EFFECT OF IMIS (INTEGRATED MANAGEMENT INFORMATION SYSTEM) 
STRATEGY ON THE ACHIEVEMENT OF CORPORATE OBJECTIVES: A CASE 
STUDY OF THE COMMUNICATION AUTHORITY OF KENYA (CA) 

BY 

LANGAT MERCY CHEROTICH 

A Research Project Report Submitted to Chandaria School of Business in Partial 
Fulfilment of the Requirement for the Degree of Masters in Business Administration 
(MBA) – Strategic Management 

UNITED STATES INTERNATIONAL UNIVERSITY-AFRICA 

SPRING 2017
DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than United States International University in Nairobi for academic credit.

Signed: ____________________________  Date: ____________________________

Langat Mercy Cherotich (ID 649511)

This project has been presented for examination with my approval as the appointed supervisor

Signed: Date: ____________________________  ____________________________

F.O. Newa

Signed: Date: ____________________________  ____________________________

Dean Chandaria School Of Business
COPYRIGHT

Copyright ©2017 Langat Mercy Cherotich. No part of this MBA Research Project may be copied, reproduced, used to create derivative works, publicly distributed or displayed, or transmitted including but not limited to storage in a retrieval system, or transmission electronically, mechanically via photocopying, recording, or other means without the prior written permission of the author
ABSTRACT

The penetration of technological innovations in the corporate world has greatly revolutionized the process through which management obligations are undertaken. From the simple round-table executive meeting to the transfer of sensitive confidential data, has now completely transformed thanks to the integration of technological platforms. At the early times of technological innovations, only operations such as financial transactions that were automated. Today, all the administration processes such as, procurement, compliance, business forecast, recruitment have been virtualized and automated. This means that all the executive operation in the corporate world have now been automated and simplified. But in the long-run do such technological advances impact on the realization of corporate strategy? It’s this question that the study sought to answer. The study will seek to evaluate the extent to which Integrated Management Information System (IMIS) Strategy impacts on the realization of corporate objectives.

The study adopted descriptive research design in the process of conducting the field exercise. The study was carried out at the Communication authority of Kenya head office at Westlands Nairobi. Purposive sampling was used to identify the respondents to participate in the study. With the support of the IT department at CAK, the study established that only 200 members of staff interacted with the IMIS platform and they all formed our target population. A sample size of 70 respondents was selected, to participate in the study. A structure questionnaire was used as the primary tool for data collection. The study was carried out for a period of one month; all the respondents fully participated as the researcher concerted all efforts following up with respondents urging them to fill-up the questionnaire. The researcher was able to collect all the questionnaires from the respondents.

The study established that FMIS utilization significantly lowered the transaction costs incurred while undertaking financial obligations. The study found that Procurement MIS contributed to strengthening the levels of accountability for the procurement operations at CAK. The study also established that, Licensing, Compliance and Standards MIS, enhanced the efforts of detecting and identification of illegal licenses used by fraudulent telecom operators. Finally the study makes a finding that Frequency Spectrum Management module strengthened and improved the security of telecommunication systems in the country.

The study thus concludes that all the integral components of the IMIS system, notably; FMIS, Procurement MIS, Licensing, Compliance & Standards MIS, and the Frequency Spectrum Management MIS wield significant influence on the realization of corporate objectives.

The study recommends that CAK prepares a policy framework and lobby the government through parliament to enact more statutory powers to be conferred to the CAK to enable the institution effectively execute all regulatory duties using the capacity of IMIS system.
ACKNOWLEDGEMENT
At the very onset, I surrender myself before the Almighty Lord blessing me with the best of what I could have had. Be it this project, the personnel associated with it or the outcome of this research pursuit, all of it is by His Grace, Mercy and Blessings. He has made it possible, and I thank the Almighty Lord with all humility and surrender.

I am truly thankful to the people who have been with me throughout my Academic journey. Firstly I would like to express my appreciation to my supervisor, Dr. F.O. Newa, of USIU – Africa, Chandaria School of Business, who helped me greatly to develop the project content and subsequently timely evaluation. His valuable comments, suggestions and technical advice were crucial throughout the study. I also wish to thank my family for moral support, financial support and encouragement and their understanding when I was not there for them during the period I was working to come up with this Research Project; I wouldn’t have made it this far without them.

My special thanks also go to my classmates, research assistants, respondents and any other person who provided input and positive criticism hence the accomplishment of the study.

God Bless you all.
DEDICATION
I dedicate this project to my parent Mr. and Mrs. Z. Lang’at, for their support and patience, while writing this thesis, without whom, the journey would have been too long.
# TABLE OF CONTENTS

DECLARATION .................................................................................................................................................................................. ii

ABSTRACT ......................................................................................................................................................................................... iv

ACKNOWLEDGEMENT ........................................................................................................................................................................ v

DEDICATION .................................................................................................................................................................................... vi

LIST OF TABLES ................................................................................................................................................................................ ix

LIST OF ABBREVIATIONS AND ACRONYMS ................................................................................................................................................ x

CHAPTER ONE .................................................................................................................................................................................. 1

1.0 INTRODUCTION ............................................................................................................................................................................. 1

1.1 Background of the Study ................................................................................................................................................................. 1

1.2 Statement of the Problem ............................................................................................................................................................... 4

1.3 General Objective ............................................................................................................................................................................. 6

1.4 Specific Objectives ........................................................................................................................................................................... 6

1.5 Significance of the Study ................................................................................................................................................................. 6

1.6 Scope of the Study ............................................................................................................................................................................ 7

1.7 Definition of Terms .......................................................................................................................................................................... 7

1.8 Chapter summary ........................................................................................................................................................................... 9

CHAPTER TWO .................................................................................................................................................................................. 11

2.0 LITERATURE REVIEW ................................................................................................................................................................. 11

2.1 Introduction ................................................................................................................................................................................... 11

2.2 Effects of Financial Management Information System and Corporate Objectives ................................................................. 11

2.3 Effects of Procurement on Corporate Objectives ......................................................................................................................... 16

2.4 Effects of Licensing, compliance & Standards on Corporate Objectives .......................................................................................... 20

2.5 Effects of Frequency Spectrum management on Corporate Objectives ....................................................................................... 26

2.6 Chapter Summary ........................................................................................................................................................................... 30

CHAPTER THREE .................................................................................................................................................................................. 31

3.0 RESEARCH METHODOLOGY ....................................................................................................................................................... 31

3.1 Introduction ................................................................................................................................................................................... 31

3.2 Research Design .............................................................................................................................................................................. 31

3.3 Population and Sampling .............................................................................................................................................................. 32
**LIST OF TABLES**

Table 3.1 Target Population .................................................................................................................. 32
Table 3.2 Sample size ............................................................................................................................ 34
Table 4.1 Work Experience .................................................................................................................. 39
Table 4.2 Department .......................................................................................................................... 40
Table 4.3 Interaction with Automated Systems .................................................................................. 41
Table 4.4 Ranking at Communication Authority of Kenya ................................................................. 42
Table 4.5 Correlation between FMIS and Corporate Objectives ......................................................... 43
Table 4.6 Mean and Std. Deviation of FMIS factors ........................................................................... 43
Table 4.7 Model Summary, FMIS factors and corporate objectives .................................................... 44
Table 4.8 Analysis of Variance (ANOVA) ......................................................................................... 44
Table 4.9 Coefficients, FMIS and realization of Corporate Objectives ............................................... 45
Table 4.10 Correlation Analysis ........................................................................................................ 47
Table 4.12 Procurement MIS factors, Mean & Std. Deviation ............................................................. 47
Table 4.13 Model Summary, between Procurement MIS and Corporate Objectives ......................... 48
Table 4.14 Coefficients, Procurement MIS and Corporate Objectives .............................................. 49
Table 4.15 Correlations between, LCS factors and corporate objectives ......................................... 50
Table 4.16 LCS Factors, Mean & Standard Deviation ........................................................................ 51
Table 4.17 Model Summary, LCS factors and corporate objectives .................................................. 52
Table 4.18 ANOVA, LCS and Corporate Objectives ........................................................................ 53
Table 4.19 Coefficients, LCS factors and Corporate Objectives ...................................................... 54
Table 4.20 Correlation test for LCS MIS and Corporate Objectives ................................................ 55
Table 4.17 FSM factors, Mean & Standard Deviation ...................................................................... 56
Table 4.22 Model Summary, FSM factor and Corporate Objectives ................................................. 57
Table 4.23 ANOVA, FSM and Corporate Objectives ....................................................................... 57
Table 4.24 Coefficients, FSM and Corporate Objectives ................................................................. 58
Table 4.25 Regression Model Summary ........................................................................................... 59
Table 4.26 Analysis of Variance (ANOVA) ....................................................................................... 60
Table 4.27 Coefficients, The IMIS strategy on Corporate Objectives ................................................. 61
LIST OF ABBREVIATIONS AND ACRONYMS

CAK  - Communication Authority of Kenya
EFT  - Electronic Financial Transfer
EDI  - Electronic Data Transfer
ICT  - Information Communication and Technology
IMIS - Integrated Management Information System
IS   - Information System
IT   - Information Technology
MIS  - Management Information System
IFMIS - Integrated Financial management System
SPSS - Statistical Package for Social Sciences
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study
The age of information and the advances in technology has lived to be a critical component that has greatly influenced the direction of corporate sector in the past decade. The importance of information is essential for the achievement of short-term, intermediate and long-range goals (Grant, 2003). The adoption of Integrated Management Information Systems (IMIS) has shaped the strategies that corporate organizations has been implementing as mechanisms for the realization of operational efficiency improvement and other management practices (Villar, 2012). The introduction of IMIS platforms in corporate scene has turned to be the driver and enabler of business strategy for numerous corporate organizations (Ives et al., 2002). Corporate organizations critical challenge is sustaining and consistent improvement of organizational performance. Proper information flow is vital and IMIS platforms enable corporate entities harness the power of information in enhancing its performance (Offi-Addo, 2011).

Information is the key to effecting operational mandate and shape the strategy for realization of corporate objectives. The challenge presented defines information, the benefits which can accrue from the successful management of information and knowledge. According to Ward and Peppard (2004), information is a primary and essential tool of management and a common thread that ties together the cycle of management that is planning, execution and control. Information consists of data that have been processed and are meaningful to a user. A system is a set of components that operate together to achieve a common purpose. Thus a management information system collects, transmits, processes and stores data on an organization’s resources, programs and accomplishments. The system makes possible the conversion of these data into management information for use by decision makers within the organization. A management information system, therefore, produces information that supports the management functions of an organization (McLeod, 1995). For the purposes of this study, a management information system is the series of processes and actions involved in capturing raw data, processing the data into usable information, and disseminating the information to users in the form needed (Morrow, 2001).
The fundamental objective for any manager, board of directors or company executive committee is to realize financial propriety and ensure the organization exemplifies consistency in its financial health. There is broad agreement that a fully functioning Financial Management Information System (FMIS) can improve corporate administration by providing real-time financial information that financial and other managers can use to administer programs effectively, formulate budgets, and manage resources. Sound IFMIS systems, coupled with the adoption of centralized treasury operations, can not only help developing country governments gain effective control over their finances, but also enhance transparency and accountability, reducing political discretion and acting as a deterrent to corruption and fraud (USAID, 2004). According to Hendriks (2012), an FMIS is an information system that tracks financial events and summarizes financial information. It supports adequate management reporting, policy decisions, fiduciary responsibilities and the preparation of auditable financial statements. Basically, 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 (Rodin-Brown, 2008).

Public organizations are required to conduct transparent procurement operations in order to ensure a level playing field for all potential suppliers. It’s thus a core corporate objective to achieve transparency in conducting its procurement operations. Integrating technology in procurement operations makes it possible to enhance transparency within the organization. There is no doubt that the use of the Internet in enhancing Procurement IMS provides several advantages over earlier inter-organizational tools (Dai & Kauffman, 2001; Koorn, Smith & Mueller, 2001). According to the Epiq Technologies (2010) report, utilization of procurement IMS technology in an organization enables a firm to organize its interactions with its most crucial suppliers, a set of built-in monitoring tools to help control costs, assure maximum supplier performance and keeping an open line of communication with potential suppliers during a business process. The system allows managers to confirm pricing and leverage previous agreements to assure each new price quote is more competitive than the last. Procurement IMS helps with the decision-making process by keeping relevant information neatly organized and time-stamped. Most are template-driven which makes all transactions standardized and traceable.
Though Licensing, Compliance and Standards information management systems have only become available in recent years, its principles were always followed by organizations by either manual processes or by using non-integrated software solutions. Nonetheless, until recently, academic research on the integrated similar initiative was not extensively developed despite its significance for the organizations (Racz et al. 2010). Incorporating the Licensing, compliance and standards operation on the IMIS, presents yet again critical support system. It enables the automation of the processes and improves on its general security (ITU, 2002). Consequently automation of the operations will go a long way in enhancing the regulators efforts in realization of corporate goals.

The uninterruptable and effective communication systems have a great economic value. In order to sustain this features frequency spectrum management activities such as analysis, computer simulation and engineering studies need take into account previously allocated frequencies used in that environment, geography, and other environmental factors (Aslam, 2014). Frequency spectrum Management operations at the CAK form the backbone of its services. It’s thus a valid objective to ensure that a core function such as frequency spectrum is undertaken in a more effective and accountable way so that the organization can achieve all it key objectives as laid down in its mandate. The integration of Frequency Spectrum Information Management System a sub module under the IMIS system impacts positively on the operations of administration duties of the regulator (ITU, 2002). The frequency management IMS enables the regulator to carry out proper checks and balances and communication audit operations (Liu, 2002). This greatly impacts on the regulators operational strategy and strongly empowers its corporate mandate.

The role of technology in frequency management operations is to bridge the operational setbacks in terms of huge administrative and manual roles into digital concurrent platform where all complex roles are simplified under one roof (Liu, 2002). the Spectrum management and spectrum monitoring activities that are complementary to each other in a manner consistent with each other and be done within a coordination and adaptation within developing systems and technologies need to be continued. In other words, spectrum monitoring can be used to support spectrum management to ensure the spectrum management activities, hence contribute in enabling the organizations realize its corporate
objectives that are intertwined in frequency spectrum management (Aslam, 2015). Centralized frequency spectrum management systems, enables the regulator to act promptly in situations such as signal jam, unethical use of frequency channels and quality monitoring (Wellenius & Neto, 2008). The system empowers the regulator to focus on its core operations more easily and effectively thus ensuring the path to the realization of corporate goals is clear. Effective and efficient spectrum management is the key element for ensuring the co-existence of various radio-communication networks, without causing interference to each other (ITU, 2002).

However, the importance of maintaining improved mechanisms to the development, use and review of MIS systems within the organization must be an ongoing concern of any organization management (Hicks, Culley, and McMahon, 2006). The organization’s MIS should have a clearly defined framework of guidelines, policies or practices, standards and procedures, which should follow throughout its development, maintenance and use. MIS can be developed and maintained by either manual or automated systems or a combination of both. These systems should be accessible and useable at all appropriate levels of the organization (Baskerville and Myers, 2002).

1.2 Statement of the Problem
Adoption of technology platforms in the corporate world yields extensive impacts in different fronts. One of the most important contributions of information technology and systems to business firms is the reduction in information uncertainty and the resulting improvement in decision-making (Loudon and Loudon, 2006). Currently, reports to management are prepared manually and are therefore delayed, non-specific and most often crippled by inaccuracies. Human resources upon technology adoption will have to be reviewed in-line with the requirements of the new system (Aslam, 2014). Consequently, some of the labor input will be rendered redundant, for example manual financial records are replaced with digital records, this means electronic transmission of the records will render redundant duties like delivery staff (Wainaina, 2012). In the end the management will have easier time in auditing its operations and focus on the realization of its corporate mandate. With digitalization of many corporate operations, caution ought to be upheld in the interest of avoiding exposure to security shortcomings (Amin, 2009). There also needs a closer
assessment on the extent to which IMIS strategy can help corporate organizations in the realization of its objectives.

Omari (2012) conducted a study on the impact of information systems resources on achieving competition. This study aimed to study the impact of information systems resources in achieving competitive strategies for a security company for mobile communications in the Jordanian market. The study found that information systems provided a high level of system resources in a security company of hardware and software, followed by human resources and networks. Abdul Qadir (2011) conducted a study on the role of strategic information to strengthen the competitive advantage. The study found that the degree of availability of Information System properties, which are applicable when making strategic decisions, was medium in administrative institutions. Tashtosh (2010) conducted a study on the role of information systems in the capacity of storing strategies for competitive advantage in the Jordanian industrial organizations. The study found that there existed is a strong positive relationship between adoption of information systems and competitive advantage. Amin (2009) assessed the contribution of electronic procurement on the organizational performance of commercial state corporations. He found that there still existed resistance to adoption of the technology in some of the state corporations majorly influenced by levels of competence required in understanding the system. Finally, Wainaina (2012), conducted a study on the contribution of IFMIS on the financial performance of state corporations. She found that up to 84.3% of the financial performance of state corporations was attributed to the adoption of IFMIS system.

The aforementioned studies greatly centralized on the aftermath upon implementation or adoption of IMIS platforms in different sectors. Furthermore, despite the great importance of integrating information systems in corporate administration there exists very limited literature on the same. This indicates a huge gap in theory and practice on the adoption of IMIS system in corporate scene. This study will assess the contribution of FMIS, evaluate Procurement IMIS, investigate the automation of licensing, compliance and standards and finally identify the impact of integrated frequency spectrum management system on the realization of corporate objectives. The identified objectives above will form the central
focus of this study, and will help in assessing the effects of IMIS strategy on the achievement of corporate objectives.

1.3 General Objective
The general objective of this study was to evaluate the effects of Integrated Management Information System (IMIS) strategy on the realization of corporate objectives.

1.4 Specific Objectives
1.4.1 To establish the effect of Financial Management Information System in the realization of corporate objectives

1.4.2 To establish the influence of Procurement Information System on the realization of corporate objectives

1.4.3 To assess the impacts of Licensing, Compliance and Standards technology systems on the realization of corporate objectives

1.4.4 To evaluate the effects of frequency Spectrum Information Management System on the realization corporate objectives

1.5 Significance of the Study
The study will assist the following:

1.5.1 The Communication Authority of Kenya
The study was centralized on the adoption of Integrated Management Information System as a strategic decision geared towards the realization of corporate objectives of an organization. The findings of this study will be of great importance for the CA which is the legal telecommunications regulator in Kenya. The IMIS system is a new operational adopted by the regulator to help in managing its diverse operations under one roof. There has never been a previous study as to how this platform will influence the organization in carrying out its duties and consequently achieve its operational objectives. The study will offer insights on the areas where the platform has performed to the expectations and consequently highlight the grey areas where more efforts need to be directed so as to ensure that optimal output is realized. The recommendations from this study can be referenced as a source of information
in the course of formulating of operational policies that relate to adoption of Integrated ICT frameworks across the whole industry spectrum.

1.5.2 Policy Makers

Policy makers like the Ministry of Information and communication technology will also benefit on learning on the loopholes still available for law breakers and determine better ways to mitigate risk of non-compliance to the legal and ethical framework. The policy makers will be able to gain more insight on the Information system strategies that affect the organization and the industry as a whole.

1.5.3 Scholars and Academicians

The findings of this study will enrich existing knowledge and hence will be of interest to both researchers and academicians who seek to explore and carry out further studies on IMIS strategies. It will provide basis for further research.

1.6 Scope of the Study

The scope of this study is in Nairobi, Communications Authority of Kenya. The employees of the organization who work at the Nairobi head-office were the population of the study. The data collection period for this study was in the month of December 2016. The researcher was privy of the fears amongst the respondents with regard to confidentiality. The researcher protected the identity of the respondents by only request for their opinions with regard to the questions listed in the questionnaires. The researcher also anticipated the likelihood of the respondents being occupied in their daily routines. The researcher presented the questionnaires individually to all the participants and extended enough time for them to respond to the questions at their free time while not busy entangled in daily duties.

1.7 Definition of Terms

1.7.1 Management

The effective and efficient pursuit of organizational goals by integrating the work of people through planning, organizing, leading and controlling the organization’s resources (Kinicki & Williams, 2008).
1.7.2 Information technology

Information technology relates to any computer-based tool that people use to work with information, support information and information processing needs of the organization (Rainer & Turban, 2009).

1.7.3 Information system

An information system is a work system whose processes and activities are devoted to processing information, i.e., capturing, transmitting, and storing, retrieving, manipulating, and displaying information. (Alter, 2008)

1.7.4 Strategy

Strategy is a long term plan of action designed to achieve a particular goal as differentiated from tactics or immediate action with resources at hand. (Armstrong and Baron, 2004)

1.7.5 Strategic management

Strategic management represents an effort to realize the fruits of strategic thinking. This occurs via strategy formulation, strategic planning, and strategy deployment. (Nikols, 2016)

1.7.6 Corporate Strategy

Refers to the overall scope and the direction of a corporation and the way in which its various business operations work together to achieve particular goals (Bernado et al, 2015).

1.7.7 FMIS

It’s the acronym for Financial Information Management System. The information system tracks financial events and summarizes its information. The system supports adequate management reporting, policy decisions, fiduciary responsibilities, and the preparation of auditable of financial statements (AMIP, 2016).

1.7.8 Licensing, Compliance and Standards IMS

The meaning of individual terms:
i. **Licensing** – It’s the process of giving or getting official permission to do something (Cambridge, 2016).

ii. **Compliance** – It’s the state of being in accordance with the established guidelines or specifications or the process of becoming so (Techtarget, 2015).

iii. **Standards** – Limit, or rule, approval and monitoring for compliance by an authoritative agency or professional or recognized body as a minimum acceptable benchmark (Cambridge, 2016).

Licensing, Compliance and Standards IMS is a central electronic platform that enables automation of the three functions.

**1.7.9 Frequency Spectrum Management**

It’s the analytical, procedural, and policy approach to planning and managing the use of the electromagnetic spectrum (ITU, 2002).

**1.7.10 Procurement IMS**

It’s the electronic platform that keeps track of every activity in public procurement and generates instant reports. The system enables procurement planning, monitoring, reporting and online bidding (ITU, 2008).

**1.8 Chapter summary**

Chapter one of the research project introduced the study subject where the researcher presented the background of the topic and stated the problem informed the need for the study. The section focused on key thematic areas including; background into, FMIS, Procurement IMIS, Licensing, Compliance & Standards IMIS, and finally Frequency Spectrum Management IMIS on how they influence organizational corporate strategy in realization of its objectives. The section consequently presented the objectives of the study, significance, scope and definition of key terms. Subsequent sections of the study will include; chapters two, three, four, and five.

Chapter two will present the literature review where the researcher will dissect into the key concepts of study by analyzing existing studies by scholars in the field of strategic management. Chapter three will cover the researcher methodology where the researcher will
elaborate on the procedure that will follow in gathering field data and consequently explain the mechanisms which will be used to identify participants in the study. Chapter four will cover the data analysis of field data, where the researcher shall present the findings using tables in summary statistics. Finally the study shall cover Chapter five, where the researcher will summarize the main findings, then broadly discuss the findings and highlight consistencies between the field data and the existing literature. Chapter five will then make conclusions on the topic of study. Next the researcher will put across recommendations based on the findings. Finally the chapter shall close with suggestions for future topics.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction
This chapter examines the literature by several credited authors on the impacts of IMIS strategy on the realization of Corporate Objectives. The chapter will seek to establish a link between the IMIS strategy and the realization of the corporate objectives for a telecommunications regulator. The chapter shall review concepts including; Financial Management Information System, Procurement Information management System, Licensing, Compliance and Standards Management System and the Frequency spectrum management platform and how they influence the realization of corporate objectives.

2.2 Effects of Financial Management Information System and Corporate Objectives
According to Hendriks (2012), a Financial Management Information System (FMIS) is an information system that tracks financial events and summarizes financial information. It supports adequate management reporting, policy decisions, fiduciary responsibilities and the preparation of auditable financial statements. Basically, a FMIS is little more than an accounting system configured to operate according to the needs and specifications of the environment in which it is installed (Rodin-Brown 2008).

2.2.1 Corporate Objectives
Corporate objectives refer to the goals set by a company which influence its internal strategic decision (BD, 2016). Corporate objectives tend to align the organizational operational activities towards the realization of desired performance and results of the business. The adoption of Management Information Systems assists in integration of communication systems thus enhancing the execution of business operations (Maseda et al., 2009). Management Information Systems is a system that converts data into information, communicated in an appropriate form to managers at levels of an organization. The information can contribute to effective decision making or planning to be carried out (Patterson, 2005). MIS basically involves the process of collecting, processing, storing, retrieving and communicating the relevant information for the purpose of efficient management operations and for business planning in any organizations. Thus, the success of
effective decision-making, is considered as the heart of administrative process, is highly dependent partly on available information, and partly on the functions that are the components of the process (Nath & Badgujar, 2013).

MIS provides information in the form of pre-specified reports and displays to support business decision making (O’Brien & George, 2007). MIS is defined as a type of information systems that transform data to information and summarized the information to meaningful and useful forms as management reports to use it in managerial decision making. This enhances the speed to which such decisions are arrived at and also ensures effectiveness in decisions made. MIS platforms enhance the levels of integrity in handling and transmission of sensitive information such as financial reports as only the responsible officials with the highest level of security clearance will be granted access to such information. Electronic transmission and digital backup will ensure that all loopholes for data manipulation are sealed thus ensuring highest levels of operational integrity. This will go along ensuring that the organization maintains efficiency and focus on the achievement of the main business goals.

In support of organizational informatics, Tapscott (2015) argues that MIS causes a “paradigm shift” introducing “the age of network intelligence”, reinventing businesses, governments and individuals. Ndou (2004) quoting Kaufman (1977) observes, “the traditional bureaucratic paradigm, characterized by internal productive efficiency, functional rationality, departmentalization, hierarchical control and rule based management is being replaced by competitive, knowledge based requirements, such as: flexibility, network organization, vertical/horizontal integration, innovative entrepreneurship, organizational learning, speed up in service delivery, and a customer driven strategy, which emphasize coordinated network building, external collaboration and customer services” all of which are supported by MIS platforms.

2.2.2 Financial Management Information System (FMIS)

In the sphere of government operations, FMIS refers to the computerization of public financial management processes, from budget preparation and execution to accounting and reporting, with the help of an integrated system for the purpose of financial management (Lianzuala and Khawlhring 2008). Rodin-Brown (2008) identifies the following basic
features that are necessary for integration: standard data classification for recording financial events; internal controls over data entry, transaction processing and reporting; common processes for similar transactions and a system design that eliminates unnecessary duplication of data entry.

According to Cole (2006) the goal of an integrated financial management system is to support the achievement of fiscal discipline, strategic & efficient allocation and use of funds, value for money and probity in the use of public funds. In this context, system sustainability aims at sustaining a system in the longer term. The main objective of integrating public financial systems is thus; to reinforce system sustainability by exploring the role of improved financial service delivery and government supervision to enhance the government’s effort to cushion itself from the impact of global financial crisis (Shaw, 2010). It is therefore imperative that the system should be able to provide the required information timely and accurately, because if it does not it will not be used and cease to fulfill its central function as a system (Diamond & Khemani, 2006).

According to Hove and Wynne (2010), an FMIS assists management in ensuring accountability for the deployment and use of public resources and in improving the effectiveness and efficiency of public expenditure programs. FMIS has been greatly instrumental in enhancing the national government operations. The platform enables prompt and efficient access to reliable financial data and helps in strengthening Government financial controls, improving the provision of effective services, raising the budget process to higher levels of transparency and accountability, and expediting government operations (GoK, 2011; Peterson et al, 2008).

Kiilu and Ngugi (2014) argue that the adoption of FMIS has led to effective management of public funds in Kenya National Treasury. FMIS has enhanced automation of government processes, enhanced reporting, enhanced record keeping, and enhanced communication, customization of government processes and integration of government processes. According to Nzuve (2012), IFMIS enhances effectiveness and transparency of financial management system, offers a standardized integrated financial management reporting system, and provides timely and accurate financial information.
Financial performance refers to the degree to which financial objectives are being or have been accomplished. It is the process of measuring the results of a firm's policies and operations in monetary terms (Wainaina, 2012). It is used to measure firm's overall financial health over a given period of time and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Chung and Fung, 2007). The central aim behind performance information systems is that systematic and continuous evaluation of organizational performance should be used to improve future performance. By analyzing performance and relating it to existing organizational arrangements, performance information is argued to promote organizational learning and, consequently, improve the quality of organizational decision making (Moynihan and Landuyt, 2009).

Financial Management Information System (FMIS) enhance the financial performance of the corporate organizations by enabling them track financial events and summarize financial information. In addition, the use of IFMIS in their operations will support management and budget decisions, fiduciary responsibilities, and the preparation of financial reports and statements. IFMIS will connect, accumulate, process and then provide information to all parties in the budget system on a continuous basis (Wainaina, 2012). Not only does FMIS infrastructure allow for the collation of vast amounts of financial business data, but they also provide a valuable time saving benefit to the workforce. Where in the past business information had to be manually processed for filing and analysis it can now be entered quickly and easily onto a computer by a data processor, allowing for faster decision-making and quicker reflexes for the enterprise as a whole (Salmela and Spil, 2002).

The main goal of implementing any FMIS includes effectiveness, efficiency and improved outcomes in financial management processes. Specifically, FMIS is geared towards achieving better fiscal management, more optimal resource allocation, improved management of resources, reduced fraud and corruption, improved transparency and accountability, lower transaction costs (Ministry of Finance, 2003). The Kenyan government has embraced the use of Integrated Financial Platform to execute effective financial management in the various government ministries and public institutions (Kang’ethe, 2002). Similarly corporate organizations can tap into FMIS and reap the operational benefits in terms of tracking progress in financial operational objectives.
The post-adoption phase where FMIS platforms are in use, numerous gains have been reported in different fronts which have gone to form basis for a good number of theoretical frameworks as published by scholars in field of management. Ruchala and Mauldin (2009), argue that; previous applications of information technology in accounting systems were mainly processes of transactions that would reciprocate the manual processes. Meta theory is the integration and the synthesis of technical orientations, cognitive as well as the overarching model into the research on AIS. The meta theory has helped in addressing the technological limitations that are imminent and addressed in previous researches such as the failure to recognize the task to which ICT is being applied, the failure to recognize the adaptive nature of the artificial phenomena, the failure to account for the design science in the actual field research and the failure to direct the act of making or choosing the necessary decisions and treating all the transactions in an equal manner (Gorry and Scott-Morton, 2011).

Reneau and Grabski (2007) assert that; information systems in accounting are used by accountants and other key decision makers that employ the accounting information or make use of the accounting data. The Meta theory model is built on past frameworks on the management information systems. The Meta theory validates the development models which were adopted in the course of designing the Management Information Systems which upon adoption replaced previously implemented manual roles. In financial transactions, extensive documentation often serves as the principal evidence that will demonstrate the occurrence of the particular transaction process. For instance, before the financial office approves payments to a supplier, the supplier is required to present an invoice showing a breakdown of all expenses that the finance office need to reciprocate by clearing the payments. The finance office will have to use internal existing mechanisms to validate the authenticity of the invoiced services otherwise they may end up instigating losses. The adoption of FMIS platform ensures all operations involving the movement of documentation are verified and certified to be valid electronically thus eliminating the probability of fraudulent transactions being accomplished.

The underlying factor on the motivation for the adoption of MIS platform in the financial operations would be to realize efficiency in financial transactions. Efficiency in transactions
would enhance the financial performance of the organizations financial operations. Performance is defined as “a reflection of the ability of the organization and its ability to achieve its objectives” (Eccles, 2011) and it is also defined as a “reflection of how the organization uses human and financial resources and how to exploit them in order to achieve its goals (Robins & Wiersema, 2015). Moreover, it is defined by (Miller & Bromiley, 2010) as the organization's ability to achieve long-term goals”.


Musee (2011) carried out a study on the factors affecting effective implementation of integrated financial management information systems (IFMIS) in government ministries in Kenya. The study covered 42 Ministries where a sample of 32 respondents involved in the use of the Integrated Financial Management Information System was surveyed. According to the study, 86% of the staff in charge of IFMIS in all ministries of government was male. The study established that 73% of the users felt that resistance and sabotage affected to ‘greater extent’ the effective use of the system. Staff resistance resulted from different reasons hereby termed to as the aspects. Understanding these aspects of resistance makes it easier when dealing with such resistance.

2.3 Effects of Procurement on Corporate Objectives
Procurement refers to a variety of means through which public and private organizations are able to acquire the products and services they require for their operations. Procurement is a function that takes place in the upstream part of the supply chain in order to ensure that the required products or services can be availed to customers. Large amount of money is spent by organizations to acquire various products and services at various stages of production or
service provision (Snider and Rendon, 2001). Integrating procurement operations within an organizational information management system enables automation of the procurement operations. This makes it possible to deviate from lengthy manual processes that consume a lot of administrative time. Procurement is strategic in nature since it links the organization’s suppliers to the strategic objectives of the organization. Procurement translates the strategic objectives of an organization into the sourcing needs that can enable the organization achieve the same (Amin, 2009).

Parida and Parida (2005) define electronic procurement as a technology solution that facilitates corporate buying using the Internet. Essentially an Internet/Intranet based purchasing application or hosted service that streamlines buying, trading partners, maximizes trade efficiency across the entire supply chain, and provides strategic electronic commerce capabilities in Instant time; Process which supports the procurement and sourcing activities via Internet technologies and enables an efficient negotiation between buyers and suppliers (Gimenez and Lourenço 2004); Electronic acquisition of goods and services in a firm (Turban and King 2006); The automation of the procurement processes so that the sourcing, vendor selection, procurement processes, shipment status tracking and payments can be made in an online environment (Bhaskar, 2005).

### 2.3.1 Procurement Information Management System

Procurement Management Information System (MIS) refers to the use of Internet-based, integrated, information and communication technologies (ICTs) to carry out individual or all stages of the procurement process including search, sourcing, negotiation, ordering, receipt, and post-purchase review (Croom& Brandon-Jones, 2004). While there are various forms of e-Procurement that concentrate on one or many stages of the procurement process such as e-Tendering, e-Marketplace, eAuction/Reverse Auction, and e-Catalogue/Purchasing, e-Procurement can be viewed more broadly as an end-to-end solution that integrates and streamlines many procurement processes throughout the organization. Although the term end-to-end e-Procurement is popular, industry and academic analysts indicate that this ideal model is rarely achieved (Department of Information Resources, 2001) and e-Procurement implementations generally involve a mixture of different models.
The centralization of procurement operation in a one-stop information system enhances several critical operations in the supply chain. Information sharing enables the system to strategically reduction on inventory, which is realized through better planning and forecast which is based on real-time supply chain data (Lambert, 2004). Procurement IMS offer corporate organizations great competitive edge as it accelerates the procurement procedures which consequently impacts positively on the efforts to achieve efficient management. Furthermore, utilization of electronic based platform for conducting corporate obligations makes it possible for evaluation. Garcia (2004) highlights the concept of system audit where technology infrastructure can be assessed to determine whether its use complied with corporate standards set by the organization.

The main objective of integrating enterprise wide information systems is to enhance the underlying interconnected tasks. The procurement IMS links up all core procurement operations, from identification of the external resources that an organization needs to its delivery. The IMS platform adds value to the processes by making it more effective and accountable. Effective implementation of procurement practices is determined by the level of compliance with procurement regulations, minimization of procurement expenditure, transparency and accountability of procurement funds and quality of procured goods and services (Gadde, 2007). Technology systems contribute to rapid flow of information across different levels of organizational management hence enhancing the speed of decision making (UNEP, 2007). Effective implementation of technological procurement platforms significantly improves the effectiveness of purchasing decisions (Sobczak, 2008).

Electronic platforms that support procurement processes enhance efficiency in procurement practice because it can reduce overhead expenses by eliminating purchasing agent costs (Wisegeek, 2013). Thus its adoption positively impacts on the financial performance of the organization. Cutting of operational costs related to manual procurement processes results in lowering of organizational operational costs thus enhancing financial stability. Technology based procurement is a very comprehensive phenomenon which includes making strategic initiatives and it can be used in reorganizing the entire purchasing process. When properly implemented, procurement IMS system can connect companies and their business processes directly with suppliers while managing all interactions (Quinnox, 2012). Procurement IMS
Implementation should be seen as an effort to improve the procurement goals, which normally include quality; timeliness; cost; minimizing business, financial and technical risks; maximizing competition; and maintaining integrity (Thai, 2001).

2.3.2 Adopting Procurement IMIS impact on Corporate Objectives

Procurement operations form part of the most sensitive engagement that deliberates on the guidelines that an organization adopts while sourcing for actors in its supply chain. The procurement function is obligated in advising the organization on expenditures for the organizations supply chain. It’s therefore imperative that the procurement function leverages on best economics strategize to accrue low cost projections for supply chain expenditures. Williamson (1979) suggested that Transaction Cost Economics theory (TSE) aims to minimize the sum of transaction costs and production costs. Transaction costs affect the firms’ decisions on how they organize their activities, whether to move towards vertical integration (hierarchy) or to prefer market exchange. Thus, According to TCE, the decision of whether to collaborate or not should be based on the efficiency of governance. Transaction cost economics theory identifies and explains the conditions suitable for a firm to manage an economic exchange internally, and the conditions under which it should manage an economic exchange externally (Williamson, 2005).

Hall (2009) conducted a study on factors that influence the implementation of procurement policies in public organizations. He found that procurement policy benefits the organization by keeping costs in line and clearly defining how purchases will be made (Hall, 2009). As the needs of the entity change, there is a good chance that the procurement policy will be adjusted to meet those new circumstances. This is necessary to make sure the policy continues to function in the best interests of the company or non-profit organization and keep the acquisition process simple and orderly (Günther, 2007).

Procurement process beyond efficiency should also be very transparent. Integration of technology enhances the efforts of ensuring transparency in the procurement process. The procurement IMS is backed by electronic computerized logs ensures that all corporate decisions based on data transmitted via the centralized platform can be audited to evaluate its authenticity. Transparent procurement procedures can contribute to a more efficient
allocation of resources through increased competition, higher quality procurement and budgetary savings for governments and thus for taxpayers (PPB Training Module 3, 2007). To avoid corruption in the public procurement systems there is the need to publish calls for tenders, notifying contract awards in the media, including the successful bidder's name and final price, and making award criteria more transparent and accountable. These are some of the basic principles of transparency in government procurement which directly affect corrupt practices (Evenett et al., 2005).

2.4 Effects of Licensing, compliance & Standards on Corporate Objectives

Operations relating to Licensing, Compliance and Standards (LCS) are majorly undertaken by regulatory entities. The activities that inform LCS operations are dynamic and often require extensive documentation (Garcia, 2004; Fisher and Harindranath, 2014). Before a license is awarded, it basic requirement that the recipient has attained the minimum requirements in terms of set out standards. Attainment of the minimum standards is the requirement for realization of compliance and hence approved to operate (Lurie, 2004).

This processes are consistent across different sector including; medicine where in pursuit of practicing license a minimum compliance requirements include graduate degree in medicine. In aviation, before a pilot is granted the license to fly an aircraft, they must pursue a flight course in a certified flying school and tested so as to prove there competence in service meets the minimum threshold, upon which are approved as compliant. Similarly at the Communication Authority of Kenya (CAK), is mandated to license stakeholders in telecommunication sector. Walter and Rolfs (2005) were critical that, utilization of technological platforms for LCS operations will go a long way in enforcing high levels of operational efficiency and improve on the organizational productivity.

2.4.1 Licensing, Compliance & Standards Information Management System

Licensing is the activity where a regulator grants permission to an individual or an organization in order to carry out certain structured operations (Resto, 2011). The attainment of the licensing agreement must be preceded by several checks pre-assessment activities where the regulator must be satisfied on the qualifications of the license applicant, only then that the licensing activity can be deemed legit. Telecommunications sector is a vital part of the society and plays crucial role in ensuring the connectivity of people through multimedia
channels (ITU, 2002). In Kenya, CAK is tasked with regulating the local telecommunication sector. Licensing of telecommunication systems, platforms and the support infrastructure is mandate under the CAK. Modern times require the adoption of sophisticated information management systems in order to automate the Licensing operations (Sadiq et al., 2012).

The IMIS platform used by the telecommunications regulator greatly impacts on the operational strategy in many ways. The platform simplifies many operations and enhances its operational efficiency, presenting the potential of realization of corporate objectives. Frigo and Anderson (2009) suggested that, integration of licensing operation in an information management system binds the operation mandate to focus on its goals and consequently adds value and strengthens its operational processes. Resto (2012), identifies that the telecommunications regulator has a duty to ensure consistent improvement of its services by tapping into innovative best practices. The IMIS strategy enables the execution of the strategic operations seamlessly through by adoption of the enterprise-wide approach infrastructure (Gericke et al., 2009). Incorporation of the licensing module in the IMIS platform enables the identification and separation of different system entities and empowering them to operate smoothly without resulting in any disruptions.

Automation of core operations such as licensing enables the regulator to seal-off all loopholes that could have been exploited by fraudsters (Resto, 2012). Reliance on the manual systems that have been in operation previously was exposed to security challenges. For instance, a fake operational license would be impossible to detect in the naked eyes and without due diligence it may be passed as genuine. Under the IMIS platform, the regulator field inspectors can verify digitally the authenticity of any regulator issued document and take action instantly. Garcia (2004) was optimistic that, leaning the regulatory operations of ensuring data authenticity under the licensing procedure in a centralized system lowers the regulatory costs. This translates to a gain in terms of the managing operational costs and consequently enhances the chances of realization of corporate goals. In fact, one of the basic corporate objectives in the adoption of information management systems is to lower operational costs (Peppard, 2001; Berger, 2003; Hannu, 2008).

Regulatory mandate of licensing servers another critical importance which is to ensure that there is semblance of fairness in offering license permits (Resto, 2012). In a society where
corruption is widespread it’s imperative that regulatory institutions adopt serious control mechanisms that can prevent the proliferation of such practice in regulatory institutions. The usage of manual models to conduct licensing operations has permitted instances of corruption which have enabled irregular issuance of critical licenses like the telecommunication permits. Other cases can be instances of regulatory officials colluding with their relatives to unfairly offer them these licenses. The other important aspect of fairness in licensing operations is informed by the costs that are incurred by license applicants. Manual system would require extensive support operations that can be costly to the applicants (Resto, 2012). Integrating IMIS platform ensures that all applicants are treated equally. The system can collect, process, evaluate and disseminate data thus cutting down costs on documentation (Berger, 2003).

The efficacy of regulatory duties is also determined by the rate at which different operations are accomplished within the organization. Traditional manual processes slow down the operations and can end-up making the operations more costly. Licensing procedures in telecommunication sector are lengthy processes, and can result in underwhelming the operational output of the regulator (Resto, 2012; Garcia, 2004). The integration of the IMIS and incorporating a sub-module which undertakes automated licensing operations speeds up the processes of executing its mandate (Lee and Bose, 2002). The positives of centralized automated information system cannot be overstated. The IMIS incorporates a finance module which contributes in accelerating the process of acquiring licenses as the payments will automatically be reflected in the applicant’s account at the licensing module. This reduces the need for lengthy paperwork and consequently results in acceleration of the operation.

Regulator in telecommunication sector is also required to ensure that the accredited entities which have been awarded operational licenses in the sector comply with the terms and agreements in the permit document (Resto, 2012). The regulator should take all the necessary steps that are required to ensure that the agreements terms of reference in a license are adhered to. The licensing, Compliance and Standards module incorporates tools that are networked with the public channels which have been licensed. In case a licensed operator deviates from the permitted obligations, and the regulator proves beyond reasonable doubt that their case is so strong then the regulator should take action and terminate the license agreement. The IMIS platform enables the regulations duties be undertaken in unison (Lee
and Bose, 2002). It’s imperative that regulations stipulated in the license charter are adhered to the latter, however difficult it maybe and the IMIS system should enforce this.

Compliance is the act of fulfilling the requirements as set out by the regulator (Cambridge, 2016). Standards on the other hand stands for the level of quality attained (BD, 2015). The two terms are used hand in hand and inevitably each directly impacts the other. The regulators prescribe certain requirements for the establishment of the compliance level. This level is then measured by the standards defined on the individual items in the list of requirements. Telecommunication sector requires the stakeholders attain certain compliance requirements before securing operational licenses. The IMIS platform that is used by the CAK has a concrete module that operates the licensing, compliance and standards IMS.

The IMIS automated compliance control is achieved through spatial computer inference, which utilizes informatics applied on information, recorded automatically relying on the compliance documentation (Nikkila, 2013). Integrating compliance operations into web services is beneficial for system interoperability in telecommunication regulation (Wolfert et al., 2010). Processes of automating the compliance procedures involve utilization of computer inference for the telecommunication standards encoded in a logical rule format where then requisite levels of compliance are defined (Nikkila, 2013). As an oversight bodies, the regulators, oversee the telecommunication sector and make sure that the operators are adhering to the rules and regulations set by them.

Regulators have been given powers to give or deny licenses to operators, also they have the powers to revoke the license of a certain operator if the operator is not operating the way it is required to operate (Resto, 2011). The IMIS compliance module is structured algorithmically to detect and predetermine the levels of compliance and standards and consequently perform the operations of clearing the successful applicants. Compliance levels are standardized using numerical references, with each indicating a reference compliance grade. The automation simplifies and improves its operational efficiency.

Determining compliance with telecommunication standards has been a largely manual process, involving paper forms and official inspections. In addition to imposing an administrative burden on the regulator, significant costs are associated with the overall
process (Varela-Ortega & Calatrava, 2004). Thus, with little to no human interaction, data collected from the stakeholders operations can be used to show compliance with telecommunications standards.

A principal requirement for automated compliance control is having the telecommunication standards available in an encoded format that can be used as input for a computer inference system (Nikkila, 2013). The encoding to this representation must be done by hand from the natural language of the telecommunication standards, using human judgment to decide which parts of the standards can or should be encoded. These rules and their interchange are closely related to logic programming, a field of computer science (Kifer, 2011, Boley et al. 2007). Similar rule encodings have appeared in the literature of other domains (Mili et al., 2011), such as in the encoding of general legislation (Gordon et al., 2009). With strong compliance interface for the IMIS platform, it will greatly impact on the ability to track operational objectives.

2.4.2 Adoption of LCS Platform

The institution that is tasked with carrying out of critical duties of ensuring that the sector players acquire requisite Licenses, Compliant and operate within some set of determine standards, involves operations of managing separate critical entities. Such operation requires highest level of automation. Institutional theory takes a sociological view of reciprocal interactions between institutions (such as business entities) and society. According to Scott (2001), 'Institutions are social structures that have gained a high degree of resilience'. Akinola (2005) observed that institutions 'are embedded in country-specific institutional arrangements' (emphasis added). Differences between national institutions affect both the level of entrepreneurial activity in each country and the nature and amount of innovation taking place within the country (Kiggundu, 2002).

Scott (2001) identified three different systems or 'pillars' that support social institutions, namely the regulatory, normative and cognitive systems. In the regulatory system, formal and informal rules are set, monitored and enforced if necessary by means of laws, regulations, and government policies which promote or restrict behaviors within a country (Busenitz,
Goacutemez, and Spencer 2000). The normative system consists of 'normative rules that introduce a prescriptive, evaluative, and obligatory dimension into social life' (Scott 2001). In contrast, the cognitive system recognizes 'the shared conceptions that constitute the nature of social reality and the frames through which meaning is made' (Scott, 2001). Individual cognitive structures and social knowledge combine to represent organizational cognitive environment.

In contexts where institutional and competitive pressures exert strong influences, the strategic decisions of managers result both in conformity to institutional pressures, which leads to isomorphism and legitimacy, and in differentiation, which, following the resource-based view of the firm, can increase the possibility of creating a competitive advantage through heterogeneity in resources and capabilities (Scott, 2001). In this study compliance to industrial and government policies is a determinant of effective administrative performance which influences the ability to achieve the corporate objectives.

Hendriks (2012) conducted a study to identify the challenges and risks that are involved in the implementation of the Integrated Compliance and Licensing Systems in South Africa regulatory agencies in order to develop guidelines that make the implementation more successful. The study used literature study methodology where theories were explored and used to solve a research problem. Based on the theoretical research, solutions and guidelines were developed to solve challenges and risks experienced. The study found that the sheer size and complexity of an automated compliance and licensing platform poses significant challenges and a number of risks to the implementation process. There are, however, critical success factors or best practices that can be used for the project to succeed. According to Eisenstat (2003) found that IT infrastructure play a supportive but important role in automated compliance and licensing implementation for improved organizational performance.

Schroy (2010) on the study on the Basics of Internal Controls postulates that the backbone of an institution’s internal control system is dictated by human ability to handle internal control functions hence training and precise skills-sets are indispensible for human capacity growth. An operative monitoring system is a continuing valuation Program that guides the design, application and efficacy of controls in alleviating risks. It is in this light that tools such as the
internal control systems aside from being put in place also strengthen and diligently monitored to check and avoid the inaccuracies to guarantee effectiveness and proper use of resources for the attainment of performance objectives. Internal control should also be designed to meet the requirements of the specific business. This is because the more intricate an institution’s control systems are, the higher the cost (IRM, 2002). Nonetheless, the role of efficient monitoring system in standards and compliance amongst telecommunication industry members is not well-expounded by Schroy (2010) which this study aims to fulfill.

Automation of the compliance process improves greatly on the quality control processes (Nikilla, 2013). The utilization of electronic based platforms ensures precision in operational execution, which goes a long way to improve on the quality control measures. The digitization of compliance systems makes it possible for the cross-compliance referencing and information sharing (Bourma et al., 2010). This is possible for inter-agency referencing and international bench marking. The adoption of automation compliance platforms makes it possible for the regulator to benchmark with international partners and other organizations. For instance, the formatting of the compliance requirement can also be referenced with other standards in different countries or by ensuring consistency with requirements set out by the International Standards Organization (ISO). This will also improve on the regulators operational standards and competitiveness (Nikkila, 2013).

2.5 Effects of Frequency Spectrum management on Corporate Objectives

Spectrum management is the combination of administrative, scientific and technical procedures necessary to ensure the efficient operation of radio-communication equipment and services without causing interference (Aslan, 2014). Radio waves are a form of electromagnetic radiation which, like visible light or infrared, makes up a portion of the entire spectrum (Aslan, 2014). They cannot be perceived by human eyes or ears, and they are not harmful in the environment. Depending on their frequency (measured in hertz), radio waves can pass through solid objects and travel long distances. This makes them useful for mobile communications, broadcasting and many other wireless applications (GSMA, 2014).

It is necessary to have an infrastructure to take the signals from the air and measure them due to make the task of spectrum monitoring.
2.5.1 Frequency Spectrum Management Information System

The ITU Handbook on National Spectrum Management describes the procedures for regulating radio transmissions within the borders of a participating country. Particular attention is given to the definition and relationships between technical parameters that “if not controlled, could cause interference to other systems and adversely impact the efficient use of the frequency spectrum”, including: carrier frequencies, transmitter power, frequency tolerance, bandwidth, unwanted emissions, inter-modulation products, and receiver sensitivity (ITU Radio communication Bureau, 2005).

Spectrum monitoring serves as the eyes and ears of the spectrum management process (ITU, 2002). It is necessary in practice because in the real world, authorized use of the spectrum does not ensure that it is being used as intended. This may be due to the complexity of the equipment, interaction with other equipment, a malfunction of equipment, or deliberate misuse (Aslan, 2014). Spectrum is used 24 hours per day, 7 days per week, every week of the year, whether locally, regionally, or globally. Similar to this, spectrum monitoring should also be on a continuous basis if the purposes and goals of monitoring are to be appropriately fulfilled. The purpose of spectrum monitoring is to support the spectrum management process in general, including frequency assignment and spectrum planning functions (GSMA, 2014).

The functions of spectrum monitoring and spectrum management are closely related. Linking these functions through an integrated computer system can result in significantly increased effectiveness and cost-efficiency for both. It is critically important in implementing a spectrum management system to develop a system structure that maintains the integrity of the process, and the database that contains all relevant information to support the process. In the case of an inadequate database, the combination of monitoring and enforcement techniques can be effectively used to obtain critical information and thereby, help improve the database and the overall spectrum management process (ITU, 2002).

Monitoring is closely associated with inspection and compliance in that it enables the identification and measurement of spectrum usage, interference sources, the verification of proper technical and operational characteristics of radiated signals, and detection and
identification of illegal transmitters, producing data on the effectiveness of spectrum management policies (ITU, 2002). Monitoring, further supports the overall spectrum management effort by providing general measurement of channel and band usage, including channel availability statistics of a technical and operational nature, thereby giving a measure of spectrum occupancy (Aslan, 2014).

On the other hand spectrum monitoring as a key factor to spectrum management has several issues during its activities. Some of the frequencies which have limited range according to their nature are increasingly used for radio-communication and countries need to pay attention to monitor these frequencies and that’s why national monitoring becomes more important (ITU, 2002). Nevertheless procedures and structures to be established for countries are described by ITU recommendations. In order to meet these recommendations countries need to establish a central office and high frequency (HF) spectrum monitoring stations (ITU, 2008).

2.5.2 Adoption of FSM Platform

The duty of spectrum management involves interaction of two entities where one has the mandate to grant the other permission to operate using a channel managed by the regulator. The objective of the regulator would be to ensure that when the permission is granted all the operational parameters defined in the agreement, whether social, technological and physical factors are adhered conclusively. Any deviation would attract a punitive action when in case of severe gross violation the services offered by the regulator can be terminated permanently. This relationship can be assumed to be agency relationship. The two parties have an agency relationship when they cooperate and engage in an association wherein one party (the principal) delegates decisions and/or work to another (an agent) to act on its behalf (Eisenhardt 2009; Rungtusanatham et al., 2007). The important assumptions underlying agency theory is that; potential goal conflicts exist between principals and agents; each party acts in its own self-interest; information asymmetry frequently exists between principals and agents; agents are more risk averse than the principal; and efficiency is the effectiveness criterion.
Two problems that could potentially arise in the agency arrangement is the agency problem or the risk sharing problem (Xingxing, 2012). An agency problem appears when agents' goals differ from the principals' and it is difficult or expensive to verify whether agents have appropriately performed the delegated responsibilities (i.e. moral hazard). This problem also arises when it is difficult or expensive to verify that agents have the expertise to perform the delegated duties (i.e. adverse selection) that they claim to have. A risk-sharing problem arises when principals and agents have different attitudes towards risk that cause disagreements about actions to be taken (Xingxing 2012). Telecommunications regulator reserves the total responsibilities for managing frequencies that have been provided to the clients. As already aforementioned, once the spectrum has been delegated, the regulator has a role in monitoring the activities of the client to ensure they comply with all operational requirements as laid down in the agreement.

Newton (2002) conducted a study on the effects of business practices in the telecommunication sector. He found that Regulators monitor industry practices such as competition in the sector. He established has market competition regulation has been achieved by imposing rules and policies to enhance competition. Competition policy provides a set of tools to promote sustainable competition and to preserve a market environment in which such competition can flourish. Competition policy may be implemented through general competition laws or through competition enhancing rules in specific sectors. Such rules might include general prohibitions on anti-competitive behavior and mergers or acquisitions that would reduce competition or specific rules designed to encourage competition in the sectors, such as interconnection requirements or unbundling policies. Competition laws aim to promote efficient competition by penalizing or undoing conduct that reduces competition in a market. This study shall aim in evaluating the importance of regular enhancing industry sanity by exploring mechanisms under the powers to regulate the frequency spectrum.

IMIS frequency spectrum monitoring and measurement platform can help in some instances where a solution to a problem requires more than knowledge of authorized or designed characteristics of radio systems (GSMA, 2014). A monitoring and measuring system also obtains information on the operation of individual stations, for regulatory, enforcement, and
compliance purposes, and can be used to establish the location and identity of stations causing interference (ITU, 2002). The other important issues about spectrum management are databases; software; legal and regulatory foundation for a national spectrum management system; spectrum planning and allocation; spectrum engineering; rules, regulations and associated standards; frequency coordination and notification; licensing, assignment and billing; inspection of radio installations and lastly law enforcement (ITU, 2002).

2.6 Chapter Summary
Chapter two covered the literature in the field of Integrated Information Management (IMIS) and how different scholars link the concepts of the research objectives in this study. The section covered the literature on FMIS platform and how its adoption has impacted on the corporate obligations. The Chapter also extensively covered the opinions of other scholars in relation to automation of the procurement process and how it impacts on the dispensation of corporate duties. The section also covered the integration of IMS in the licensing, compliance and standards operations for the telecommunication regulator. Further, the Chapter covers with an analysis of the literature on frequency spectrum management and how it has been impacted by centralization of the operations.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction
This part of the project highlights the methodology which was adopted in the process of gathering field data in relation to IMIS strategy on the realization of corporate objectives. The chapter will cover sections among others including; the research design, population and Sampling, data collection methods, research procedure and data analysis method.

3.2 Research Design
Research design is a plan and structure of investigation conceived so as to obtain answers to the research question (Trochim, 2000). Greswell (2009) opined that research design involves the planning, organization, collection and analysis of data to provide information and also solutions to the existing problem of the study. According to Green and Tull (2009), a research design is the specification of methods and procedures for acquiring the information needed. It is the over-all operational pattern or framework of the project that stipulates what information is to be collected from which source by what procedures. Research design is important as it prepares proper framework within which the research work/activity will be actually carried out.

The study employed descriptive research design as the researcher considers it to be perfect for this kind of study. The descriptive design was used because the study sought to gather quantitative and qualitative data in regard to the effect of IMIS strategy on the realization of corporate objectives. According to Sekeran (2003), descriptive research design is a type of design used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. Kothari (2003) describes descriptive research as including surveys and fact-finding enquiries adding that the major purpose of descriptive research is description of the state of affairs as it exists.
3.3 Population and Sampling

3.3.1 Population

Population is the entire set of units for which the study data are to be used to make inferences (Kothari 2003). Dempsey (2003) suggested that the target population is the entire set of units which the findings of the study are meant to be generalized. Kothari et. al., (2010) defines research population as a well-defined collection of individuals or objects known to have similar characteristics. The study targeted members of staff that have authorization to use the system managers at the Communication Authority of Kenya (CAK). The study found that the list of the system users is maintained by the IT team in a system database, where a users table with different level of accreditation. There are about 200 persons with accreditation to access the IMIS platform at different levels of access (CAK, 2016). The CA IT department subdivided the access accreditation to three levels namely; senior level management, middle level management and low level management.

Table 3.1 Target Population

<table>
<thead>
<tr>
<th>Level of Access</th>
<th>IMIS Modules</th>
<th></th>
<th></th>
<th></th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accreditation</td>
<td>FMIS</td>
<td>Procurement</td>
<td>MIS</td>
<td>LCS</td>
<td>FSM</td>
</tr>
<tr>
<td>Senior Level Management Access</td>
<td>6</td>
<td>4</td>
<td>14</td>
<td>18</td>
<td>42</td>
</tr>
<tr>
<td>Middle Level Management Access</td>
<td>12</td>
<td>6</td>
<td>24</td>
<td>26</td>
<td>68</td>
</tr>
<tr>
<td>Low Level Management Access</td>
<td>16</td>
<td>10</td>
<td>32</td>
<td>32</td>
<td>90</td>
</tr>
<tr>
<td>TOTALS</td>
<td>34</td>
<td>20</td>
<td>70</td>
<td>76</td>
<td>200</td>
</tr>
</tbody>
</table>

Source: (Communication Authority of Kenya, 2016)

3.3.2 Sample Design

3.3.2.1 Sampling Frame

A sampling frame is a list that incorporates all the elements in a population from which a sample is drawn (Coopers & Schindler, 2014). Sampling frame covers the support resource
such as materials and devices from which the sample will be drawn (Yin, 2009). The requisite sample frame ought to replicate total characteristics of the study population. The sampling frame can incorporate the entire set or part of the study population. The sampling frame in this study comprised the members of staff at the Communication Authority of Kenya who have access to the IMIS platform and utilize it on their day-to-day duties. Since the respondents are the people who use the system, their experience was valuable to the study with valuable information with regard to the utilization of IMIS platform. The study sought to establish the effects of different modules of the system which include; the FMIS, the Procurement MIS, Licensing, Compliance and Standards and the Frequency Spectrum control IMS on the realization of corporate objectives.

3.3.2.2 Sampling Techniques

Sampling technique is the strategy which the researcher adopts as a mechanism geared towards identifying the most qualified respondents to the study questions (Babbie, 2010). Sampling technique defines the scientific procedures which are used in selecting a sample in a given set of target population (De Leeuw et al., 2008). This study utilized purposive sampling technique for selecting respondents. The study adopted stratified random sampling. In this method, the target population was partitioned into non-overlapping groups (stratas) where a sample is drawn from each of the stratum. This technique was useful as it helped in minimizing any biasness and further leaning the population items such that none is overrepresented or underrepresented. The partitions in this study included the users of different modules in the IMIS platform, which are; FMIS, Procurement MIS, Licensing, Compliance & Standards MIS, and the Frequency Spectrum Management IS.

3.3.2.3 Sample Size

Sample size is a smaller part representation of the whole population which is identified by the researcher (Shao and Zhuou, 2007). The sample size forms the epicenter of the research process as it comprises the individual entities of observation. The study identified strategic members of staff who use the IMIS system at the Communication Authority of Kenya. The IT department listed 200 members of staff as having access to the system. The access was subdivided into three levels of authorization, namely; top level management accreditation, middle level management accreditation and low level management accreditation.
The researcher settled for a sample of 70 respondents. The sample for each user module was calculated from the total number of users against the number of the system users:

**FMIS:**

FMIS users = 34, IMS users = 200, Sample Size = 70, FMIS sample =?

\[
\text{FMIS sample} = \frac{\text{FMIS users}}{\text{IMS users}} \times \text{Sample Size}
\]

\[
= \frac{34}{200} \times 70 = 12
\]

Thus FMIS Sample = 12

<table>
<thead>
<tr>
<th>User Module</th>
<th>Target Population</th>
<th>Sample Size</th>
<th>Percentage of Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMIS</td>
<td>34</td>
<td>12</td>
<td>17%</td>
</tr>
<tr>
<td>Procurement MIS</td>
<td>20</td>
<td>7</td>
<td>10%</td>
</tr>
<tr>
<td>LCS</td>
<td>70</td>
<td>24</td>
<td>34%</td>
</tr>
<tr>
<td>FSM</td>
<td>76</td>
<td>27</td>
<td>39%</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>200</strong></td>
<td><strong>70</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**3.4 Data Collection Methods**

According to Morris (2001), data collection procedure is the process of gathering pieces of information that are necessary for research process. Primary data present the actual information that was obtained for the purpose of the research study. Data collection instrument is a device used to collect data in an objective and a systematic manner for the purpose of the research (Orodho, 2009). Data collection instruments can be questionnaires, interviews, schedules and available records. Questionnaires are a paper and a pencil data collection instruments filled in by respondents for the purpose of the research study (Morris 2001). The main data collection instrument that was used to collect data was a structured
questionnaire containing closed-ended questions with the quantitative section of the instrument utilizing an ordinal scale format. The ordinal format was selected because according to Kiess and Bloomquist (2009), this format yields equal-interval data, a fact that allows for the use of more powerful statistical tools to test research variables. Questionnaire was preferred since according to Dempsey (2003) are effective data collection instruments that allow respondents to give much of their opinions pertaining to the researched problem.

The questionnaire was subdivided into six parts. The first part encompasses the background section which seeks to gather demographic data from the respondents. The demographic data include; gender, work experience, department, level of education, experience of interaction with automated systems, and Level of management. The subsequent sections of the questionnaire contained information about the variables of study including; FMIS, Procurement MIS, LCS MIS and FSM MIS. Section two covered the influence of FMIS on corporate objectives. Section three covered the contribution of Procurement MIS on the realization of corporate objectives. Section four covered the subject of Licensing, Compliance and Standards MIS and its influence on the realization of corporate objectives. Section five explored on the influence of Frequency Spectrum Management on the realization of Corporate Objectives. Finally the study covered on the corporate objectives. Each section had 10 close ended questions measured against a satisfaction scale of 1 – 5 with 1 lowest level of satisfaction and 5 being the highest level of satisfaction.

3.5 Research Procedures
Lescroel (2015) recognized that research procedure is the sequence of activities that are followed when carrying out field study. The researcher initiated the research process by conducting a pilot test of the questionnaire. The researcher distributed 5 questionnaires to respondents who are not part of the final study. The pilot test was carried out for the purposes of ensuring that the questionnaires are complete, precise, accurate and clear. This assisted in assessing the reliability and validity of the data collection instrument (Mugenda and Mugenda, 2008). The researcher requested for an official letter from the institution that was used to seek permission to conduct a field survey at the Communication Authority of Kenya. The letter explained all the details on the intents and purposes regarding the field survey. Upon acceptance of the request to conduct the survey, the researcher took the initiative to
personally deliver the questionnaire to the respondents. The researcher convinced the respondents to fill up the questionnaires on the spot if possible. Those who agreed to participate in the study but were busy at the time were given enough time to fill the questionnaires at their own pace. The researcher ensured made prompt follow-up relying on phone calls and text messages reminders till all the respondents offered full support by filling in the questionnaires in time and agreed on dates on which they were collected for data analysis.

The field exercise involved gathering of raw primary data as the questionnaire offered the first hand responses from the respondents with regard to the topic of study. The secondary data was gathered from published journals and previous studies by scholars in strategic management.

3.6 Data Analysis Method
Upon completion of the field study, data analysis process was next course of action. The data and information obtained through the questionnaire was checked for completeness. All the questionnaires were found correctly filled and fit for analysis, thus the researcher coded them and made entries into statistical package for social sciences (version, 20) and analyzed using quantitative technique. The research findings were subjected to mathematical or statistical manipulation to produce a broad representative of data to the total population and forecasts of future events under different conditions (McDaniel & Gates, 2013). Regression analysis of all variables was carried out and it assisted in evaluating the relationships between the dependent and independent variables. Inferential Statistics including; correlations and standard deviations were also presented using graphs to give a conclusion on the relationship between the independent and dependent variables.

3.7 Chapter Summary
This part of the proposal covered the research methodology, which is detailed description of the process that the researcher will undertake while conducting the field survey. The section covers the research design which the researcher shall adopt. The chapter has also defined the target population for this study and the sample size which is the number of participants who will take part in the study. The section also described the research procedure which will be adopted in the course of field survey and finally highlighted the research analysis method.
which will be adopted upon completion of the field survey. The next section will be chapter four which will present the findings of this study.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction
This section of the study explores the data gathered from the field survey, where its presented using charts, figures and tables.

4.2 Response Rate
The study settled for a sample of 70 respondents who are all active personnel working at the Communication Authority of Kenya. The basic requirement for participation was the respondent’s interaction with the Integrated Management Information System at the Communication Authority of Kenya. The researcher personally delivered the questionnaires to all the respondents and later collected them for study. All the questionnaires that were issued out were all successfully collected. This was achieved by researchers prompt efforts to make follow-ups on responses from all the participants. A 100% response rate was thus achieved for this study and therefore the N value would be 70 respondents.

4.3 Demographic Data
The demographic data presents the respondents background information which includes; gender, work experience, level of education, ranking at workplace and exposure to automated systems.

4.3.1 Gender of the Respondents
Figure 4.1 presents the respondents gender using a diagrammatic representation where the respondents genders were computed using the frequency as a basis for percentage derivation.

Figure 4.1 Gender Distribution
The findings in figure 4.1 indicate that majority of the respondents; about 52.86% were male, while 47.14% were female. The organization though a top public institution, has a gender imbalance, with majority of critical positions occupied by men.

### 4.3.2 Work Experience

Table 4.1 presents the data on work experience which indicates the estimated duration of time through which the respondents at the Communication Authority of Kenya.

<table>
<thead>
<tr>
<th>Duration worked at CAK</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 5 years</td>
<td>34</td>
<td>48.6%</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>21</td>
<td>30.0%</td>
</tr>
<tr>
<td>11 - 15 years</td>
<td>12</td>
<td>17.1%</td>
</tr>
<tr>
<td>Over 15 years</td>
<td>3</td>
<td>4.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

The findings in table 4.1 present the work experience which encompasses the duration which the respondents have worked at the Communication Authority of Kenya. Majority of the respondents which is about 48.6% indicated that they have worked at the organization for a period equal or less than 5 years. Further, 30% of the respondents indicated to have worked at the organization for about 6 – 10 years, about 17.1% indicated to have worked at the organization for between 11 – 15 years. Finally a marginal 4.3% of the respondents indicated that they have worked at the organization for over 15 years.
4.3.3 Department

Table 4.2 presents the details in regard to the department where the respondents work at the Communication Authority of Kenya.

Table 4.2 Department

<table>
<thead>
<tr>
<th>Department attached</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Communication and Technology</td>
<td>51</td>
<td>72.9%</td>
</tr>
<tr>
<td>Procurement Division</td>
<td>11</td>
<td>15.7%</td>
</tr>
<tr>
<td>Finance Department</td>
<td>5</td>
<td>7.1%</td>
</tr>
<tr>
<td>Licensing and Compliance Department</td>
<td>3</td>
<td>4.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

The findings in table 4.1 indicate the organizations departments at CAK where the respondents were attached to. Majority of the respondents about, 72.9% indicated that they worked at the Information Communication and Technology department. About, 15.7% of the respondents indicated that they worked at the Procurement department, whereas 7.1% of the respondents indicated that they worked at the Finance department. Finally, about 4.3% of the respondents indicated that they worked at the Licensing and Compliance department. As aforementioned in the preceding text, all the participants were persons with firsthand experience with the IMIS platform. All the departments were integrated within the system and the ICT department is responsible for maintaining the operation of the platform.

4.3.4 Level of Education

Figure 4.2 Education Level
The findings in figure 4.2 present the level of education which the respondents have attained. Majority of the respondents, 57.10% indicated to have attained a bachelor’s degree. Further, 21.40% of the respondents indicated to have attained diploma and about 2.9% indicated that they attained a certificate. About 18.60% of the respondents indicated that they attained a post-graduate level of education.

**4.3.5 Duration of interaction with Automated Systems**

Table 4.3 presents the findings on the duration through which the respondents have interacted with the automated systems.

<table>
<thead>
<tr>
<th>Duration of interaction with Automated systems</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 2 years</td>
<td>30</td>
<td>42.9%</td>
</tr>
<tr>
<td>2 - 4 years</td>
<td>32</td>
<td>45.7%</td>
</tr>
<tr>
<td>4 - 6 years</td>
<td>5</td>
<td>7.1%</td>
</tr>
<tr>
<td>Over 6 years</td>
<td>3</td>
<td>4.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>70</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The findings in table 4.3 indicate that majority of the respondents; about 45.7% have interacted with automated systems for a period of 2 – 4 years. Further, about 42.9% of the respondents indicated that they have interacted with the automated systems for less than two years. About 7.1% of the respondents indicated that they have interacted with automated
systems for a period of between 4 – 6 years. Finally, about 4.3% of the respondents indicated that they have interacted with automated systems for over 6 years. The findings on duration of exposure to automated systems, largely replicates the work experience, in that an overwhelming majority of the respondents indicated that they have worked at CAK for a period less than 10 years.

4.3.6 Position

Table 4.4 presents the findings on position ranking in the work designation within the Communication Authority of Kenya among the respondents.

<table>
<thead>
<tr>
<th>Position</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Level Management</td>
<td>11</td>
<td>15.7%</td>
</tr>
<tr>
<td>Middle Level Management</td>
<td>13</td>
<td>18.6%</td>
</tr>
<tr>
<td>Lower Level Management</td>
<td>46</td>
<td>65.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>100.0 %</strong></td>
</tr>
</tbody>
</table>

The findings in table 4.4 indicate that majority of the respondents; about 65.7% were low level management staff. About 18.6% of the respondents indicated that they were middle level management staff and 15.7% of the respondents were senior level management staff.

4.4 Effect of Financial Management Information System on Corporate Objectives

The first objective was to assess the influence of Financial Management Information System module on the realization of corporate objectives. The study identified numerous FMIS factors and evaluated the extent to which they influence the realization corporate objectives.

4.4.1 Correlation

Table 4.5 presents the findings on the correlation between Financial Management Information System and Corporate Objectives.
Table 4.5 Correlation between FMIS and Corporate Objectives

<table>
<thead>
<tr>
<th></th>
<th>Corporate Objectives</th>
<th>FMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate objectives</td>
<td>1.000</td>
<td>.168</td>
</tr>
<tr>
<td>FMIS</td>
<td>.168</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Objectives</td>
<td></td>
<td>.083</td>
</tr>
<tr>
<td>FMIS</td>
<td>.083</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>Corporate objectives</td>
<td>70</td>
</tr>
<tr>
<td>FMIS</td>
<td>70</td>
<td>70</td>
</tr>
</tbody>
</table>

The findings in table 4.5 indicate that for a 1-tailed correlation test, there exist a positive significant relationship between the independent variable, FMIS and the dependent variable corporate objectives. The findings indicate that, using a Pearson’s correlation, at 95% confidence interval, there is a positive relationship at significance level 0.168 between the dependent and independent variable.

4.4.2 The Influence of FMIS Factors on Corporate Objectives

Table 4.6 presents the findings on Means and Standard Deviation for the Financial Management Information Systems factors.

Table 4.6 Mean and Std. Deviation of FMIS factors

<table>
<thead>
<tr>
<th>FMIS factors</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The extent to which FMIS influence Corporate Objectives</td>
<td>70</td>
<td>4.61</td>
<td>0.531</td>
</tr>
</tbody>
</table>

The findings in table 4.6 presents mean and standard deviation as derived from respondent’s opinions on different factors on Financial Management Information System. A scale of 1 – 5 was used where; 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 =
Strongly Agree. The computation revealed that, FMIS impact of lowering transaction costs, with a mean of 4.84, was rated by respondents as the most significant factor impact of the IMIS platform at the Communication Authority of Kenya. The computed average for respondent’s opinions for the FMIS variables was 4.61. The study therefore makes a finding that, FMIS factors notably; lower transaction costs, Financial Security, Fiscal discipline, financial forecasting, Accountability, Financial reporting, Transparency, Effective financial decisions, Financial Tracking and Comparative Analysis influence the realization of corporate objectives to a large extent.

4.4.3 Regression Analysis of FMIS versus Realization of Corporate Objectives

Regression analysis involved the correlation of all FMIS factors against the Corporate objective; realization of coordination.

Table 4.7 Model Summary, FMIS factors and corporate objectives

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.390(a)</td>
<td>.152</td>
<td>.008</td>
<td>.501</td>
</tr>
</tbody>
</table>


The model summary presented in table 4.7 computes the relationship between the independent variable FMIS factors and the influence on corporate objectives. The model establishes the R value for the relation as 0.390, whereas the R Square value is computed as 0.152. The study therefore makes a finding that, FMIS factors contribute about 15.2% in the variability of corporate objectives, whereas about 84.8% of the variability in corporate objectives is contributed by other factors.

Table 4.8 Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>2.655</td>
<td>10</td>
<td>.265</td>
<td>1.059</td>
</tr>
</tbody>
</table>
The findings presented in table 4.8 demonstrate the Analysis of variance between the independent variable FMIS and dependent variable corporate objectives. The results indicate that, $F (10, 59) = 1.059$, $p = 0.408$ ($p < 0.5$) at 95% significance level. The F statistic value 1.059 is reflected at significance 0.408, which indicates that it’s significant at that level. The study thus makes a finding that FMIS factor, including: lowers transaction costs, Financial Security, Fiscal discipline, Financial forecasting, Accountability, Financial reporting, Transparency, Effective financial decisions, Financial Tracking and comparative Analysis have a significant effect on corporate objectives.

### Table 4.9 Coefficients, FMIS and realization of Corporate Objectives

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>3.865</td>
<td>1.127</td>
<td>3.431</td>
</tr>
<tr>
<td></td>
<td>Financial reporting</td>
<td>.142</td>
<td>.202</td>
<td>.147</td>
</tr>
<tr>
<td></td>
<td>Fiscal discipline</td>
<td>-.463</td>
<td>.428</td>
<td>-.405</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
<td>.538</td>
<td>.448</td>
<td>.494</td>
</tr>
<tr>
<td></td>
<td>Transparency</td>
<td>-.073</td>
<td>.184</td>
<td>-.088</td>
</tr>
<tr>
<td></td>
<td>Financial Tracking</td>
<td>.016</td>
<td>.217</td>
<td>.025</td>
</tr>
<tr>
<td></td>
<td>Comparative Analysis</td>
<td>-.049</td>
<td>.193</td>
<td>-.067</td>
</tr>
<tr>
<td></td>
<td>Lower transaction costs</td>
<td>.039</td>
<td>.277</td>
<td>.028</td>
</tr>
<tr>
<td></td>
<td>Effective financial decisions</td>
<td>.067</td>
<td>.174</td>
<td>.085</td>
</tr>
</tbody>
</table>
The results in table 4.9 presents the t – statistic values for FMIS factors as; lowers transaction costs  $t (69)= 0.140$, Financial Security $t (69)= -1.354$, Fiscal discipline $t(69) = -1.081$, Financial forecasting $t(69) = 1.360$, Accountability $t(69)= 1.202$, Financial reporting $t(69)= 0.704$, Transparency $t(69) = -3.99$, Effective financial decisions $t= 0.387$, Financial Tracking $t= 0.074$ and Comparative Analysis $t= -0.255$. The Financial Management Information System has a significant effect on the realization of corporate objectives, with p value = 0.408 at 95% confidence level. The study further makes a finding that, FMIS factors contribute to a net of 0.21 units shift in the corporate objectives. The study thus concludes that for any change that occurs in corporate objectives, FMIS factors will contribute about 0.21 units in that change.

### 4.5 Effect of Procurement Management Information System on Corporate Objectives
The second objective was to assess the contribution of Procurement Management Information System in the realization of corporate objectives.

#### 4.5.1 Correlation Analysis
Table 4.10 presents the findings on the test for correlation between the independent variable Procurement MIS against the dependent variable Corporate Objectives.

<table>
<thead>
<tr>
<th></th>
<th>.304</th>
<th>.223</th>
<th>.271</th>
<th>1.360</th>
<th>.179</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial forecasting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial security</td>
<td>- .371</td>
<td>.274</td>
<td>- .280</td>
<td>-1.354</td>
<td>.181</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Corporate Objectives*
Table 4.10 Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Corporate Objectives</th>
<th>Procurement MIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>Corporate Objectives</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Procurement MIS</td>
<td>.079</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>Corporate Objectives</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>Procurement MIS</td>
<td>.258</td>
</tr>
<tr>
<td>N</td>
<td>Corporate Objectives</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Procurement MIS</td>
<td>70</td>
</tr>
</tbody>
</table>

The findings in table 4.10 indicate that there exists a significant statistical relationship in the variables under study. The analysis used a one-tail Pearson correlation test, at 95% confidence interval, where a finding was made that there exist a positive relationship between Procurement MIS and Corporate Objectives at significance level 0.079. The study makes a finding that there exists a positive significant relationship between independent variable notably Procurement MIS and the dependent variable corporate objectives.

4.5.2 Procurement MIS factors

Table 4.11 presents the respondents opinions on the influence of Procurement MIS factors in realization of effective used of the integrated digital procurement platform.

Table 4.9 Procurement MIS factors, Mean & Std. Deviation

<table>
<thead>
<tr>
<th>Procurement MIS factors</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The extent to which Procurement MIS influence on Corporate Objectives</td>
<td>70</td>
<td>4.68</td>
<td>0.471</td>
</tr>
</tbody>
</table>

The findings in table 4.11 present mean and standard deviation derived from the respondent’s opinions on the influence of Procurement Management Information System factors on the realization corporate objectives. A scale of 1 – 5 was used where; 1 = Strongly Disagree, 2 =
Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree. The study makes a finding that enforcement of procurement accountability was the most significant factor that wields huge impact on the realization of corporate objectives, registering a mean of 4.96. The findings also indicate that, the average attained for all the Procurement MIS factors is 4.68, which indicates that all the factors wield significant influence on the realization of corporate objectives. Therefore the study makes a finding that, Procurement MIS factors, namely; Procurement accountability, sealing fraud loopholes, lowering administrative costs, Supply Chain Transparency, Task acceleration; Supply Chain Efficiency, Lower Supply Chain operational costs, Procurement targets, External Resources Identification and Inventory control wield a significant influence on the realization of corporate objectives.

4.5.3 Regression Analysis, procurement MIS versus realization of corporate objectives

The regression analysis assists in assessing the relationship that exists between the independent variable, Procurement MIS and the dependent variable, corporate objective. This statistical evaluation will highlight, quantifiable figure which indicates Procurement MIS factors wield on corporate objectives.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.303</td>
<td>.092</td>
<td>-.062</td>
<td>.514</td>
</tr>
</tbody>
</table>

a. **Predictors:** (Constant), Procurement accountability, sealing fraud loopholes, lowering administrative costs, Supply Chain Transparency, Task acceleration; Supply Chain Efficiency, Lower Supply Chain operational costs, Procurement targets, External Resources Identification and Inventory control

The model summary in table 4.12 presents the relationship between the procurement MIS factors and corporate objectives. The computation resulted in R value of 0.303, and the R Square value of 0.092. The study makes a finding that, Procurement MIS factors account for
9.2% variability in corporate objectives. Therefore, 90.8% of variability in corporate objectives can be attributed to other factors beyond the scope of Procurement function.

Table 4.13 ANOVA, Procurement MIS and Corporate Objectives

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.579</td>
<td>10</td>
<td>.158</td>
<td>.599</td>
<td>.809</td>
</tr>
<tr>
<td>Residual</td>
<td>15.564</td>
<td>59</td>
<td>.264</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17.143</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. **Dependent Variable:** Corporate Objectives

b. **Predictors:** (Constant), Procurement accountability, sealing fraud loopholes, lowering administrative costs, Supply Chain Transparency, Task acceleration; Supply Chain Efficiency, Lower Supply Chain operational costs, Procurement targets, External Resources Identification and Inventory control

The findings in table 4.13, present the variance in independent variable Procurement MIS against the dependent variable corporate objectives. The results indicate that, F (10, 59) = 0.599, and p = 0.809. The results indicate that the F statistic value, 0.599 has been reflected at significance level, 0.809 which indicates that it’s significant at that level. These findings indicate that, Procurement MIS has significant statistical effect on the realization of corporate objectives.
The findings in table 4.14 present the coefficient relationship between all the Procurement MIS factors analysis and the dependent variable corporate objectives. The results for coefficients statistic for the Procurement MIS factors include; lowering administrative costs $t(69) = 0.320$, Supply Chain Efficiency $t(69) = -0.281$, Inventory control, $t(69) = 0.038$, External Resources Identification, $t(69) = -0.149$, Procurement accountability, $t(69) = -0.021$, Lower Supply Chain operational costs, $t(69) = -0.215$, Task acceleration, $t(69) = -0.160$, Sealing off fraud loopholes, $t(69) = 0.311$, Procurement targets, $t(69) = 0.244$ and Supply Chain Transparency, $t(69) = -0.254$. 

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>lowering administrative costs</td>
<td>.363</td>
<td>.554</td>
<td>.320</td>
</tr>
<tr>
<td></td>
<td>Supply Chain Efficiency</td>
<td>-.312</td>
<td>.554</td>
<td>-.281</td>
</tr>
<tr>
<td></td>
<td>Inventory control</td>
<td>.025</td>
<td>.172</td>
<td>.038</td>
</tr>
<tr>
<td></td>
<td>External Resources Identification</td>
<td>-.133</td>
<td>.218</td>
<td>-.149</td>
</tr>
<tr>
<td></td>
<td>Procurement accountability</td>
<td>-.052</td>
<td>.368</td>
<td>-.021</td>
</tr>
<tr>
<td></td>
<td>Lower Supply Chain operational costs</td>
<td>-.224</td>
<td>.172</td>
<td>-.215</td>
</tr>
<tr>
<td></td>
<td>Task acceleration</td>
<td>-.178</td>
<td>.296</td>
<td>-.160</td>
</tr>
<tr>
<td></td>
<td>Sealing fraud loopholes</td>
<td>.358</td>
<td>.322</td>
<td>.311</td>
</tr>
<tr>
<td></td>
<td>Procurement targets</td>
<td>.252</td>
<td>.242</td>
<td>.244</td>
</tr>
<tr>
<td></td>
<td>Supply Chain Transparency</td>
<td>-.283</td>
<td>.268</td>
<td>.254</td>
</tr>
</tbody>
</table>

a. **Dependent Variable:** Corporate Objectives
Chain Transparency, $t(69) = 0.254$. The results show that, Procurement MIS factors have a significant statistical effect on the realization of corporate objectives as show by $p = 0.809$ at 90% confidence level. The study makes a finding that, for every extra measurable change in Procurement function, will induce a 0.341 unit’s change in corporate objectives.

4.6 Effect of Licensing, Compliance and Standards MIS on Corporate Objectives
The third objective of this study was to evaluate the impact of licensing, Compliance and Standards module in the realization of corporate objectives at the Communication Authority of Kenya.

4.6.1 Correlation

The data in table 4.15 presents the findings on the test for correlation between the dependent variable, LCS MIS and the dependent variable Corporate Objectives.

Table 4.15 Correlations between, LCS factors and corporate objectives

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Corporate Objectives</th>
<th>LCS MIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>Corporate Objectives</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>LCS MIS</td>
<td>.253</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>Corporate Objectives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LCS MIS</td>
<td>.017</td>
</tr>
<tr>
<td>N</td>
<td>Corporate Objectives</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>LCS MIS</td>
<td>70</td>
</tr>
</tbody>
</table>

The findings in table 4.15 indicate that there exists a significant relationship between the variables of study. The analysis used the Pearson correlation coefficient at confidence interval 95%. The study makes a finding that there exist a positive correlation between LCS MIS and Corporate objectives at significance Level 0.253. The study thus establishes a significant positive statistical relationship between the independent variable LCS MIS and the dependent variable Corporate objectives.
4.6.2 LCS Factors

Table 4.16 presents the licensing, compliance and standards factors; mean and standard deviation as derived from field sample.

Table 4.16 LCS Factors, Mean & Standard Deviation

<table>
<thead>
<tr>
<th>LCS factors</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The extent to which Licensing, Compliance &amp; Standards MIS influence Corporate Objectives</td>
<td>70</td>
<td>4.59</td>
<td>0.518</td>
</tr>
</tbody>
</table>

The findings in table 4.16 presents mean and standard deviation derived from the respondent’s opinions on the Licensing, Compliance and Standards factors influence on the realization of corporate objectives. A scale of 1 – 5 was used where; 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree. The study makes a finding that the LCS factor, detection of illegal and fraudulent licenses wields the most influence on the realization of corporate objectives with a mean of 4.84. The study further makes a finding that all the LCS factors wielded influence on the realization of corporate objectives, computing an average mean of 4.59. The study thus makes a conclusion that, LCS factors notably; Fraudulent License detection, Effective licensing decisions, Prevention of Licensing fraud, Electronic documents transmission, Accessibility, Coordination of Licensing operations, lower licensing costs, Mandate execution, improved licensing standards and virtual experience contribute strongly on the realization of corporate objectives.

4.6.3 Regression Analysis of Licensing, Compliance and Standards Variable

Regression analysis was conducted relying on two-tailed linear comparison to aid in evaluation of the relationship between the independent variable LCS factors and dependent variable corporate objectives.
Table 4.17 Model Summary, LCS factors and corporate objectives

<table>
<thead>
<tr>
<th>Model Summary</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>R</td>
<td>R Square</td>
<td>Adjusted R Square</td>
<td>Std. Error of the Estimate</td>
</tr>
<tr>
<td>1</td>
<td>.491</td>
<td>.241</td>
<td>.112</td>
<td>.474</td>
</tr>
</tbody>
</table>

a. **Predictors:** (Constant), Fraudulent License detection, Effective licensing decisions, Prevention of Licensing fraud, Electronic documents transmission, Accessibility, Coordination of Licensing operations, lower licensing costs, Mandate execution, improved licensing standards and virtual experience

The model summary presented in table 4.17 presents the results of the relationship between the independent variable factors and dependent variable, where the computation obtained an R value of 0.491 and an R Square value of 0.241. This finding indicates that, LCS factors account for 24.1% of the variation in corporate objective, and therefore 75.9% of variation in corporate objectives can be attributed to other factors.

Table 4.18 ANOVA, LCS and Corporate Objectives

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>4.201</td>
<td>10</td>
<td>.420</td>
<td>1.872</td>
</tr>
<tr>
<td>Residual</td>
<td>13.242</td>
<td>59</td>
<td>.224</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17.443</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: IMIS has improved staff productivity at CAK

b. **Predictors:** (Constant) Fraudulent License detection, Effective licensing decisions, Prevention of Licensing fraud, Electronic documents transmission, Accessibility, Coordination of Licensing operations, lower licensing costs, Mandate execution, improved licensing standards and virtual experience

The results in table 4.18 present the Analysis on the LCS factors which form the independent variable and the corporate objectives which is the dependent variable. The outcome indicate that, F (10, 59) = 1.872, with P = 0.068 at 95% Confidence interval. This indicates that the F
statistic value, 1.872 is reflected at significance level 0.068, which means that it’s significant at that level. This finding that, Licensing, Compliance and Standards factors wielded a significant statistical effect on the realization of corporate objectives.

### Table 4.19 Coefficients, LCS factors and Corporate Objectives

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>2.202</td>
<td>.968</td>
<td>2.276</td>
<td>.027</td>
</tr>
<tr>
<td>Virtual experience</td>
<td>.097</td>
<td>.148</td>
<td>.137</td>
<td>.659</td>
</tr>
<tr>
<td>Electronic documents transmission</td>
<td>-.185</td>
<td>.189</td>
<td>-.178</td>
<td>-.981</td>
</tr>
<tr>
<td>Mandate enforcement</td>
<td>.036</td>
<td>.112</td>
<td>.044</td>
<td>.325</td>
</tr>
<tr>
<td>Lowering licensing costs</td>
<td>-.067</td>
<td>.175</td>
<td>-.066</td>
<td>-.384</td>
</tr>
<tr>
<td>Coordinating licensing operations</td>
<td>.257</td>
<td>.187</td>
<td>.252</td>
<td>1.374</td>
</tr>
<tr>
<td>Accessibility</td>
<td>-.247</td>
<td>.208</td>
<td>-.241</td>
<td>-1.189</td>
</tr>
<tr>
<td>Prevents Licensing fraud</td>
<td>.121</td>
<td>.201</td>
<td>.111</td>
<td>.604</td>
</tr>
<tr>
<td>Detecting Fraudulent licenses</td>
<td>.015</td>
<td>.219</td>
<td>.011</td>
<td>.070</td>
</tr>
<tr>
<td>Effective licensing decisions</td>
<td>.324</td>
<td>.182</td>
<td>.279</td>
<td>1.778</td>
</tr>
<tr>
<td>Improved licensing standards</td>
<td>.157</td>
<td>.116</td>
<td>.199</td>
<td>1.354</td>
</tr>
</tbody>
</table>

a. **Dependent Variable**: Corporate objectives

The results in table 4.19 present the coefficient relationship between the independent and the dependent variables. The findings indicate t – statistic values for LCS factors, which include; Virtual experience t(69) = 0.659, Electronic documents transmission t(69) = -0.981, Mandate enforcement t(69) = 0.325, Lowering licensing costs t(69) = -0.384, Coordinating licensing operations t(69) = 1.374, Accessibility t(69) = -1.189, Prevents Licensing fraud t(69) = 0.604, Detecting Fraudulent licenses t(69) = 0.070, Effective licensing decisions t(69) = 1.778, and Improved licensing standards t(69) = 1.354. The study establishes a significant statistical relationship between the independent variable LCS factors with F (10, 59) = 1.872, with p=0.068 at 95% confidence interval. The study makes a finding that for
every fractional change in corporate objectives, LCS factors contribute about 0.548 units in for every noted change.

4.7 Effect of Frequency Spectrum Management MIS on Corporate Objectives
The fourth objective of this study was to evaluate the impact of Frequency Spectrum Management (FSM) module in the realization of corporate objectives.

4.7.1 Correlation

The data in table 4.20 presents the findings on the test for existence of correlation between the dependent and the dependent variables.

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Corporate Objective</th>
<th>FSM IMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>Corporate Objective</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>FSM IMIS</td>
<td>.457</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>Corporate Objective</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>FSM IMIS</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>Corporate Objective</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>FSM IMIS</td>
<td>70</td>
</tr>
</tbody>
</table>

The findings in table 4.20 indicate that there exists a positive statistical relationship between the independent and the dependent variables of study. The study used a one-tail Pearson coefficient test at confidence interval of 95%. The study makes a finding that there exists a positive significant relationship between the independent variable FSM MIS and the dependent variable Corporate Objectives at significance level 0.457.
4.7.2 FSM factors

Table 4.21 presents the frequency spectrum management factors mean and standard deviation as gathered from the respondent’s opinions.

Table 4.17 FSM factors, Mean & Standard Deviation

<table>
<thead>
<tr>
<th>FSM factors</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The extent to which Frequency Spectrum Management MIS influence Corporate Objectives</td>
<td>70</td>
<td>4.61</td>
<td>0.499</td>
</tr>
</tbody>
</table>

The findings in table 4.21 presents mean and standard deviation derived from respondent’s opinions on the influence of FSM factors on the realization of corporate objectives. The study makes a finding that the FSM factor, enhancement of telecommunication security wielded more influence on the realization of corporate objectives with a mean of 4.84. The study further makes a finding that, all the FSM factors influenced corporate objectives to a large extent, recording an average mean of 4.61. The study makes a conclusion that, FSM factors notably; Telecommunication security, System Audit, Preventing fraudulent Frequencies, Eliminate illegal frequencies, Implementing quality control, Eliminating frequency duplication, Efficient operations, Eliminating frequency interference, Improved Accessibility to frequencies, and Frequency Standardization had a considerable influence on the realization of corporate objectives.

4.7.3 Regression Analysis of FSM factors versus Corporate Objectives

Regression analysis sought to evaluate the relationship between independent variable FSM factors and the dependent variable corporate objectives.
Table 4.22 Model Summary, FSM factor and Corporate Objectives

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.528a</td>
<td>.279</td>
<td>.157</td>
<td>.456</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant) Telecommunication security, System Audit, Preventing fraudulent Frequencies, Eliminate illegal frequencies, Implementing quality control, Eliminating frequency duplication, Efficient operations, Eliminating frequency interference, Improved Accessibility to frequencies, and Frequency Standardization

The model summary in table 4.22 presents the relationship between the Independent variable FSM factors and the dependent variable corporate objective. The results computed indicate the R value as 0.528, whereas the R Square value is 0.279. This implies that the FSM factors account for 27.9% of the variability in corporate objectives, and consequently 72.1% of variability in corporate objectives is attributed to other factors.

Table 4.23 ANOVA, FSM and Corporate Objectives

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>4.741</td>
<td>10</td>
<td>.474</td>
<td>2.285</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>12.244</td>
<td>59</td>
<td>.208</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>16.986</td>
<td>69</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. **Dependent Variable:** IMIS platform has enabled optimal use of resources

b. **Predictors:** (Constant), Telecommunication security, System Audit, Preventing fraudulent Frequencies, Eliminate illegal frequencies, Implementing quality control, Eliminating frequency duplication, Efficient operations, Eliminating frequency interference, Improved Accessibility to frequencies, and Frequency Standardization

The findings in table 4.23 presents the findings on the Analysis of variance for independent variable, FSM factors against corporate objectives. The results indicate that, F (10, 59) = 2.285, p = 0.024 at 95% Confidence level. This indicates that, the F Statistic value 2.285 is reflected at significance level 0.024, which means that it’s significant at that level. The study
therefore makes finding that; FSM factors wield a significant statistical effect on the realization of corporate objectives.

**Table 4.24 Coefficients, FSM and Corporate Objectives**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.934</td>
<td>1.133</td>
<td>2.590</td>
</tr>
<tr>
<td></td>
<td>Efficient operations</td>
<td>.276</td>
<td>.173</td>
<td>.280</td>
</tr>
<tr>
<td></td>
<td>Telecommunication security</td>
<td>-.051</td>
<td>.194</td>
<td>-.038</td>
</tr>
<tr>
<td></td>
<td>Eliminating frequency duplication</td>
<td>.044</td>
<td>.160</td>
<td>.043</td>
</tr>
<tr>
<td></td>
<td>Implementing quality control</td>
<td>-.049</td>
<td>.172</td>
<td>-.047</td>
</tr>
<tr>
<td></td>
<td>Eliminating illegal frequencies</td>
<td>-.192</td>
<td>.182</td>
<td>-.178</td>
</tr>
<tr>
<td></td>
<td>Preventing fraudulent frequencies</td>
<td>-.206</td>
<td>.209</td>
<td>-.179</td>
</tr>
<tr>
<td></td>
<td>Systems audit</td>
<td>-.149</td>
<td>.210</td>
<td>-.130</td>
</tr>
<tr>
<td></td>
<td>Accessibility</td>
<td>.132</td>
<td>.136</td>
<td>.192</td>
</tr>
<tr>
<td></td>
<td>Eliminating frequency interference</td>
<td>.273</td>
<td>.127</td>
<td>.277</td>
</tr>
<tr>
<td></td>
<td>Standardization</td>
<td>.298</td>
<td>.135</td>
<td>.367</td>
</tr>
</tbody>
</table>

a. **Dependent Variable**: Corporate objectives

The findings in table 4.24 present the t – statistic coefficients of independent variable, FSM factors and dependent variable corporate objectives. The t – statistic coefficients for FSM factors include; Efficient operations, t (69) = 1.594, Telecommunication security, t(69) = -0.264, Eliminating frequency duplication, t(69)= 0.276, Implementing quality control, t(69) = -0.286, Eliminating illegal frequencies, t(69) = -1.054, Preventing fraudulent frequencies, t (69) = -0.984, Systems audit ,t(69)= -0.713, Accessibility , t(69)= 0.976, Eliminating
frequency interference, $t(69) = 2.141$, and Standardization, $t(69) = 2.200$. The study makes a finding that, the F statistic value, $F(10, 59) = 2.285$, and $p = 0.024$ at confidence level 95% indicates that there exists a significant statistical relationship between the independent variable FSM factors and corporate objectives. The study finally makes a conclusion that for every quantifiable change that in FSM factors will result in about 0.587 units change in corporate objectives.

4.8 Multivariate Linear Regression Analysis of the Study Variables

The study further conducted a regression analysis to establish the relationship between the study variables, notably; FMIS ($X_1$), Procurement MIS ($X_2$), Licensing, Compliance & Standards MIS ($X_3$), and finally the Frequency Spectrum MIS ($X_4$). Regression analysis makes it possible to validate if there exists statistical relationship between the dependent and the independent variables (Green & Salkind, 2013). In addition regression analysis makes it possible to compute the regression equation.

The model used for the regression analysis was expressed in the general form as given below:

$$Y = a + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + e$$

For this model, corporate objectives was used as the dependent variable ($Y$), whereas independent variables include; FMIS ($X_1$), Procurement MIS ($X_2$), Licensing, Compliance & Standards MIS ($X_3$), and the Frequency Spectrum MIS ($X_4$). The value $a$ represents the constant, while $e$ represents the margins of error in the model.

The relationships between the dependent variable and independent variables, and the results of testing significance of the model were also respectively interpreted. In interpreting the results of multiple regression analysis, the three major elements considered were: the coefficient of multiple determinations, the standard error of estimate and the regression coefficients. R squared was used to check how well the model fitted the data. R squared is the proportion of variation in the dependent variable explained by the regression model.
Table 4.25 Regression Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.949</td>
<td>.901</td>
</tr>
</tbody>
</table>

Predictors: (Constant), X1, X2, X3, X4

From the findings in table 4.25 shows that the regression model coefficient of determination (R2) is 0.901 and R is 0.949 at 0.05 significance level. This is an indication that the four independent variables notably; Financial MIS, Procurement MIS, LCS MIS, and FSM MIS are significant in contributing to the realization of corporate objectives. The coefficient of determination indicates that 94.9% of the variation on corporate objectives is influenced by independent variables (X1) FMIS, (X2) Procurement MIS, (X3) LCS MIS, and (X4) FSM MIS. This indicates that there exists a significant positive relationship between the variables and realization of corporate objectives. The remaining 6.1% significance for variability is influenced by other factors which are not captured in the model. According to Graham (2002) a model will be deemed valid if it can result to a 75% in variability on the dependent variable (Corporate Objectives).

Table 4.26 Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P-Value.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>9.119</td>
<td>4</td>
<td>2.280</td>
<td>84.351</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>1.000</td>
<td>37</td>
<td>.027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10.119</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X1, X2, X3, X4
b. Dependent Variable: Y

The findings in Table 4.26 present the results of one way Analysis of Variance (ANOVA) in order to test the significance of the overall regression model. Observation’s by Green & Salkind (2003) suggests that one way Analysis of Variance helps in determining the
significant relationship between the research variables. Table 4.26 hence shows the regression and residual (or error) sums of squares. The variance of the residuals (or errors) is the value of the mean square which is 2.280. The predictors X1, X2, X3 and X4 represent the independent variables notably; (X1) FMIS, (X2) Procurement MIS, (X3) LCS MIS, and (X4) FSM MIS as the main factors which contribute to the realization of corporate objectives. Since the P value is actual 0.00 which is less than 5% level of significance. Table 4.26 also indicates that the high value of F (84.353) with significant level of 0.00 is large enough to conclude that all the independent variables significantly influence the realization of corporate objectives.

Table 4.27 Coefficients, The IMIS strategy on Corporate Objectives

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Constant)</td>
<td>0.217</td>
<td>.211</td>
<td>.449</td>
</tr>
<tr>
<td></td>
<td>FMIS</td>
<td>0.898</td>
<td>.184</td>
<td>.128</td>
</tr>
<tr>
<td></td>
<td>Procurement MIS</td>
<td>0.787</td>
<td>.184</td>
<td>.060</td>
</tr>
<tr>
<td></td>
<td>LCS MIS</td>
<td>0.644</td>
<td>.170</td>
<td>.150</td>
</tr>
<tr>
<td></td>
<td>FSM MIS</td>
<td>0.544</td>
<td>.168</td>
<td>.206</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Corporate Objectives

The findings in table 4.27 presents the results of the test of beta coefficients which indicates that the significant relationship between independent variables notably; (X1) FMIS, (X2) Procurement MIS, (X3) LCS MIS, and (X4) FSM MIS and (Y) Corporate Objectives as the dependent variable.

The findings indicate that; (X1) FMIS coefficient of 0.898 was found to be positive at significant level of 0.001 and this indicates that FMIS has a positive influence on realization
of corporate objectives. (X_2) Procurement MIS coefficient of 0.544 was found to be positive at significant level of 0.004 and this indicates that Procurement MIS has a positive influence on the realization of corporate objectives. (X_3) LCS MIS coefficient of 0.644 was found to be positive at significant level of 0.003 and this indicates that LCS MIS has a positive influence on the realization of corporate objectives. (X_4) FSM MIS coefficient of 0.787 was found to be positive at significant level of 0.002 and this indicates that FSM MIS has a positive influence on Corporate Objectives. This clearly demonstrates that all the independent variables significantly influenced corporate objectives but the relative importance of each independent variable was different. However, since the significance values were less than 0.005, all the coefficients were significant and thus the regression equation was:

\[ Y = 217 + 898X_1 + 544X_2 + 644X_3 + 787X_4 + X_5 + e \]

### 4.9 Chapter Summary

This section of the study explored on the findings from the field survey. The section commenced with an overview of the respondents background information which accounted for the demographic details for our sets of observation. Subsequent section covered the analysis of all the independent variables. The analysis incorporated assessment of individual’s variable factors and their influence on the dependent variable corporate objectives. Regression analysis was carried out to assess the statistical correlation between the independent and the dependent variables. The next section is chapter five, which covers key areas notably; a summary of the findings, discussion of the findings, main conclusions, recommendations and finally suggestions for further studies.
CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This section of the study covers the final sections of the study subject. This section indicates that the study has now reached the homestretch and the content centers on the closing remarks. Key sections to be covered in this part are notably; summary of the findings, Discussion of the findings, conclusion, recommendations and suggestions for further studies.

5.2 Summary of the findings
The main purpose for this study was to establish the effects of Integrated Management Information System on the realization of corporate objectives. The study looks at the prospects of centralized information systems as a core platform for integrating various operations within an organization and how it can influence the strategic management of an organization. The study evaluated the IMIS platform used by the Communication Authority of Kenya, where its main components formed the variables assessed in this study. The study was guided by the following objectives; to evaluate impacts of FMIS in realization of corporate objectives, to assess the contribution of Procurement MIS in realization of corporate objectives, to investigate the impact of Licensing, Compliance & Standards IMS in achievement of corporate objectives, and finally to study the influence of Frequency Spectrum Management information system in the realization of corporate objectives.

The study adopted descriptive research design as the research methodology. The target population was the active personnel at the CAK who have direct interaction with the IMIS platform. Official communication from the IT department indicated that about 200 members of staff had access to the system. The IT department also indicated that the accreditation for system access is divided along 3 level of ranking in the organization which include; the senior level management, middle level management and low level management. The study relied on purposive sampling to identify and organize the respondents across different strata’s based on system modules access. A sample size of the 70 respondents was identified and they all participated in the study. The researcher used SPSS version 20 to compute and analysis the field results. The study established that an overwhelming majority of the respondents were highly educated personnel with academic qualification of bachelor’s and post-graduate
degrees. This meant that, all the respondents exuded deep understanding of the IMIS system operation.

The first objective in the study was to evaluate the influence of Financial Management Information System on the realization of corporate objectives. The FMIS module executes operations related to financial tasks within CAK. The study makes a finding that, FMIS contributed to lowering of transaction costs registering a mean of 4.84. The study makes a finding that, FMIS wielded positive impacts on the financial transactions, accumulating an average approval of 4.61 across all the FMIS factors. The study therefore makes a finding that IMIS platform enhances FMIS factors notably; Financial Security, Fiscal discipline, financial forecasting, Accountability, Financial reporting, Transparency, Effective financial decisions, Financial Tracking and Comparative Analysis. These factors consequently wielded surmountable influence on the realization of corporate objectives.

The second objective in this study was to evaluate the impact of Procurement Management Information System on the realization of corporate objectives. The study makes a finding that, enforcement of procurement accountability as the most fundamental impact of Procurement MIS, recording a mean of 4.96. The study further makes a finding that; IMIS platform utilization has wielded positive impact on Positive impact on Procurement operations, registering an average mean of 4.68. The study makes a finding that, Procurement Management Information System factors notably; sealing fraud loopholes, lowering administrative costs, Supply Chain Transparency, Task acceleration; Supply Chain Efficiency, Lower Supply Chain operational costs, Procurement targets, External Resources Identification and Inventory control have significant influence on the realization of corporate objectives.

The study third objective was to evaluate the impact of Licensing, Compliance and Standards module on the realization of corporate objectives. The LCS MIS module capability to detect illegal and fraudulent licenses was found to be the most significant component recording an approval rating of about 4.84. The study established that IMIS platform significantly enhanced Licensing, Compliance and Standards operations by integrating all its components under one-roof hence impacting on its administration. The study makes a finding that, LCS factors, notably; Effective licensing decisions, Prevention of Licensing fraud, Electronic
documents transmission, Accessibility, Coordination of Licensing operations, lower licensing costs, Mandate execution, improved licensing standards and virtual experience have a strong influence on the realization of corporate objectives.

The final objective in this study was to investigate the contribution of Frequency Spectrum Management module on the realization of the corporate objectives. The study makes a finding that, the most fundamental contribution of FSM module is the enhancement of telecommunications channels security, recording a mean of 4.84. Further, the study makes a finding that, the IMIS platform has enhanced the FSM model in a way that all is components execute effectively, with all recording an average mean of 4.61. The study finally makes a finding that, FSM factors, including; System Audit, Preventing fraudulent Frequencies, Eliminate illegal frequencies, Implementing quality control, Eliminating frequency duplication, Efficient operations, Eliminating frequency interference, Improved Accessibility to frequencies, and Frequency Standardization are central to positively impact on the corporate objectives.

5.3 Discussion
5.3.1 Financial Management Information System and Corporate Objectives
The findings on Financial Management Information System support the existing literature on the integration of financial transactions under a central platform. The findings supports Cole (2006) arguments that the goal of an integrated financial management system is to support the achievement of fiscal discipline, strategic & efficient allocation and use of funds, value for money and probity in the use of public funds. The findings are in agreement with Shaw (2010), that integrating public financial systems helps to reinforce system sustainability by exploring the role of improved financial service delivery and government supervision to enhance the government’s effort to cushion itself from the impact of global financial crisis.

The findings indicate that there exists a huge benefit in utilization of integrated financial management platform that links numerous organization departments and its contacts which enhances operational speeds and efficiency. The findings support Lianzuala and Khawlhring (2008) analysis of the FMIS contribution to government operations, where it enables the computerization of budget processes which enhances the ability of government to deliver on its financial obligations. Computerized platform tap into the use of electronic data-logs which
enable tracking of executed transactions, thereby enhancing the levels of scrutiny and integrity. FMIS enhances the integrity levels making it possible for enhanced levels of financial accountability required in government operations.

Hove and Wynne (2010) presented that FMIS utilization assists management in ensuring accountability for the deployment and use of public resources and in improving the effectiveness and efficiency of public expenditure programs. The findings in this study support this line of thought. The study endorses FMIS as a platform that enables prompt and efficient access to reliable financial data and helps in strengthening Government financial controls, improving the provision of effective services, raising the budget process to higher levels of transparency and accountability, and expediting government operations. The study also agrees with, Kiilu and Ngugi (2014) who suggested that the adoption of FMIS led to effective management of public funds in Kenya National Treasury. Furthermore, FMIS has enhanced automation of government processes, enhanced reporting, enhanced record keeping, and enhanced communication, customization of government processes and integration of government processes.

The fundamental role of Financial Management Information System (FMIS) is to enhance the financial performance of the corporate organizations by enabling them track financial events and summarize financial information. In addition, the use of IFMIS in their operations will support management and budget decisions, fiduciary responsibilities, and the preparation of financial reports and statements. The findings support the core components of FMIS in executing unique roles all of which are geared towards the realization of corporate objectives. The study puts Salmela and Spil (2002) argument into context, by comparing the benefits of FMIS vis-à-vis the manual systems. They presented that, under manual systems business information had to be manually processed for filing and analysis, but when FMIS is utilized similar data can be entered quickly and easily onto a computer by a data processor, allowing for faster decision-making and quicker reflexes for the enterprise as a whole.

Reneau and Grabski (2007) highlighted the importance of information systems in accounting and how they are used by accountants and other key decision makers that employ the accounting information to make use of the accounting data. The findings back this claims and
exude that, FMIS platforms facilitate faster information exchange in the financial departments and also help them make faster financial and accounting decisions.

5.3.2 Procurement Management Information System

The findings in this study highlight the benefits derived from automation of procurement functions as a strategy to enhance efficiency across the supply chain. The findings support, Amin (2009) observations that integrating procurement operations within an organizational information management system enables automation of the procurement operations. Afterwards, this makes it possible to deviate from lengthy manual processes that consume a lot of administrative time. The findings support the claim that procurement is strategic in nature since it links the organization’s suppliers to the strategic objectives of the organization. The findings links-up with Bhaskar (2005), in view that automation of the procurement processes enables sourcing, vendor selection, procurement processes, shipment status tracking and payments to be made in a virtual environment.

The study supports Lambert (2004) argument that centralization of procurement operation in a one-stop information system enhances several critical operations in the supply chain. Furthermore, the study backs Lambert (ibid) observations that Information sharing enables the system to strategically reduction on inventory, which is realized through better planning and forecast which is based on real-time supply chain data. The study also draws parallels that Procurement IMS offer corporate organizations great competitive edge as it accelerates the procurement procedures which consequently impacts positively on the efforts to achieve efficient management.

The integration of procurement operations with a integrated system, enables for centralized approach on operational execution. Traditionally, procurement division in any organization plays a crucial role of linking the supply chain and its external contacts which could comprise the suppliers and clients. The findings strongly support the observation by Garcia (2004), who observed that, the procurement management information system enables the audit of the transactions and operations in the system which ultimately enhances the levels of procurement integrity. In addition, the study agrees with Garcia (ibid), on the element of data integration and forecast, where gathered information on the procurement operations within
the organization makes it possible to make estimations and projections for future supply chain requirements. This will generally enhance organization planning obligations and enables for timely preparations for future organization procurement processes.

The findings in the study, support Gadde (2007) presentation that effective implementation of procurement practices is determined by the level of compliance with procurement regulations, minimization of procurement expenditure, transparency and accountability of procurement funds and quality of procured goods and services. Consequently the observations by Wisegeek (2013) that electronic platforms that support procurement processes enhance efficiency in procurement practice because it can reduce overhead expenses by eliminating purchasing agent costs is strongly backed by evidence in this study. Furthermore, it’s noted that transaction cost economics theory is deeply hinged in the concept of lowering transaction costs and production costs. The findings in this study, support the theory, as the use of Procurement MIS results in cutting down on overhead costs related to procurement. The study findings also support that transparent procurement procedures can contribute to a more efficient allocation of resources through increased competition, higher quality procurement and budgetary savings for governments and thus for taxpayers.

5.3.3 Licensing, Compliance and Standards MIS and Corporate Objectives

The IMIS platform helps in streamlining and simplification of intensive operations like evaluation of compliance amongst license applicants. The study findings indicate that the integration of licensing operation in an information management system binds the operation mandate to focus on its goals and consequently adds value and strengthens its operational processes (Anderson, 2007). Furthermore the findings in this study are in line with Gericke et al., (2009) postulation that, the IMIS strategy enables the execution of the strategic operations seamlessly through by adoption of the enterprise-wide approach infrastructure. The findings support Resto (2010) observation that, automation of core operations such as licensing enables the regulator to seal-off all loopholes that could have been exploited by fraudsters. The findings support the notion that under the IMIS platform, the regulator field inspectors can verify digitally the authenticity of any regulator issued document and take action instantly.
The findings support Garcia (2004) position that, leaning the regulatory operations of ensuring data authenticity under the licensing procedure in a centralized system lowers the regulatory costs. This translates to a gain in terms of the managing operational costs and consequently enhances the chances of realization of corporate goals. The study established that the IMIS platform incorporates a finance module which contributes in accelerating the process of acquiring licenses as the payments will automatically be reflected in the applicant’s account at the licensing module. This was central in the reduction of lengthy paperwork and consequently results in acceleration of the operation. The study findings support the literature on the licensing, Compliance and Standards module on how it incorporates tools that are networked with the public channels which have been licensed. This prevents licensed operator from deviating from the permitted obligations, and the regulator can prove beyond reasonable doubt in case of a breach and the regulator can take action and terminate the license agreement.

The findings are in agreement that regulatory procedures should reflect high levels of fairness in all parties subjected to licensing and compliance procedures. This is in agreement with, Resto (2012), that institutions conferred with regulatory mandate should implement platforms, which that there is semblance of fairness in offering license permits. The findings further indicate that utilization of computerized platforms, eliminates the loop holes that can be abused by corrupt officials as the system electronic logs enhances levels of system tracking, making it easier to detect fraud. The findings prove that the usage of manual models to conduct licensing operations has permitted instances of corruption which have enabled irregular issuance of critical licenses like the telecommunication permits.

The study findings have backed the observations made by Wolfert et al., (2010) where they opined that the Integration of compliance operations into web services is beneficial for system interoperability in telecommunication regulation. Furthermore, the process of automating the compliance procedures involve utilization of computer inference for the telecommunication standards encoded in a logical rule format where then requisite levels of compliance are defined (Nikkila, 2013). The study findings concur with that this platform enhances regulators roles in overseeing the telecommunication sector and make sure that the operators are adhering to the rules and regulations set by them.
In addition to overseeing the adherence of standards and regulations as stated in the regulators approved operational guidelines, the study established that the automation of the system makes it possible to moderate on the utilization of the platform and also prevent irregular or illegally use of the communication channels. This is in agreement with observation by Lee and Bose (2002), who were critical that, the IMIS platform support for the Licensing, compliance and standards evaluation procedures makes it possible to execute uniform standardization across a huge scope, thus incase of deviations, prompt action can be executed.

5.3.4 Frequency Spectrum Management MIS and Corporate Objectives

The study findings draw parallels on the IMIS platform ability to integrate the Frequency Spectrum Management operations under a common central system. The findings support that the functions of spectrum monitoring and spectrum management are closely related, in a way that linking these functions through an integrated computer system can result in significantly increased effectiveness and cost-efficiency for both. The study findings support ITU (2002) report that, it’s critically important to implement a spectrum management system to develop a system structure that maintains the integrity of the process, and the database that contains all relevant information to support the process. The findings indicate that the duty of spectrum management involves interaction of two entities where one has the mandate to grant the other permission to operate using a channel managed by the regulator.

The study findings support the evaluation by ITU (2002) that observed that frequency spectrum monitoring is closely associated with inspection and compliance in that it enables the identification and measurement of spectrum usage, interference sources, the verification of proper technical and operational characteristics of radiated signals, and detection and identification of illegal transmitters, producing data on the effectiveness of spectrum management policies. The findings also supports Aslan (2014) observations that frequency spectrum monitoring supports the overall spectrum management effort by providing general measurement of channel and band usage, including channel availability statistics of a technical and operational nature, thereby giving a measure of spectrum occupancy.
The findings support the agency arrangement where one party delegates authority to another on the principle of adherence to set rules and guidelines on operations. The regulator controls the use of frequency spectrums used in telecommunication channels, and by extending operational license to operators. The findings support Eisenhardt (2009) that such an arrangement is also a form of cooperation, where two parties have an agency relationship when they cooperate and engage in an association wherein one party (the principal) delegates decisions and/or work to another (an agent) to act on its behalf. The agreement is based on written the agreement ascertained in a license where the regulator has the power to withdraw the agreement of responsibility delegation in case there is proven case of malpractice in accordance to the guiding regulations.

The findings are also in consistent with Newton (2002), on the importance of spectrum management so as to create a level playing field for all operators to enable thriving of fair competition. The findings support that competition policy extends a set of tools to promote sustainable competition and to preserve a market environment in which such competition can flourish. The findings also indicate that competition policy may be implemented through general competition laws or through competition enhancing rules in specific sectors. Such rules might include general prohibitions on anti-competitive behavior and mergers or acquisitions that would reduce competition or specific rules designed to encourage competition in the sectors, such as interconnection requirements or unbundling policies.

5.4 Conclusion

5.4.1 Financial Information Management System and Corporate objectives

The study makes a conclusion that IMIS platform has enabled the integration of financial operations under one roof massively impacting on the administration of the financial duties. The FMIS platform is a sub-module under the integrated communication framework. The study makes a conclusion that, FMIS platform most significant impact is the lowering of transaction costs. The study reckons that financial tasks in large organizations, involve a lot of documentation which requires highest levels of scrutiny and security. The study concludes that ultimately manual handling of financial transactions is way expensive, therein under the digital system, unnecessary expenditures that are incurred in the course of executing financial duties are eliminated thus resulting in low transaction costs.
The study makes a conclusion that; all fundamental components that are linked up within the FMIS module contribute positively to its net productivity. These components make up the factors central to realization of full FMIS optimization. The study makes a conclusion that, FMIS factors notably; lower transaction costs, Financial Security, Fiscal discipline, financial forecasting, Accountability, Financial reporting, Transparency, Effective financial decisions, Financial Tracking and Comparative Analysis wield a significant influence on the realization of corporate objectives.

5.4.2 Procurement Management Information System and Corporate Objectives

The study concludes that procurement operations consume huge amount of transactional processes. The study makes a conclusion that the IMIS platform enhances the operations along the supply chain. The study makes a conclusion that the most significant impact of Procurement MIS module is to uphold high integrity levels that enable the accountability of the supply chain operations. The procurement function is synonymous with bidding and tendering, where many potential suppliers bid for tenders to offer services. Its tentative that, such an undertaking be done in a transparent environment to present every applicant with a fair chance of winning the tender. In jurisdictions which only use manual procurement processes the vulnerability to favoritism and unfair practice exists, where the procurement officials collude with their cronies to fraudulently manipulate the process on their favor. The study makes a conclusion that under the procurement MIS, the integrity threshold is high and enforces a fair procurement practice.

The study makes a conclusion that, the procurement component effectiveness is made possible by integration of numerous positive factors under the integrated system. The study concludes that Procurement MIS factors, namely; sealing fraud loopholes, lowering administrative costs, Supply Chain Transparency, Task acceleration; Supply Chain Efficiency, Lower Supply Chain operational costs, Procurement targets, External Resources Identification and Inventory control are central to the execution of the procurement mandate which enables realization of corporate objectives.
5.4.3 Licensing, Compliance and Standards MIS on Corporate Objectives

The study concludes that IMIS platform enhances the delivery of operations related to Licensing, Compliance and Standards functions. The integrated platform simplified the roles which impacted positively on the component of systems security. The study concludes that, LCS most significant impact is the detection and identification of illegal licenses acquired by fraudulent telecommunication operators. The study makes a conclusion that, LCS has greatly enhanced the efficiency and integrity of the Licensing duties by strengthening the stages of verifying compliance amongst the license applicants. The study makes a conclusion that LCS factors, notably; Effective licensing decisions, Prevention of Licensing fraud, Electronic documents transmission, Accessibility, Coordination of Licensing operations, lower licensing costs, Mandate execution, improved licensing standards and virtual experience were central to the realization of corporate objectives.

5.4.4 Frequency Spectrum Management and Corporate Objectives

The study makes a conclusion that the integration of Frequency Spectrum Management within the FMIS platform was vital in the achievement of efficiency in FSM operations. The study concludes that the most significant and notable contribution of FSM MIS is the upgrading and enhancement of telecommunication security for the frequency spectrum. The study makes a conclusion that the integration of the FSM component, strengthens the CAK duties of monitoring the frequency spectrum and gives them capacity to instantly respond and react to irregular use of the frequency spectrum. Finally, the study concludes that FSM factors, including; System Audit, Preventing fraudulent Frequencies, Eliminate illegal frequencies, Implementing quality control, Eliminating frequency duplication, Efficient operations, Eliminating frequency interference, Improved Accessibility to frequencies, and Frequency Standardization are the basis for the realization of corporate objectives.

5.5 Recommendations

5.5.1 Recommendations for improvement

5.5.1.1 Recommendations for Financial Management Information System

The study recommends for the enhancement of the financial transactions by expanding the FMIS links to frontend interfaces that can be accessed by many more users. The study
recommends that, ability of the FMIS system to effectively accommodate dynamic financial extensions as the future of financial transactions. A good example is the extension of mobile money transactions, which is popular with common citizens. The CAK should consider integrating mobile financial transactions within the system to enable the citizens easily access services and also make transactions from the comfort of their home or workplace.

5.5.1.2 Recommendations for Procurement Management Information System

The study recommends that the advancement of the IMIS platform procurement function be expanded to make easier access to diverse group of suppliers. The computerized system should be evaluated on its ability to link with different levels of potential suppliers since some may still be using the manual procedures that are inferior to more advanced users. The study makes recommendation that, the system should be in-house and simple for the ordinary users to understand its operation so that they won’t be disadvantaged when it comes to applying and bidding for tenders due to technical setbacks.

5.5.1.3 Recommendations for Licensing Compliance and Standards Platform

The study recommends that, the LCS module scope be extended to cover the internet infrastructure. The researcher recommends this since, the users applicants of the telecommunication licenses are many times confused on the requirements validation. For instance to apply for Premium Rate Service with a mobile provider, other than the standard procedure set out by the CAK, the mobile service provider make additional confusing requirements which duplicate the requirements by CAK. The LCS platform should be designed to capture user profiles which then can share it with all the service providers. The applicant will then be only required to verify their accreditation from the CAK and that should be enough to apply for a business license without going through the same compliance procedure like that of the CAK.

5.5.1.4 Recommendations for Frequency Spectrum Management Platform

The researcher recommends that, the Frequency Spectrum Management duties integrated within the IMIS network, be strengthened with statutory backing. This will certify and consequently empower the CAK resolve in executing their mandate of monitoring the Frequency Spectrum. Few years ago the CAK was taken to the court for switching off the
analogue television signal and was forced to operate under guidance of the courts on the issue of digital migration. This case demonstrated the situation where lack of statutory powers limits regulatory organizations from executing some of its duties. Consequently, the study recommends that, the powers and capacities to execute roles related to FSM, be empowered in law thus ensuring that the CAK secures exclusive frequency spectrum control and monitoring hence giving them mandate to effectively execute their roles.

5.6 Recommendations for future Studies

The study major purpose was to evaluate the effects of Integrated Management Information System on the realization of corporate objectives. The study was centered at the Communication Authority of Kenya which is a regulatory agency. Future researchers should seek to assess the importance of Integrated Management Information System within the private sector like within the manufacturing firms, large-scale retailers etc. Furthermore, the study suggests studies in the following areas;

i) How to effectively implement Integrated Management Information System within all government departments as a strategy of realization of effective governance.

ii) Future researchers should attempt to investigate the pitfalls that make it difficult for adoption of integrated communication between market environment and production environment.

iii) The study suggests studies be done on the capacity requirements for enforcing effective adoption and execution of IMIS roles within small scale businesses.
REFERENCES


Kiniki, A., & Williams, B. K. Management: A Practical Introduction.


Ogeto, V. M. (2004). A survey of computer based is security implemented by large private manufacturing companies in Kenya. MBA - University of Nairobi


Porter, M. E. (1996). What is strategy?. *Published November*.


APPENDIX I: COVER LETTER

Langat Mercy Cherotich

United States International University

P.O.BOX 14634-00800

NAIROBI

Dear Respondent,

REF: REQUEST FOR YOUR PARTICIPATION

This structured questionnaire is for collecting data on effect of Integrated Management Information System (IMIS) on the realization of corporate objectives at the Communication Authority of Kenya. You are kindly requested to provide the required data in the questionnaire. The process will take you only about 10 minutes. The information that you provide will remain confidential and is sought exclusively for the completion of an MBA research project.

Thank you very much for taking the time to complete this survey. Your input will be critical in evaluating the impacts of technological systems in the execution of administrative roles within statutory regulatory agencies in the country. Your contribution will also help in identifying grey areas which need urgent intervention to eliminate redundancies and limiting the IMIS platform realizing the full potential of its utilization. If you would like to receive a copy of this report, please indicate so by writing your email address on the back of the questionnaire.

Kind Regards,

MBA Student
APPENDIX II: QUESTIONNAIRE

Section A: GENERAL INFORMATION

1. Kindly indicate your gender
   a. Male (1) □
   b. Female (2) □

2. How long have you worked at the Communication Authority of Kenya
   a. 0-5 years (1) □
   b. 6-10 years (2) □
   c. 11-15 years (3) □
   d. Over 15 years (4) □

3. Please indicate the department you work in
   a. Information Communication Technology (1) □
   b. Procurement Division (2) □
   c. Finance Department (3) □
   d. Licensing and Compliance Department (5) □

4. Indicate the level of education
   a. Certificate (1) □
   b. Diploma (2) □
   c. Degree (3) □
   d. Post-Graduate (4) □

5. How long have you interacted with automated systems at the CAK
   a. 0 – 2 years (1) □
   b. 2 – 4 years (2) □
   c. 4 – 6 years (3) □
   d. Over 6 years (4) □

6. Which position do you hold among the three levels of organizational administration

a. Senior Level Management (1)  

b. Middle Level Management (2)  

c. Lower Level Management (3)  

SECTION B: FINANCIAL MANAGEMENT INFORMATION SYSTEM ON CORPORATE OBJECTIVES

To what extent do you agree with the following with regard to Financial Management Information System?

Use: 1 - Strongly Disagree, 2 - Disagree, 3 - Undecided, 4 - Agree and 5 - Strongly Agree.

<table>
<thead>
<tr>
<th>Financial Management Information System platform</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Integration of financial processes enhances financial reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Integration of financial operations helps in the realization of fiscal discipline and improves efficiency in public funds allocation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. FMIS assists in accountability in the deployment of financial resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. FMIS enhances transparency in the financial management system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. FMIS makes it possible to track financial transactions and enables real-time reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. FMIS platform makes it possible to conduct comparative analysis of organizations financial health across the industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. FMIS platform adoption assists in lowering transaction costs common with manual processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. FMIS platform improves the efficiency in decision making process amongst the executive team</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. FMIS adoption makes it possible to make financial forecasts thus enabling timely planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. FMIS platform enhances security of financial transactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION C: PROCUREMENT INFORMATION MANAGEMENT SYSTEM ON CORPORATE OBJECTIVES

To what extent do you agree with the following statements on the procurement information management system?
Use: 1- Strongly Disagree, 2- Disagree, 3- Undecided, 4- Agree and 5- Strongly Agree.

<table>
<thead>
<tr>
<th>Procurement Information management System</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Integration of procurement operations under one system cuts down on administrative time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Adoption of procurement IMIS enhances trade efficiency across the supply chain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Integration of procurement information helps in cutting down on the inventory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Procurement IMIS makes it possible for the identification of vital external resources needed for organizational operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Integration of procurement operations under IMIS improves on the accountability of the procurement operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Procurement IMIS contributes to the minimization of procurement costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Procurement IMIS enhances the speed of procurement process thus ensuring timely transactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Procurement IMS seals off any loopholes which could permit fraudulent practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Procurement IMIS enhances the prospect of realization procurement goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Procurement IMIS enhances transparency on the public supply chain.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION D: LICENSING, COMPLIANCE AND STANDARDS

To what extend do you agree with the following statements on licensing, compliance and Standards in relation to corporate objectives?

Use: 1- Strongly Disagree, 2- Disagree, 3- Undecided, 4- Agree and 5- Strongly Agree.

<table>
<thead>
<tr>
<th>Licensing,Compliance and Standards</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. IMIS platform contributes to virtual experience in licensing and compliance exercises</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. IMIS platform enables electronic transmission on electronic records for telecoms license applicants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. IMIS platforms enhances the duties of establishing the levels of compliance requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. IMIS reduces costs incurred in the course of seeking telecommunication license</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. IMIS platform enhance the efforts of coordinating licensing and compliance obligations for the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. IMIS platform extends the reach of regulator to many users of telecommunication systems and enhance the telecommunication regulatory compliance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. IMIS platform seals off any loopholes in licensing and compliance operations (irregular licensing awarding)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. IMIS platforms helps in detection of counterfeit licenses awarded and enhances the security of licensing operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. The IMIS platform enhances the realization of effective decisions related to Licensing and compliance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. IMIS platform enables the platform to be benchmarked with the global best practices in regard to licensing and compliance standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### SECTION E: FREQUENCY SPECTRUM MANAGEMENT

To what extend do you agree with the following statement on frequency spectrum management on the realization of corporate objectives?

Use: 1- Strongly Disagree, 2- Disagree, 3- Undecided, 4- Agree and 5- Strongly Agree.

<table>
<thead>
<tr>
<th>Frequency Spectrum management</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. IMIS enhances the efficiency in frequency spectrum for telecommunication systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. IMIS ensures the security of the telecommunication frequency systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. IMIS platforms avoids duplication of frequency channels allocation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. IFMIS platform enables the regulator to measure the quality of frequency channels awarded to users</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. IFMIS enhances control of the telecommunication systems and prevents illegal use of the frequencies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. IFMIS prevents irregular awarding of frequency channels information systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. The use of IMIS in frequency spectrum management enable system audit enhances monitoring efforts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. IMIS platform expands the access to the frequency spectrum for many users</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. IMIS platform prevents interference of frequencies in the communication channels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. IMIS enhances the standards of frequency spectrum management to global standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**SECTION E: CORPORATE OBJECTIVES**

To what extend do you agree with the following statement on corporate objectives?

Use: 1- Strongly Disagree, 2- Disagree, 3- Undecided, 4- Agree and 5- Strongly Agree.

<table>
<thead>
<tr>
<th>Corporate Objectives</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Are you satisfied with IMIS contribution in coordination of operations at CAK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Do you believe that IMIS platform has improved on efficiency in executing CAK operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Are you satisfied that IMIS has contributed to optimal use of resource at CAK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. The IMIS platform has made it easier to monitor and regulate the telecommunication sector in Kenya</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Do you agree that the IMIS has helped CAK cut down on its operational costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Do you agree that the use of IMIS platform has improved productivity among staff at the CAK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Are you satisfied that the utilization of IMIS platform has enabled efficient financial management practices at CAK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Do you agree that IMIS system has contributed to growth of the operational mandate of CAK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Do you agree that the utilization of IMIS system has contributed to better customer service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Are you satisfied that IMIS has enhanced consistency across different CAK operational processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

End

Thank you for your participation