CHALLENGES FACING USERS OF THE INTEGRATED
FINANCIAL MANAGEMENT INFORMATION SYSTEM IN
SERVICE DELIVERY: A CASE OF THE NATIONAL TREASURY,
NAIROBI KENYA

BY

NJAGI STEPHEN NYAGA

(BSc. INFORMATION SCIENCE-INoorERO UNIVERSITY)

A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE AWARD OF THE DEGREE OF MASTER OF
INFORMATION SCIENCE, DEPARTMENT OF INFORMATION
SCIENCE, SCHOOL OF INFORMATION SCIENCE AND
TECHNOLOGY, KISII UNIVERSITY

OCTOBER 2019
DECLARATION AND RECOMMENDATION

DECLARATION BY STUDENT

This is my original work and has not been presented for a degree in any other University

Njagi Stephen Nyaga ..Signature....signed Date 3/11/2019
MIN11/20124/12

RECOMMENDATION BY SUPERVISORS

This thesis has been submitted for examination with our consent as the university supervisors.

Name: Dr. Mbenge. T. Ndiku:Signature:signed Date 3/11/2019
Senior Lecturer: School of Information Science
Technical University of Kenya

Name: Dr. Naomi Mwai: Signature…Signed Date.3/11/2019
Senior Lecturer: School of Information Science
Technical University of Kenya

Dr. Ratemo Makiya Cyprian:Signature signed. Date.3/11/2019
Lecturer: Department of Computing Science
Kisii University
PLAGIARISM DECLARATION

DECLARATION BY STUDENT

i  I declare I have read and understood Kisii University rules and regulations, and other documents concerning academic dishonesty

ii  I do understand that ignorance of these rules and regulations is not an excuse for a violation of the said rules.

iii  If I have any questions or doubts, I realize that it is my responsibility to keep seeking an answer until I understand.

iv  I understand I must do my own work.

v  I also understand that if I commit any act of academic dishonesty like plagiarism, my thesis/project can be assigned a fail grade (“F”)

vi  I further understand I may be suspended or expelled from the University for Academic Dishonesty.

Name: Njagi Stephen Nyaga Signature...signed...Date...3/11/2019

Admin No: MIN 11/20124/12

DECLARATION BY SUPERVISORS

i  I/we declare that this thesis/project has been submitted to plagiarism detection service.

ii  The thesis/project contains less than 20% of plagiarized work.

iii  I/we hereby give consent for marking.

1. Name: Dr. Mbenge T. Ndiku: Signature.signed Date..3/11/2019

   Affiliation: Technical University of Kenya

2. Name: Dr. Naomi Mwai: Signature signed Date.2/11/2019

   Affiliation: Technical University of Kenya

3. 

4. Name: Dr. Ratemo MakiyaCyprian:Signature.signed .Date.2/11/2019

   Affiliation: Kisii University
DECLARATION OF NUMBER OF WORDS

DECLARATION BY STUDENT

I confirm that the word length of the thesis, including footnotes, is 17774 words and the bibliography is 2226 words while the appendices are 1128 words.

I also declare the electronic version is identical to the final, hard bound copy of the thesis and corresponds with those on which the examiners based their recommendation for the award of the degree.

Signed (Candidate) signed………Date 3/11/2019

DECLARATION BY SUPERVISORS

I confirm that the thesis submitted by the above-named candidate complies with the relevant word length specified in the School of Postgraduate and Commission of University Education regulations for the Masters and PhD Degrees.

Signed:signed: Email: tabbenge@gmail.com. Tel. 0721228464
Date: 3/11/2019
(Supervisor 1)

Signed.signed.Email: mwainomi@yahoo.com Tel. 0722469333. Date:
3/11/2019
(Supervisor 2)

Signed:Signed: Email: mcratemo@gmail.com. Tel. 0722741666. Date.
3/11/2019
(Supervisor 3)
COPYRIGHT

All rights are reserved. No part of this thesis/project or information herein may be reproduced, stored in a retrieval system or transmitted in any form by any means electronic, mechanical photocopying, recording or otherwise without the prior written permission of the author or Kisii University on their behalf.

© Njagi Stephen Nyaga
DEDICATION

This work is dedicated to my family; Saraphina, Chris and Lincoln for their support patience, understanding and tireless effort to see me through up to this stage, God bless you.
ACKNOWLEDGMENT

I acknowledge the assistance and guidance of my lecturers and supervisors
of Kisii and other Universities who assisted me to professionally write
this thesis. In a special way, I wish to appreciate the concern and support of
Dr. Mbenge T.Ndiku Dr. Naomi Mwai and Dr Ratemo M. Cyrian towards
my success in this research. While acknowledging the help of all the
above, I take responsibility for any errors that still remain in this thesis.
ABSTRACT

The users of the Integrated Financial Management Information System in public organizations have been experiencing various challenges in service delivery. This is contrary to the expectations that the system would enhance efficiency and effectiveness in government financial processes and service delivery. While empirical studies exist in the Kenyan literature on the adoption and implementation of IFMIS in governments, the focus has been largely on factors affecting its implementation, leaving experiences in its implementation largely unexplored. None has particularly, to the best of the researcher’s knowledge, explored challenges in the implementation of IFMIS, as perceived and experienced by users in service delivery. This study therefore sought to address the identified gap by assessing the challenges faced by the users of IFMIS in service delivery in the government of Kenya. More specifically, to examine the effect of IFMIS user training on service delivery at the National Treasury, Kenya, determine the impact of IFMIS implementation on service delivery at the National Treasury, Kenya, establish the effect of authorization through the IFMIS on service delivery at the National Treasury, Kenya and to isolate the challenges facing the users of IFMIS and suggest interventions to address them. The researcher adopted a case study design using quantitative and qualitative (mixed method) approach to collect data. The study targeted a population of 1,539 officers who were purposively selected from the IFMIS user departments at the headquarters. A sample of 94 respondents was selected from the target population using the Yamane formula. Stratified random sampling technique was then used to draw respondents from specific departments. Quantitative data was collected through structured questionnaires while interview schedules were used to collect qualitative data. Data collected through interviews were first organized into themes, patterns identified and then coded. Content analysis was done to categorize data for classification, summarization. The quantitative data was processed and analyzed through Statistical Package for Social Sciences (SPSS). The findings revealed that IFMIS had to a significant extent been implemented at the National Treasury. The ‘Procure to pay’ module was the most widely used in the organization. The challenges identified in the use of IFMIS ranged from technological, proficiency and technical. The most prevalent technological challenge faced was technophobia. The complexity of the system, resistance to change and bureaucracy in authorization were the most prevalent technical challenges while lack of training was the most prevalent proficiency related challenge. Delays in service delivery concerning the application of IFMIS were attributed to the many levels of IFMIS authorization. This was the major challenge to the users as it contributes to delays in service delivery. The change management had not been done effectively the reason why some modules had not been
implemented. The bureaucracy should be minimized, and training programs should be regularly tailor-made to improve user capacity and skills and address any emerging changes in financial management in the country. This would motivate the users to improve service delivery to the public.
TABLE OF CONTENTS

DECLARATION AND RECOMMENDATION.................................ii
PLAGIARISM DECLARATION..................................................iii
DECLARATION OF NUMBER OF WORDS...............................iv
COPYRIGHT..........................................................................v
DEDICATION........................................................................vi
ACKNOWLEDGMENT..........................................................vii
ABSTRACT...........................................................................viii
TABLE OF CONTENTS.........................................................x
LIST OF TABLES...............................................................xiv
LIST OF FIGURES.............................................................xv
LIST OF APENDICES.........................................................xvi
LIST OF ABBREVIATIONS....................................................xvii
LIST OF ACRONYMS...........................................................xviii
CHAPTER ONE
1.0 INTRODUCTION..........................................................1
  1.1 Background to the study..............................................1
    1.1.1 Historical perspective of the Integrated Financial Management Information System..........................3
    1.1.2 Adoption of IFMIS in Latin America and other countries...4
    1.1.3 Challenges facing users of IFMIS..............................7
    1.1.4 Implementation of IFMIS.......................................8
    1.1.5 Challenges of IFMIS and resistance to change...........10
    1.1.6 Challenges in implementation and use of IFMIS in the National Treasury.................................11
  1.2 Statement of the Problem............................................13
  1.3 Purpose of the study.................................................14
  1.4 Objectives of the study.............................................14
  1.5 Research questions of the study.................................15
  1.6 Assumptions of the study.........................................15
  1.7 Scope/Limitations of the study..................................16
  1.8 Conceptual framework............................................18
    1.8.1 Independent variables.......................................19
CHAPTER FOUR

4.0 RESULTS AND PRESENTATION

4.1 Data analysis

4.2 Response rate

4.3 Effect of IFMIS user training on service delivery

4.4 Impact of IFMIS implementation in the National Treasury

4.4.1 Implementation of IFMIS

4.4.2 The IFMIS modules fully implemented

4.4.3 Impact of IFMIS on service delivery

4.4.4 Impact of IFMIS reengineering on service delivery

4.5 Effects of authorization procedure through the IFMIS on service delivery

4.5.1 IFMIS Authorization procedure

4.5.2 Cause of delay in service delivery

4.5.3 Systems in use

4.5.4 Integration of IFMIS with other systems

4.5.5 Complexity of IFMIS

4.6 Challenges affecting the users of IFMIS in service delivery

4.6.1 Challenges faced while using IFMIS

4.6.2 Overcoming the challenges

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

5.2 Summary of findings

5.2.1 Effect of user training on IFMIS

5.2.2 Impact of IFMIS implementation

5.2.3 Effect of IFMIS authorization on service delivery

5.2.4 Challenges facing the users of IFMIS in service delivery and solutions

5.3 Conclusion
5.4 Recommendations.................................................................79
  5.4.1 Recommendation to the National Government..............79
  5.4.2 Recommendation to the National Treasury,.................79
  5.4.3 Recommendations to address the identified challenges......80
  5.4.4 Recommendation to IFMIS users.................................81

5.5 Suggestions for further studies............................................81

REFERENCES..................................................................................82

APPENDICES..................................................................................97
LIST OF TABLES

Table 3.1: Distribution of users of IFMIS in the National Treasury……32
Table 3.2: Distribution of users of IFMIS in the directorates of National Treasury………………………………………………………………………………34
Table 4.1: Impact of IFMIS on service delivery……………………………46
Table 4.2: IFMIS authorization ………………………………………………….50
Table 4.3: Cause of delay in service delivery………………………………52
Table 4:4: Complexity of IFMIS……………………………………………………55
LIST OF FIGURES

Figure 1:1: Conceptual framework ......................................................16

Figure 2:1: Components of a typical IFMIS .......................................26

Figure 3:3: Concurrent triangulation approach ..................................42

Figure 4.1: Response rate ..................................................................44

Figure 4.2: Training methods ...............................................................45

Figure 4.3: IFMIS implementation .......................................................47

Figure 4.4: Modules implemented ......................................................48

Figure 4.5: System in use, .................................................................57

Figure 4.6: IFMIS integration with other systems ..................................58

Figure 4.7: Challenges faced in the use of IFMIS ...............................61

Figure 4.8: Overcoming the challenges in use of IFMIS .......................63
LIST OF APPENDICES

Appendix I: Introduction letter to NACOSTI
Appendix ii: Research authorization
Appendix iii: Letter of authority
Appendix iv: Questionnaire covering letter
Appendix v: Interview schedule
Appendix vi: The questionnaires
Appendix vii: The plagiarism report
LIST OF ABBREVIATIONS

CS: Cabinet Secretary
EFT: Electronic Funds Transfer
ERP: Enterprise Resource Planning
FMIS: Financial Management Information System
IFMIS: Integrated Financial Management Information System
MDGs: Millennium Development Goals
P2B: Plan to Budget
P2P: Procure to pay
PDMS: Public Debt Management System
PFM: Public Financial Management
PFSRT: Public Financial Sector Reform Program
PFTAC: Public Financial Technical Assistance Center
PIFRA: Pakistani Improvement in Financial Reporting and Accounting
TNT: The National Treasury
LIST OF ACRONYMS

CIDA: Canadian International Development Agency
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the study
The Integrated Financial Management Information System (IFMIS) is an Oracle-based Enterprise Resource Planning (ERP) application and a large scale computer software and hardware system. IFMIS is more than the usual accounting system which is configured to operate according to the needs, specifications and the environment where it is installed (Kostenbaum & Dener, 2015). As an information system, it tracks financial events and summarizes financial information into various reports. According to Chêne (2017) and Diamond and Khemani (2016), a well-designed IFMIS is a tool for management that delivers a spanning range of financial and non-financial information and impacts on corruption. An IFMIS offers public-sector managers and decision-makers the necessary information to operate their managerial and accounting functions. The system was centrally domiciled at the National Treasury to be accessed through a secure computer network. The ERP was supposed to handle all the government financial transactions and processes and give real time reports for management action. The ERP functionalities are managed through various modules which facilitate flexibility in implementation of other functions through integration. Among the benefits the government expected from this system was to streamline the
effectiveness and success in managing public financial resources, fighting corruption, promote transparency and accountability of information across government.

As a financial information management tool, IFMIS has become a major component of financial reforms aimed to promote efficiency, data security and financial reporting in many organizations (Bartel, 2016). The system was characterized with many problems including regular shutdown due to lack of professional support and inept infrastructure, inadequate coordination amid user departments, inadequate networking, deficient strategic focus, partial system ownership and unfavorable human resource development to support users. Equally, the lack of integration and linkage to other systems like the debit management, pensions and payroll that would have offered critical information for the IFMIS to improve reporting capabilities exerçabated the problem. This caused more frustration to the users and beneficiaries of the system.

Countries which adopted IFMIS expected the system to improve effectiveness, transparency, efficiency, accountability, security of data management and comprehensive financial reporting (Hove & Wynne, 2016). Moreover, IFMIS was programmed to computerize and automate important accounting operation aspects and budget execution in all organizations of the government (Diamond & Khemani, 2015). That notwithstanding, implementation of IFMIS by many governments and organizations across the world was coupled with challenges attributed to
the system itself, management, the users, service delivery and the organization. That view was supported by Josh and Moore (2017) who argued that for many years, organizations have been grappling with inefficient financial management resulting in wastage of financial resources through mismanagement and misappropriation.

The deployment and implementation of IFMIS have been associated with various emerging design issues according to (Fyson, 2018; Peterson, 2016; Chêne, 2018). The IFMIS design has been considered complex not only in terms of technology but also functionality (Chêne, 2018). According to Fyson (2018) and Rodin-Brown, (2018), the adoption and usage of IFMIS has proven considerably demanding, particularly for middle and low income countries, and consequently its successful implementation has been scanty.

1.1.1 Historical perspective of the Integrated Financial Management Information System

According to Rozner (2018) and Dorotinsky (2017), the IFMIS summarises financial information and trails financial events. It facilitates policy decisions, adequate management reporting, the preparation of auditable financial statements and fiduciary responsibilities. An IFMIS in its essential form is more than an accounting system constructed to function as per the specifications and needs of the environment it is installed in (Rodin-Brown 2018). Since the 1980s, major international aid agencies including the World Bank, have promoted integrated financial
management information systems as an important system to reform public financial management (PFM) in low-income countries (LICs) (Fengler, Ihsan & Kaiser, 2018).

The IFMIS was first piloted in Kenya in the year 2003 but stopped in 2005 as a result of technological deficits (Bwoch & Muwanga, 2018). The programme management lacked strategic direction, leadership and communication (Kostenbaum & Dener, 2015). In February 28th 2011, the IFMIS Re-engineering Strategic Plan (2011-20130) was launched to review the business processes for enhanced financial Management: plan to budget; an entirely integrated process and system to link planning, policy objectives and the allocation of budget. The procedure to pay; was intended to develop a complete integrated and automated supply chain management system. The revenue to cash is an auto-reconciliation of revenue and payments with regular file generation. The record to report was a safe two way interface with CBK for correct, current information on the government financial position and the production of statutory reports at the right time. The Support of ICT was devoted to IFMIS support functions for software, hardware and infrastructure, while communication to change was the IFMIS academy for capacity building and continuous learning.
1.1.2 Adoption of IFMIS in Latin America and other countries

IFMIS is meant to offer management support of public sector budgetary, financial, and accounting operations for enhanced public financial management (PFM), as well as to generate financial reports (Dener, Watkins, and Dortinky, 2011). Accordingly, every country in Latin America has developed the IFMIS for her financial management projects most of which were supported by the World Bank and other financial institutions. In 2011, the World Bank supported 45% of the projects in Latin America which were concerned with information and communications technology (ICT) in financial management. The Inter-American Development Bank (IDB) equally supported 15 investment projects at a national level in an effort to strengthen PFM in the countries which had initiated the development of the IFMIS. After two decades, several other countries in Latin America including Argentina, Brazil, Chile, the Dominican Republic, Honduras, Nicaragua, Panama, Peru, and Uruguay were seriously engaged in updating their IFMIS, specifically

The concept of PFM and IFMIS, therefore, gained momentum as the best suited for financial management. These countries realized the potential of IFMIS in contributing to an enhanced PFM and creating correct information which could streamline processes undertaken by the public sector. According to Dortinky, (2011) the following countries followed in implementing and improving their IFMIS projects for efficient financial management; Brazil became the first country to implement an IFMIS in
1986 followed by Bolivia in 1989, Argentina, Paraguay, Uruguay and, from 2000 onwards, Chile, Colombia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, and Nicaragua, as well as the Caribbean followed.

Besides their relevance in addressing fiscal crises, the replication of IFMIS projects was initially driven by various other factors. (Farias and Pimenta, 2012). Despite the general availability of IFMIS in the region, not all were designed to fulfill the objectives of producing timely, relevant, and reliable data for fiscal transparency and accountability. The use of public financial systems in many developed countries is less standardized or centralized compared to Latin America, with the exception of some, including South Korea and France. Other countries, such as Germany, the United Kingdom, and the United States which have not adopted a single public finance system that takes into account the entire public sector. (Farias and Pimenta, 2012). Likewise, Nicaragua and Panama are implementing customized commercial off-the-shelf software as their IFMIS which are not tailor-made systems.

In the case of Brazil, Chile, and Mexico, coverage at the formulation stage is supported by individual modules that are minimally integrated into the execution module. The IFMIS in Peru was designed to integrate all stages of public expenditure for the national, regional, and local levels of government by utilizing a single budget classifier and chart of accounts for
effectiveness. In Chile, there were no single IFMIS for the budget formulation of line ministries. The data was processed in each ministry with their own systems before being sent to the Budget Directorate at the Ministry of Finance. The Ministry of Finance then consolidates the data in the Budget Administration System.

1.1.3 Challenges facing users of IFMIS
During the adoption and implementation of IFMIS in many countries users faced various drawbacks caused by changes in technology on which the system depended. As Hendricks (2012) states, implementing the IFMIS in many countries was extensively delayed by lack of commitment by the top management in most of the organizations, lack of user capacity regarding training and inadequate resources. As further indicated in the USAID practical guide (2008), common challenges facing the users of IFMIS in developing countries included; the inadequate planning, poor communication between those responsible for implementation and the donor countries, shortage of management capacity and resources which in particular affected many developing countries in Africa, frequent changes in systems design due to fluctuation in information technology, poorly implemented training programs and unnecessary expenditures that strained budgetary allocations. The following challenges were isolated as they particularly have a direct effect on service delivery in the government of Kenya.
1.1.4 Implementation of IFMIS

According to Mwaura (2016), the organization’s bureaucracy, inadequate user skills, negative attitudes and opinion towards IFMIS grossly contribute to inefficiency in service delivery. The difficulties experienced by IFMIS users cause technophobia among users who did not understand how it works and consequently resulted in unnecessary delays in services provision (Beschel & Ahern, 2016). According to Wanyama and Zheng, (2011), adoption of IFMIS by the Government of Kenya (GOK) was expected to spearhead the benefits envisaged from its use and facilitate a smooth and eventual replacement of some of the existing systems. The system was intended to integrate with other existing systems to improve efficiency in service delivery where inadequacies were noted. However, for many years since its inception, some of the modules which form its subsystems have not been operational resulting to over-reliance on manual system (Fengler, Ihsan & Kaiser, 2018). As a result, the users of IFMIS have however been encountering various challenges that contribute to poor performance and inefficient service delivery. In situations where the system implementation is not complete there is over-reliance on the manual and other systems running parallel with the main system (Hendricks, 2016).

Rodin-Brown (2018) observe that the successful implementation of IFMIS encountered several deployment and adoption difficulties, including; bureaucratic resistance, weak human capital. lack of top management
decision-making, fraud, and corruption, IFMIS systems are difficult to maintain and manage, expensive, and complicated. Dorotinsky and Watkins (2019) further identified various usability challenges in the implementation and use of IFMIS including technical interoperability, multi-modal interaction, security and privacy, portability, maintainability costs and social issues including usability, accessibility, and acceptance. These were also echoed by Semakula and Muwanga (2014) further citing lack of knowledge about the e-government program, lack of privacy of information and security, lack of training courses and qualified personnel, lack of leadership and management support, culture differences, as well as shortage of financial resources and resistance to change.

According to the USAID, Integrated Financial Management Systems: a practical guide, January (2008) report, implementing an IFMIS project is a very expensive undertaking by any government as was the case of the following countries which incurred huge sums of money in their respective IFMIS projects; Botswana spent approximately Kshs. 800 million, Uganda, approximately Kshs. 1.7 billion, Ethiopia approximately Kshs. 1.7 billion while Slovak Republic the cost of IFMIS installation was US$60 million. However, where implementation has succeeded, those countries have become benchmark point of reference to other countries which are in the process of implementation of these IFMIS projects
1.1.5 Challenges of IFMIS and resistance to change
The complexities of the system, institutional and technical challenges were other factors that affected the implementation and use of IFMIS (Dener, Watkins & Dorotinsky, 2017). IFMIS as an initiative of the World Bank financing was developing countries to the same level with the most developed economies with a view to instil accountability in the utilization of public funds. The system was imposed on many countries some of which did not have any idea about it and were not willing to embrace the system in the first place (Bwoch & Muwanga, 2018). As a result of this, implementation of IFMIS has not been completed in most such countries where there were some resistance and a majority of these countries still rely on the manual systems. In some cases, IFMIS projects stalled in most of the developing countries because of political, technical and operational challenges (Chêne, 2018).

Poor leadership in public institutions, inadequate organization leadership systems led to problems of inefficient planning and policy coordination, which constrained the strengthening of budgetary processes and systems in most low and middle-income countries (Peterson, 2017). On the contrary, in some developing economies, such as Vietnam, Kosovo, Ruanda, Burundi, Uganda and the Republic of Slovenia, adoption, and implementation of IFMIS have been successful. The success was attributed to leadership commitment to the project, sound financial reform objectives, project planning, and design, ICT readiness, phased
implementation approach, project management capability, and allocation of adequate resources to projects (Diamond & Khemani, 2016).

On the contrary, delay in embracing the use of financial management information systems in some countries resulting from civil wars which took several years causing severe destruction of infrastructure, property as well as other systems (Beschel & Ahern, 2016). Those countries continue to implement various financial management information systems in an endeavor to jump-start their economies, recover from the effects of civil wars and reach the same economic development levels as countries where financial management information systems were successful (Fengler, Ihsan & Kaiser, 2018).

1.1.6 Challenges in implementation and use of IFMIS in the National Treasury

Implementation and usage of IFMIS in the National Treasury equally faced some challenges. The need for the IFMIS to help in financial management resulted from the challenges identified by the Accountant general of the National Treasury particularly, the need to address the problems of poor record management, untimely presentation of financial reports, poor accountability of financial resources, lack of proper audit trail, transparency and accountability and overall improvement of efficiency in financial management. It was equally difficult at inception for the users to understand different functionalities and modules of the system owing to its multifaceted nature.
The challenges necessitated the National Treasury to engage the services of consultants to work with officers of the Ministry and train them on how to use the IFMIS. The National Treasury, (2015). However, the prolonged engagement of consultants in the ministry delayed the transfer of the Management of IFMIS to the officers. This consequently denied users in the organization an early chance of training and familiarization with the system. The users in the government were therefore reluctant to own the system and accept changes that could be introduced during system implementation (Mwaura, 2016).

Lack of timely stakeholders’ involvement in the entire process of system adoption in both central and county government resulted in some resistance by the users against the system. At one time there were some complaints from the county governments in that the system was not serving them properly. Though some complaints were politically instigated it was the onus of the government to enhance training interventions targeting the users in the counties as well as in central government (International Monetary Fund (IMF), 2017).

At the same time lack of sufficient sensitization to the users on the potential benefits of the system contributed to the slow uptake of information about the system (Diamond & Khemani, 2016). The benefits of involving the users from the beginning of implementation process, encouraging ownership of the project and continuously addressing identified bottlenecks could mitigate challenges facing potential users. The
focus by the governments to attract and maintain qualified and motivated workforce would enable them to effect a successful implementation process that would mitigate the challenges they face while using the system (IMF, 2016).

1.2 Statement of the Problem
The IFMIS was adopted by the government to leverage the benefits of its effectiveness, efficiency, promotion of transparency, accountability, comprehensive financial reporting and security of data management (Peterson, 2017). However, the plight of the users of IFMIS was not seriously considered during the implementation and maintenance of the system in many countries including Kenya. The users of IFMIS include officer-involved in initiation, approval, authorization, procurement, and payment for goods and services, other stakeholders and customers who consume or benefit from the services through the IFMIS (Fengler et al., 2018). Acceptability of IFMIS, like any other information system was dependent on perceived usefulness and ease of use Priyanka and Kumar (2017), Teo, (2016), Ducey, (2015) Priyanka & Kumar, (2017) and Huda, et al., (2016).

The users of IFMIS in Kenya and more so in the county government have complained about regular system breakdown as a result of inadequate technical support, insufficient networking, insufficient infrastructure (Diamond & Khemani, 2015). As Henricks (2016) observes the size and complexity of IFMIS is a major challenge to the users while Chene
(2018) and (Fyson, 2018) point out at inadequate capacity building as a challenge to the users of IFMIS. In this case the system was not easy to use and so it was not useful to the users whenever it did not help them to discharge their duties effectively and efficiently.

According to Kostenbaum & Denver and Young (2013), Dener, (2015), parallel and phased implementation, bureaucratic process of authorization and approval where procurement process has to undergo 25 authorization levels from initiation of procurement of goods and services to the payment for the same as major challenges hindering efficient use of IFMIS. While existing empirical studies in Kenya (Kimwele, 2011 and Hendriks, 2012 Mwaura, 2016 and Rotich, 2013), focussed mainly on the adoption and implementation of IFMIS in governments none has particularly, to the best of the researcher’s knowledge, explored the challenges experienced by users in service delivery. This study, therefore, sought to address the challenges facing the users of IFMIS in service delivery and suggest interventions to bridge the gap for efficient delivery of services in Kenya.

1.3 Purpose of the study
The purpose of this study was to assess the IFMIS user service delivery at the National Treasury and propose recommendations to improve its service delivery.

1.4 Objectives of the study
a) To examine the effect of IFMIS user training on service delivery at the National Treasury, Kenya.
b) To determine the impact of IFMIS implementation on service delivery at the National Treasury, Kenya.

c) To establish the effect of authorization procedures through the IFMIS on service delivery at the National Treasury, Kenya.

d) To isolate the challenges facing the users of IFMIS and suggest recommendations to address them

1.5 Research questions of the study

a) What is the effect of IFMIS user training on service delivery at the National Treasury Nairobi, Kenya?

b) What is the impact of IFMIS implementation on service delivery at the National Treasury Kenya?

c) What is the effect of the authorization process through the IFMIS on service delivery at the National Treasury Nairobi, Kenya?

1.6 Assumptions of the study

This study was based on the assumptions that:

a) Respondents fully understood the questions being asked in the questionnaire and interview schedule.

b) Respondents would give factual information to the best of their knowledge.

c) The inclusion criteria of the sample are appropriate in that respondents have all used IFMIS in their respective tasks.
d) The research questionnaire as designed would give reliable responses.

1.7 Scope/Limitations of the study

The study aimed to establish the challenges facing users of the Integrated Financial Information Management System (IFMIS) in government institutions. This was a case study of the National Treasury, Nairobi Kenya as it is the institution where IFMIS is coordinated. The study only focused on IFMIS and no other superior financial management information systems used in the ministry. The study involved a sample of 94 respondents selected from a target population of 1,539 officers from the users of IFMIS. The main limitation faced in the study was a generalization of findings as other ministries could have factors unique to themselves which could not be found in the National Treasury and were not subjected to the study. A case study of the National Treasury would not be conclusive as it would not apply to all the ministries since they do not have common characteristics. To address this limitation, the study generalized the findings and recommendations only to the National Treasury and related organizations.

The study was also limited to the structure of the research instruments where answers were confined within the structure. This applied to the questionnaires where quantitative data were collected in a structured format thereby denying a chance to other opinions outside the confines of the structured questions. To address this limitation, the study included
open-ended questions within the questionnaire where respondents had a leeway to include information not captured in the structured questions.

Respondents were only limited to the text in the questionnaire for direction about how to fill and respond. There was no provision for them to seek clarifications if they did not understand the questions. To address this, the researcher left respondents his contact information included email and telephone number for any clarifications. Filling and returning the questionnaires depended on the willingness of the respondents and time at their disposal. To address this, the researcher adopted the “drop and pick” technique where respondents were allowed ample time with the questionnaire and responded to the same at their convenience after which they informed the researcher when dully filled for collection.

The reliability of instruments could not be absolute, and so the research was limited to the degree of instrument reliability. To address this limitation, the study subjected the data collection instrument to the Cronbach test of reliability the outcome of which indicated that all scales were above the threshold and therefore reliable for data collection.
1.8 Conceptual framework

**Independent Variables**

- **User training on IFMIS**
  - Workshops
  - Internship
  - Apprenticeship

- **Approaches to IFMIS implementation**
  - Phased approach
  - Parallel approach
  - Big bang approach

- **Challenges to the users**
  - System Complexity
  - Resistance to change
  - Techno-phobia

- **IFMIS authorization levels**
  - Number of levels
  - Speed of operations
  - Delegation

**Dependent Variable**

- **Service Delivery**
  - Efficiency
  - Work output
  - Availability and access to information

**Figure 1:1: Conceptual Framework**

Figure 1:1 illustrates the conceptual interrelation of the aspects mentioned by forming the study objectives. From the diagram, the independent variables included the challenges facing the users of the IFMIS, the intervening variables including the user attitude, government policy on IFMIS organizational bureaucracy while service delivery was the dependent variable. The dependent variables will be affected by the
changes in the independent variables. In this case, any change in authorization levels, occupational challenges, approaches to implementation and complexity of IFMIS with markedly change the behavior in the budget process, procurement of goods and services, as well as making payments and servicing debts.

1.8.1 Independent variables
An independent variable is a variable that is believed to affect the dependent variable as its manipulation causes variations in the dependent variable. Likewise, as the challenges in using the IFMIS increase they equally affect the service delivery thus users cannot deliver as efficiently as expected.

In the present study, the overall independent variable is the challenges facing users of the integrated financial management information system. The specific independent variables derived from the main independent variable include the specific user challenges including IFMIS user training, IFMIS implementation, and IFMIS authorization levels. The independent variables are conceptualized as both individually and wholesomely influencing service delivery at the National Treasury, Nairobi, Kenya.

1.8.2 Dependent variables
Dependent variables do vary depending on the influence and changes in independent variables. In the present study, service delivery forms the dependent variable as indicated by budgeting processing, procurement of
goods and services, payment of suppliers and management of government
debts. As depicted in the conceptual framework, the study conceptualizes
that efficiency in service delivery largely depends on the challenges
experienced by the users. In a situation where challenges are more, the
service delivery will be minimal, and where challenges have been
eliminated, the efficiency in service delivery will be realized (Cargan,
2007).

1.9 Operational definition of terms
Interoperability: the ability of IFMIS to exchange and make use of
information with other e-government systems.

Deployment: The action of mobilizing IFMIS as a technological resource
into effective action.

Technophobia: Fear to use the IFMIS which is inherent among some
users due to limited interface and lack of adequate information about the
system.

Bureaucracy: Officially designed structure and steps through which any
financial transaction should along the IFMIS from initiation to finalization

Integration: - linkage or inter-connection of the IFMIS with other systems
which are in the organization
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction
The chapter explores theoretical and empirical literature in the area of IFMIS user service delivery at the National Treasury Kenya. The literature covers both independent and dependent variables under the study and tends to bring to the fore the nature of the relationship among these variables as established by theory and empirical research. The chapter is structured into the integrated financial management information system, users of the integrated financial management information system, application of IFMIS in other countries, theoretical perspective, current phase of IFMIS implementation and service delivery, IFMIS authorization levels, and service delivery, challenges facing the users of IFMIS in service delivery and culminates into a research gap.

2.1.1 Background of IFMIS
Many countries around the world according to Josh and Moore (2017) were grappling with inefficient financial management resulting in an unwarranted waste of funds through mismanagement. IFMIS is the most efficient financial management reform practices adopted by most of the developing countries (Kasumba, 2018). Countries that adopted the IFMIS continue enjoying the benefits of its effectiveness, efficiency, transparency, accountability, comprehensive financial reporting and security of data management among others (Peterson, 2017).
The adoption of IFMIS faced some impediments due to changes in technology on which it depended. As Hendricks (2012) states, implementing the IFMIS in some countries was delayed by lack of commitment by the top management in most of the organizations, lack of users capacity, resources, and management support. The complexity of IFMIS, institutional and technical challenges also affected its implementation and use. As further indicated by World Bank (2013), challenges that are common among countries in the world include; inadequate planning, poor communication between those responsible for implementation, the donor countries, shortage of management capacity and resources all of which curtail the IFMIS implementation and usage.

As observed by Al-Zoubi, Sam and Eam (2016), Slovakia and Kosovo have the best IFMIS implementation system which is attributed to political goodwill and commitment to the alleviation of the challenges affecting the use of the system. Most of the Scandinavian countries did not have a budget or a treasury system because they were recovering from the post-conflict regime and therefore they depended on USAID and CIDA to finance their project (Hendricks, 2016). After many years of civil and economic strive countries in the developing world realized the need for social, political and economic transformations to steer their economies to the greater levels of development. Most of those countries particularly in Africa have over the years increasingly embraced technology in fiscal and other economic management practices (Josh & Moore, 2017).
The pace of reforms spearheaded by the World Bank, IMF, USAID, and other donor institutions was impossible to match by some of other countries (Wescott, 2017; Allen, 2015, Willis, 2018). According to Watkins and Doronitsky (2011), IFMIS was an initiative of the World Bank financing aimed at taking the developing countries to the same level with the developed economies and to enhance the management of public financial resources in those countries.

The IFMIS projects often stalled in some of the developing countries because of political interference, technical, technological and operational challenges (Wescott, 2017). Successful implementation in other countries was attributed to the commitment of the authorities to financial reform objectives, ICT readiness, sound project design, a phased approach implementation, project management capability, as well as adequate resources allocated to the project (Al-Zoubi et al., 2016).

Governments in the developing countries as observed by Hendricks, (2016), continued to explore new methods and systems to modernize as well as to improve public financial management. Most of those countries continued to automate operations as part of public financial reforms (PFM) albeit with many challenges. In particular, countries in Africa were more prone to such challenges as changes in systems design due to fluctuation in information technology, poorly implemented training programs and unnecessary expenditures that strained budgetary allocations among others. Implementation and use of IFMIS in post-conflict
governments such as; Vietnam, Rwanda, Burundi, Uganda and the Republic of Slovenia lagged behind because of continued civil wars which took several years and caused destruction to infrastructure, property as well as the systems (Watkins & Dorotinsky, 2016).

According to Peterson B, (2015), public finance is crucial to economic growth, but successful reform of public finances has been rare especially in many African countries. However, success stories are there from few countries which defied all odds to transform their economies through adoption of PFM and IFMIS reforms. The financial reform's success in Ethiopia is a rare case of references as it was possible when the country undertook a comprehensive reform of its core financial systems, independent of the IMF and the World Bank influences. This made it to successfully transform itself into the fastest growing economy among countries in Africa. The success of reforms in Ethiopia was attributed to the culture of the people and the character of reforms which was well managed by the government through undertaking a comprehensive need assessment for the civil service and they prioritized them in implementation. The success in public financial management and public financial administration provided grounding platforms for success in IFMIS implementation. Unlike many countries where reforms are done in a hurry, Ethiopia took twelve years to accomplish its reforms which greatly improved the four core financial systems; budgeting, accounting, planning, and financial information. This success was grounded on four
strategies of reform which are to; recognize, improve, change, and sustain. Likewise for any governments to succeed, they must first establish the public financial administration (PFA) before moving to more sophisticated public financial management (PFM) and IFMIS.

According to Trevor (2012), post-conflict countries chose to directly implement a more sophisticated IFMIS rather than adopting traditional systems which would require upgrading to IFMIS later to enhance efficiency. Strengthening budgetary processes and systems in low and middle income countries are constrained by the poor quality of public institutions, weak centers of government and cabinet systems that create problems in policy coordination and inefficient planning (Beschel & Ahern, 2016). To be more precise, the Government of Kenya started conceiving ideas to enhance its financial management functions since 1997. The main aim of this endeavor was to integrate Financial Management System (FMS) to improve access and sharing of financial information between and among the Ministries (Fengler et al., 2018). Wanyama & Zheng, (2011) and Hendriks, (2014) opined that the initiative was particularly undertaken to address issues of many discrete systems in the government that operated autonomously within specific structures and established organization cultures which were found to conflict with situational, individual and organizational factors of work.
Implementation of the Public Financial Management (PFM) reforms in Kenya followed the enactment of the Public Finance Management Act, 2012 which is enshrined in the new Constitution. Chapter 12 of the Constitution provided for the establishment of a new PFM legal and institutional framework which led to the development of a new (2013-2018) strategy for Public Finance Management Reforms (PFMR) in Kenya. The PFMR strategy outlined seven priority themes that outlined the PFM reforms for a period of five years. The objectives of each theme were linked to the implementation of the Constitution and the Public Finance Management Act 2012. In particular, theme 7 of the PFMR strategy focused on IFMIS Re-engineering with specific objectives to automate and integrate PFM systems to facilitate efficient and effective execution of all financial management processes, eliminate risks, enhance security and financial controls in all service areas including the county units. The IFMIS Re-engineering Strategic Plan 2011-2013 was formulated in 2011 with the main aim of providing a structured methodology to stabilize the existing IFMIS while facilitating the development of a comprehensive IFMIS, which would allow the Government of Kenya to realize the full benefits of a financial management information system. The implementation of the strategy was faced with various challenges which included the inadequate IFMIS support infrastructure in form of stable power and computing hardware (GOK, 2011). The Re-engineering of the (IFMIS) initiated in
2011, and guided by the Strategic Plan for the period 2011-2013. was to focus attention on Re-engineering for Business Results components for improved financial management. The Plan to Budget (P2B) component which aimed at providing a structured framework for development and deployment of a fully functional, automated planning and budgeting system was expected to improve the accuracy and efficiency in the Government’s planning and budgeting process. The procure to Pay component was to create end to end automated process starting at the development of procurement plans, procurement of goods and services and payment of suppliers for goods and services delivered. The Revenue to Cash component was aimed at helping in the collection, recording, classification, and reporting of Government revenue and all the activities related to revenue and cash management, from generation, collection, recording, and distribution of funds to the ministries. The Record to Report component was to encompass all activities including the updating and maintenance of the general ledger, reconciliation of sub-ledgers to the general ledger and closing of books among other functions. Automation of all the IFMIS processes and for the infrastructure and support required for a fully functional financial management system. The Communicate to Change component was to focus on change management, capacity enhancement, information generation and dispersion, education and effective communication among IFMIS stakeholders.
The IFMIS Re-engineering program adopted a modular to full-cycle end to end framework, in which users would recognize their roles and responsibilities in the public financial management. The IFMIS was also integrated with the other systems including KRA’s revenue collection system, Debt Management System, Electronic Project Management Information System (E-PROMIS), Pension Management Information System (PMIS), Government Human Resources Information System (GHRIS) and Group Personal Accident (GPA).

2.1.2 Users of IFMIS in Kenya

IFMIS has been generally applied throughout Central and County Government ministries, state departments, and other affiliated bodies. It is used to specifically manage expenditures of the central government as well as the county government (Josh & Moore, 2017). Users of IFMIS include any officer involved in initiation, approval, authorization, procurement, and payment for goods and services. These include officers in user departments who initiate procurement process through requisition of goods or services, officers who approve requisitions for services or procurement of goods, officers responsible for authorization of the order, charging a particular expenditure to the relevant account and officers responsible final authorization for the payments. Users also include other stakeholders and customers who consume or benefit from the services through the IFMIS (Fengler et al., 2018).
2.1.3 The IFMIS configuration in Kenya

The IFMIS is configured to perform several functions and integrate with other systems that are used in the organization. As observed by Heidenhof, Grandvoinnet, Kianpour, & Rezaian (2002) modern integrated systems including the IFMIS have two main characteristics. The first characteristic is the uniform classification of accounts which are used for budget and expenditure management. This is enabled through data exchange capabilities that cut across the Local and Wide Area Network (LAN) and (WAN). On the same note, Diamond and Khemani (2005) identified three characteristics of IFMIS; as a management tool that supports changes in any organization and provides information required for decision making while providing a wide range of financial and non-financial information for decision making.

It uses standard data classification to record financial events, with internal controls over data entry, processing transaction, and reporting. It uses a common process for similar transactions and is designed to eliminate unnecessary data duplication. Equally, Rickson (2012) describes the IFMIS is a collection of software, hardware, data, people and procedures which are designed to generate information that the organization requires to transact business on a daily basis. The figure 2.1 below represents a basic diagram of a typical government IFMIS comprising the core and non-core component.
2.1.4 IFMIS re-engineering

The re-engineering of IFMIS culminated with the establishment of an IFMIS Academy, which was established to enhance IFMIS user’s capacity both at national and county governments. This was meant to ensure that
there is optimal utilization of the system in the country and National Governments thus improving service delivery to the public (The National Treasury, 2013).

The relentless effort to improve IFMIS to enhance service delivery to the public has not been fully achieved especially in-country governments. A study of IFMIS, procurement performance and customer satisfaction in Nyeri found that the Implementation of IFMIS has not improved customers’ satisfaction at the country government (Mwangi, Kiarie & Kiai, 2016). A report by the auditor general revealed that despite the rollout of the system in every county, some users could not easily interface with it. Likewise, the users in most counties where internet was not fully connected were very disadvantaged hence spending much time trying to generate reports (Auditor-General, 2016) at the expense of service delivery to the public. In this case, IFMIS could not stand on its own to support processes but heavily independent on other systems, including manual system which consequently caused delays in service delivery.

2.2 Theoretical framework
Organizations invest a lot of financial and human resources towards the development and implementation of innovative technology solutions to help them improve service delivery, but often such innovations fail to deliver as expected, which is attributed to the challenges users face in implementing various innovations. The present study was underpinned by both the Systems theory proposed by Von Bertalanffy in the 1930s and the
Technology Acceptance Model developed by Richard Bagozzi and Fred Davis in 1986.

2.2.1 Systems theory
From the perspective of the system theory, organizations are considered to be open social systems which interact with their environments in order to survive. Organizations depend on customers who purchase the products or services from the organization, suppliers who provide materials, employees who provide labor or management, shareholders who invest, and governments that give regulations. Just like mechanical systems, organizations are divided into departments which to some levels have autonomy to operate individually for the common benefits of the entire organization (yogesh k. et al, 2011).

The system theory depicts a modeling device that shows the interrelationships and overlap between separate disciplines. The theory explains the importance of integration of the parts of a particular system. It helps the organization to realize that for a problem to be solved all the components in a system need to be synchronized and work together.

A system is viewed by K. Ellis, et al. (2013) as an organized entity which is made of interrelated parts which are interdependent from each other. A system has barriers which distinguish it from other systems in the organization or an environment in which it is applied. A system tends to maintain its major characteristic which define it and distinguish it from other systems. A Systems theory is applicable in many disciplines, in society, science, public and educational organizations among others.

According to Hedricks (2012), system thinking is a framework of thoughts that help to deal with a complex phenomenon holistically. This view informed this study in that IFMIS is a system made up of different
components whose roles are collecting, accumulating, processing and providing information to all parties in the budgetary system on a continuous basis (Diamond and Khemani, 2006). The Systems theory thus guided the present study in determining the various challenges users of the system experience in implementing its various modular components.

2.2.2 Technology Acceptance Model (TAM)
The study borrowed heavily from the Technology Acceptance Model (TAM) developed by Richard Bagozzi and Fred Davis in 1986. The TAM is a model of an information system that indicates how the users accept and use a certain technology. The TAM deals more specifically with the prediction of the acceptability of an information system and to identify the modifications which need to be done to make the system acceptable to the users (F.D.Davis, 2018). This model suggests that the acceptability of any information system is dependent on two main factors; perceived usefulness and ease of use. Perceived usefulness refers to the extent to which an individual believes that using a system will improve his or her performance. Perceived ease of use is the level of believes that the system will be used effortlessly.

Since its proposal, TAM has gone through a number of validations and modifications as observed by Priyanka and Kumar (2017). Several scholars (Teo, 2016; Ducey, 2015; Priyanka & Kumar, 2017; Huda, et al., 2016) have since enumerated a variety of factors that advance the acceptance and use of technology, including social influences, individual
differences, beliefs, situational influences and attitudes that propagate the intent to adopt technology as well as the aptitude to reject it. The theory has also been tested to determine its authenticity, a majority of whom have established a significant relationship between the model and information acquisition (Jiang, Chen & Lai, 2017). The theory has also been tested for reliance in view of latest developments such as mobile money and mobile payment systems results of which indicate that TAM anticipates the facilitating conditions for e-finance and mobile finance contexts (Thakur, 2013).

Accordingly, the use of an information system also depends on the behavioral intentions determined by the individual’s attitude towards using the system and user’s perceptions regarding its utility. Accordingly, the users' use of the system is not only determined by his or her attitude but also by the impact on the user’s performance. An employee may therefore, not welcome a new information system, but if he or she perceived that the system would improve the user's performance, the probability that he will use it is high. Besides, the TAM hypothesizes a direct link between perceived ease of use and perceived usefulness. Likewise, the users were free to accept or reject the use of IFMIS depending on their perception against or for the system.

2.4 Effect of IFMIS user training on service delivery
The IFMIS user training and capacity building is a major factor that influences the success of IFMIS implementation as well as service
delivery, according to Chêne, (2018). In Kenya, the National Treasury through the IFMIS department established IFMIS training school at the Kenya school of government back in May 2012 to enhance skills and build capacity among the IFMIS users. Vickland & Nieuwenhuijs (2005) studies critical success factors for modernizing public financial management information in Bosnia and Herzegovina found that a comprehensive training program for users is critical for successful implantation of the systems as it leads to efficiency in service delivery. They noted that training help to unlock user readiness to deliver services and enhance the sustainability of the system. In a presentation to the South Africa National Treasury, Maake (2007) noted that the challenges that South Africa faced with regard to service delivery through IFMIS were the lack of proper user training on IT skills and functional skills. Hendriks (2012) argued that to build the required capacity for effective service delivery, training should be a continuous process, and should be given to senior managers, technical staff and end users.

Mpofu & Hlatywayo (2015) studied training and development as a tool for improving basic service delivery in selected municipalities in South Africa. The findings showed that quality employee training programs significantly improved employee performance and service deliverance. The findings further pointed out that high standard training programs positively influence efficient and effective service deliverance. Afandi (2016) studied the effect of IFMIS on the performance of employees in
Kenya and found that user capacity which is built on training, as well as the technical skills acquired through training, have a positive effect on the user performance as far as service delivery is concerned. In the same context, The National Treasury procured the services of a Training/Capacity enhancement firm to develop content and provide in classroom and online training for IFMIS users in national and county governments. The IFMIS academy developed curriculum and manuals for the users’ training and have provided training at the Kenya School of Government since 2012 and so far 7320 system users have been trained. That notwithstanding the number of the people trained is insignificant as compared with the needs of IFMIS in the country. However, the impact of IFMIS has been of great help to the management in institutions where it was fully implemented.

2.5 Impact of IFMIS Implementation on service delivery
The Government is appreciating the benefits realized through the use of IFMIS in public financial management activities especially in the budgetary process for public institutions. The IFMIS has facilitated timely decision making, prompt reporting on financial matters, allowing internal controls on financial processes, and provision of consistent compliance to financial regulations. In addition to that IFMIS has great impact in transparency of operations, checking on financial misappropriations and reducing corruption in the public sector. As compared to manual and other
accounting systems, IFMIS has improved efficiency in Budgetary and financial processes in the country. (Beschel Jr. and Ahern, 2012).

The impact of IFMIS has further been realized in the promotion of transparency, accountability, and responsiveness of public financial resources, curtailing wasteful spending, enhancing controls and audit procedures, strengthening fiscal planning and reporting. The IFMIS has helped the National Treasury to efficiently allocate financial resources to Ministries, Departments, Government agencies and County Governments. It has allowed the Treasury to establish links among the major players in accounting and financial management, as well as boosting the development partners’ confidence in the country’s prudent management of public financial resources. Strategic Plan (2011-2013).

Where an IFMIS is fully implemented, it helps the management to ensure accountability for the deployment and use of public resources, improving the effectiveness and efficiency of public expenditure. It also provides decision makers with necessary information to perform managerial functions. Equally, IFMIS help to improve the quality and availability of information required at various stages of public financial management, according to Barcan, L., (2010). It helps in detecting corruption through identification of exceptions to normal operations, detection of suspicious patterns of activities, automated cross referencing of personal identification numbers for fraud, assessment of inventories to detect theft, automated cash disbursement and identification of ghost workers (Brar, 2010). The effective implementation, operation and maintenance of an IFMIS requires staff with the necessary knowledge and skills. Lack of capacity is one of the main causes for the delay in the implementation process as was the case of Ghana. The emphasis put on
capacity building through training in Tanzania greatly contributed to their success. According to Brar (2010), the implementation of IFMIS in Tanzania was distinguished by developing enabling legislations which contributed to the success of the system implementation.

2.6 Effect of authorization procedures through the IFMIS on service delivery

Too much bureaucracy is detrimental to efficient services in any organization as it causes unnecessary delays and deters efficient decision making along the organization hierarchy (Carlos, 2014). The application of IFMIS in the National Treasury was done within a sequence of many authorization levels along the organization hierarchy. For an action to be taken users underwent several steps from initiation of an action to its finalization. Officers in different seniority levels along the organizational hierarchy were assigned to check and sign documents before they passed from one level to the next. In case the document was not correct the officer would refer it back to the source to make corrections and then resend it to him/her. This approach affected the users who were not within Treasury especially in the county governments where system users were required to regularly visit Treasury Nairobi for software updates.

2.6.1 Procurement process for goods and services

To procure a single item or service, it required the user department to initiate action by manually writing a memo (Stage 1) to the head of the department (HoD). The memo was to be approved by the HoD (Stage 2) and sent back to the officer to upload the same in the IFMIS (Stage 3) and then return to HoD. The HoD approved (Stage 4) and forward the
requisition to the head of the procurement department (HoP) through the system. The (HoP) would approve (Stage 5) and authorizes officers under him/her to issue the quotations (Stage 6) to the pre-selected suppliers through their email addresses. The supplier would quote the prices and email back the quotations. The quotations were verified (Stage 7) by a team of selected members who would award the tender to the pre-identified supplier. The supplier would then be informed through the email address of the items to supply. The supplier would be given time to deliver the goods to the organization stores where they were inspected to ascertain conformance (Stage 8) with the order. If delivery was found to be in order, then the supplies documents which include the Invoice, delivery note, copy of the order are scanned to upload into the system to start the process of payment. (GOK, strategic plan, 2011-2013).

2.6.2 Payment for goods and services
The payment documents, which include the invoices, delivery notes, and the order all in hard copies are forwarded to payment and accounts department. The officer in charge would verify the documents against the copy in the system (Stage 9). Then payment voucher (PV) would be prepared on paper as well as within IFMIS. The hard and soft copies were to be authorized (Stage 10) by the HoD of the requesting department (AIE holder) and sent back to pay an account. The hard copy of the PV was forwarded to an examination where the PV and soft information were checked and if correct forwarded to audit (Stage 11). The auditor verified
soft information against the information in the hard copy of the PV and passed to the director of administration for final authorization (Stage 12). The PV and soft copy information are forwarded to cash office for payment, captured in IFMIS (Stage 13) to the Electronic Funds Transfer (EFT) system where after verification it was then forwarded to the government payment system (G-Pay) and then to the Central Bank for transmission to the supplier’s Bank account within 24 hours. The above levels were too many for a transaction to be completed as it took time for documents to move from one step to another. Likewise, since each authorization level was assigned to a particular officer, then when such an officer was not on his/her desk or was on another assignment, the process could not continue to the next level thus causing more delay. The delays contributed to the inefficiency of IFMIS, frustrated the system users and caused the delay in service delivery.

2.7 Challenges facing the users of IFMIS in service delivery

The challenges facing users of IFMIS are not unique to Kenya but have also been experienced in countries that have adopted the use of IFMIS. Majority of the users took time to interface with the system due to its complexity and the approaches to its implementation. Many authors including, Diamond & Khemani (2015), Dener et al., (2017), Henricks (2016), argued that there have been widespread complaints about inadequate professional support, insufficient networking, lack of infrastructure, lack of coordination among user departments, and less than
optimal human resource development to support users. Dener et al. (2017), Hendricks (2016), Denver & Young (2013), Rodin-Brown, (2018), identified the size and complexity of IFMIS as a major challenge affecting the users. As noted by Chene (2018), Fyson, (2018) and Hendricks, (2016) capacity building is a key factor that influenced the success or failure of IFMIS in service delivery and inadequate experience in use of IFMIS was a cause of challenges to the users. Parallel implementation alongside the manual system was another challenge identified in the IFMIS strategic plan (2011-2013). Kostenbaum & Dener, (2015), Semakula & Muwanga, (2014), and Dener et al., (2017), identified bureaucratic process of approval and authorization as a significant challenge, and according to Diamond & Khemani, (2006), occupational-related sicknesses due to prolonged use of computers where IFMIS is domiciled equally affect efficiency of the users in service delivery.

2.8 Research gap
Countries that adopted the use of IFMIS continue to enjoy the benefits of its effectiveness, efficiency, transparency, accountability, comprehensive financial reporting and security of data management among others (Peterson, 2017). However, despite relentless effort to improve IFMIS to enhance service delivery to the public, this has not been achieved. A study of IFMIS, procurement performance and customer satisfaction in Nyeri found that the Implementation of IFMIS has not improved users’ and customers’ satisfaction at the country government (Mwangi, Kiarie &
Parallel implementation alongside the manual system is one of the main challenges identified in the IFMIS strategic plan 2011-2013 as affecting service delivery. In line with that most of activities were particularly done manually rather than within the system which not only slowed down the processes but also frustrates the users. The study established that there was scanty knowledge about any study of the challenges facing the users of IFMIS as many of the empirical studies in Kenya dealt particularly of issues of the adoption and implementation of IFMIS in governments with the focus mainly on factors affecting its implementation, leaving experiences and difficulties faced by the users largely unexplored.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction
In this chapter, the researcher involves various techniques to collect, assemble and evaluate data. Also the researcher adopted specific methods and techniques to approach research in a logical manner. The researcher equally used different research instruments including the questionnaires and interviews to gather relevant data. The researcher also used specific sampling technique to generate a sample and methods to identify the target population for the study.

3.2 Research design
The researcher adopted a case study design using quantitative and qualitative (mixed method) approach to collect data. The method enabled the researcher to use qualitative and quantitative techniques which enabled him to gain a wide and in-depth understanding of the study problem. The method was useful and allowed the researcher to understand the inconsistencies between quantitative results and qualitative findings. It helped him to use the study findings to carry out a well-grounded research.

3.3 Target population
In the present study, the target population includes the 1,539 officers who are IFMIS users at the National Treasury headquarters working in various directorates including Directorate of administrative services, Directorate of accounting and quality assurance, Directorate of public debt management, Directorate of public investment and portfolio management.
and Directorate of the budget, fiscal and economic affairs (The National Treasury, 2017).

Table 3: 1: Distribution of users of IFMIS in the National Treasury

<table>
<thead>
<tr>
<th>Directorates</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directorate of administrative services</td>
<td>906</td>
</tr>
<tr>
<td>Directorate of Accounting services and quality assurance</td>
<td>455</td>
</tr>
<tr>
<td>Directorate of Public Debt management</td>
<td>30</td>
</tr>
<tr>
<td>Directorate of public investment and portfolio management</td>
<td>77</td>
</tr>
<tr>
<td>Directorate of Budget fiscal and Economic affairs</td>
<td>71</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1539</strong></td>
</tr>
</tbody>
</table>

Source: The National Treasury (2017)

3.4 Sample and the sampling techniques

A sample of 94 respondents was used for this study. The Yamane formula was used to calculate the sample from the population of 1,539 officers who work in the National Treasury. Sampling enabled the researcher to select a sample deliberately and in doing so avoided many factors that would make the data observed unrepresentative (Thompson, 2012). According to Holloway (2013), a sample may be small or large depending on the type of research question, materials, time, resources and the number of researchers involved. A sample of 94 respondents in this study was calculated from the target population using the Yamane (1967) formula which is justified for its scientific approach and has been successfully used before in information science studies including by Kiprutto (2013) in his study on cloud computing and service delivery.

The Yamane formula is as illustrated below:
\[ n = \frac{N}{1 + N(e)^2} \]

Where: \( n \) = required a sample

\( N = \text{total population} = 1539 \)

\( e = \text{margin of error} = 0.1 \)

= 0.01, 0.05, and 0.1 where the margin of error will be taken as (0.1). The margin of error was ideal to allow for instances where top management staff who are the target sample for the study would not be available and had to delegate to their immediate lower staff to respond to the survey.

\[ n = \frac{1539}{1 + 1539(0.1)^2} = 93.89 \]

\( n = 94 \) (Sample)

The 94 respondent users were spread out across the various directorates at the Treasury proportionately as elaborated in Table 3.2. To ensure representativeness, stratified random sampling was employed whereby respondents were randomly drawn from various departments and job cadres in the National treasury.

Table 3: 2: Distribution of users of IFMIS in various Directorates at the National Treasury

<table>
<thead>
<tr>
<th>Directorates</th>
<th>Population</th>
<th>% Proportion</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directorate of administrative services</td>
<td>906</td>
<td>58.9</td>
<td>55</td>
</tr>
<tr>
<td>Directorate of Accounting services and quality assurance</td>
<td>455</td>
<td>29.6</td>
<td>28</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>-----</td>
<td>------</td>
<td>----</td>
</tr>
<tr>
<td>Directorate of Public Debt management</td>
<td>30</td>
<td>1.9</td>
<td>2</td>
</tr>
<tr>
<td>Directorate of public investment and portfolio management</td>
<td>77</td>
<td>5.0</td>
<td>5</td>
</tr>
<tr>
<td>Directorate of Budget fiscal and Economic affairs</td>
<td>71</td>
<td>4.6</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1539</strong></td>
<td><strong>100.0</strong></td>
<td><strong>94</strong></td>
</tr>
</tbody>
</table>

### 3.5 Instruments of data collection

The researcher collected quantitative data using the questionnaires and the interview schedule to collect qualitative data from officers who could not fill the questionnaire because of the nature of work engagement or where more clarification was sought. The instruments were administered to the respondents at the departments where they worked.

#### 3.5.1 Questionnaires

A questionnaire is one of the commonly used research instruments to obtain important information about the population. According to C Paul (2019), questionnaires are the major data collection tools because they allow for the collection of a large amount of data from a target population within a specified period.

The objectives and research questions guided the design of the questionnaires, and they constituted two parts; the first part was the introduction where the researcher offered a personal introduction, the topic of study, objectives, and instructions that guided answering the questions.
The second part contained the research questions and constituted four sections: the socio-demographic information, the extent to which IFMIS was adopted and implemented in the National Treasury, analysis of the challenges faced by the users of IFMIS and the evaluation of the level of skills among the users. The questionnaires were structured to contain both closed and open-ended questions to enable the collection of the required data from the respondents. Multiple choice and Likert scale questions were provided where the respondents were asked to tick against the appropriate choices. The researcher preferred the tool because it is free from the bias and the answers given would be in the respondents’ own words. The respondents were allowed adequate time to think and give reasonable answers, and the researcher could conveniently reach the respondents who were far within the allowed time. The open-ended or unstructured questions gave respondents complete freedom of response.

### 3.5.2 Interview schedule

To complement the questionnaires and address areas that may not have been covered, the researcher used key informant interviews to solicit actual information from pre-selected respondents. Senior staff was purposively sampled owing to their possession of information pertinent to the present study variables. The interview schedules were arranged based on the pre-arranged dates of appointment with the respondents. The researcher allocated about fifteen minutes to interview each respondent while recording proceedings during each session. To further compliment
both the questionnaire and interview guides, the study used secondary data in the discussion of findings with a view to comparing what previous empirical studies in the body of knowledge established globally, regionally and locally.

3.5.3 Validity
The researcher used a content validity method to measure the validity of research instruments by presenting the questionnaire to an expert in systems related to financial information management. The expert was cordially requested to read all the instruments and point out if the research questions were well captured and if the instruments were participant-friendly in terms of their readability, longevity, chronological arrangement and grammatical errors. The expert was also asked to provide suggestions on what should be added or deleted. This was effected and the instrument was also cleared of grammatical and other content-related errors. This method ensured that there was adequate coverage of the topic under study.

3.5.4 Reliability
To ensure reliability of the research instruments, a pilot study was carried out prior to the main data collection exercise. The Cronbach Alpha tests were then performed to determine whether the instruments met the threshold of 0.7 Alpha coefficient as recommended (Damon et al, 2011). The questionnaire was deemed reliability as all scales surpassed the 0.7 thresholds.
3.6 Data collection procedures
The researcher sought permission from the Principal Secretary of the National Treasury to collect data from among the officers. The questionnaires were administered to the sampled respondents through the drop and pick method. The method involved handing over the questionnaire to the respondent and either the same was filled immediately and collected by the researcher or an arrangement was made where the researcher would collect them at an agreed later date. The interviews were scheduled as agreed by the researcher and respondents who due to their nature of work could not get time to fill the questionnaires. During the interview, the researcher asked the questions and received answers from the respondent. Answers were recorded in the interview guide while the proceedings were tape-recorded.

3.7 Methods of data analysis
The concurrent triangulation method of data analysis was used where quantitative data was first analyzed and results interpreted. The qualitative data was also analyzed and the results interpreted. The overall results were then interpreted as shown in figure 3:1 below.
Figure 3: Concurrent triangulation approach

The qualitative data was first evaluated using the content analysis method. This involved organizing data into themes using a numbering system to identify different themes, grouping ideas and gathering evidence about views on each theme. Quantitative data was classified, edited and analyzed with the aid of the Statistical Package for Social Sciences (SPSS) software version 21. Analyzed data were then presented in graphs and tabulated summaries.

3.8 Ethical issues in research

The researcher applied the following ethical principles, which were meant to enhance the security of respondents, confidentiality, and safeguard the interests and privacy of the organization.

3.8.1 Plagiarism

In this research study, plagiarism was avoided through paraphrasing information borrowed from outside sources and acknowledging the authors through proper referencing. The document was subjected to a plagiarism checker system to establish and ensure plagiarism was below 20% acceptable level.

3.8.2 Voluntary participation

This principle was applied in that the researcher did not in any way coerce the respondents to give information against their will. Respondents were appropriately informed about the procedures as well as the requirements for the study, and they voluntarily gave the required information.
3.8.3 Confidentiality
Confidentiality of respondent’s information was guaranteed in this study. The researcher assured them their identity and other information they provide would be kept secret during and after the study.

3.8.4 Informed consent
The researcher got permission to carry out research at the National Treasury administer the questionnaires and interview the participants. The respondents were briefed about the intended research study and agreed to provide the required information from the point of knowing that the proposed research was purely for academic and not other purposes.

3.9 Chapter summary
This chapter articulated issues related to research methodologies. The researcher adopted a case study design using quantitative and qualitative (mixed method) approach to collect data. The mixed-method design enabled the researcher to use qualitative and quantitative techniques of data collection. The method was useful and allowed the researcher to understand the inconsistencies between quantitative results and qualitative findings. In the present study, the target population included the 1,539 officers who are IFMIS users at the National Treasury headquarters working in various directorates. A sample of 94 respondents was used for this study. The Yamane formula which is justified for its scientific approach and has been successfully used before in information science studies was used to calculate the sample from the population of 1,539 officers who work in the National Treasury. The researcher collected
quantitative data using the questionnaires and the qualitative data was collected through interviews. The questionnaires were administered to the sampled respondents through the drop and pick method. The concurrent triangulation method of data analysis was used where quantitative data was first analyzed and results interpreted. The qualitative data was also analyzed and the results interpreted. The overall results were then interpreted together.

CHAPTER FOUR

4.0 RESULTS AND PRESENTATION

This chapter presents data analysis and presentations of the results of the study. Data analysis was conducted through descriptive statistics. Whereas the descriptive statistics build the case for the main thesis of the study.
4.1 Data analysis
Data was analyzed with the help of the Statistical Package for Social Science (SPSS) and presented using graphs, tables, and pie charts.

4.2 Response rate
From the 94 respondents targeted in the study, 83 of them were successfully reached thus achieving a response rate of 83.0%. Stevens, Wrenn, and Loudon (2012) argued that a response rate of 50% is adequate for a study. In support of this, Thompson (2012) also noted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. The study, therefore, attained an excellent response rate as in figure 4.1 below

Figure 4.1: Response rate

4.3 Effect of IFMIS user training on service delivery
The study sought to examine the effect of IFMIS user training on service delivery at the National Treasury Nairobi, Kenya. The study first suggested the best training methods to address the various identified
challenges in the use of IFMIS. To this end, respondents were asked to suggest such methods.

![Figure 4.2: Training methods](image)

As illustrated in figure 4.2 above, a majority of respondents (33.7%), suggested the use of internship as a training method to help overcome the observed challenges. This was followed by (22.9%) of respondents suggesting the use of workshops then (16.9%) suggesting training manuals and on the job training while (9.6%) of the respondents were of the opinion that apprenticeship would help.

It was further revealed in an interview with a senior procurement official that not everybody using IFMIS had been trained adequately on the same.

“……We had a number of seminars aimed at training records managers on IFMIS, but at the moment, not everybody has been taken on board... It is continuous, and eventually, all relevant personnel will be adequately trained... We, however, have information on the job training going
on…..”. Going by the majority of responses, it could be deduced that the best training methods included the use of internship, workshops and the training manuals as they could help overcome the observed challenges and hence improving service delivery.

4.4.Impact of IFMIS implementation in the National Treasury
The study sought to establish the impact of various approaches to IFMIS implementation in the National Treasury. This section presents findings to pertinent questions asked with the view to ascertain how IFMIS was applied in the National Treasury, examine the impact of IFMIS on service delivery determine the effects of IFMIS authorization levels on service delivery identify the challenges facing the users of IFMIS in service delivery and finally suggest recommendations to address them.

4.4.1 Implementation of IFMIS
The study was to determine how IFMIS was applied in the National Treasury. This was achieved by collecting data on the usage of the IFMIS in the National Treasury. In light of this, the study first sought to find out from the respondents whether or not IFMIS was implemented and collect data on the usage of the IFMIS modules in the National Treasury. This would indicate the state of its implementation at the National Treasury.
Figure 4.3: IFMIS Implementation in the study area

Figure 4.3 above illustrates that a majority of respondents (49.3%), affirmed that indeed IFMIS was implemented in the study area, while (28.1%) responded that it was not implemented. Among the respondents that indicated that IFMIS was not implemented, a majority noted that some modules like cash management and e-procurement were not used entirely in the study area. A further (22.6%), were not aware whether or not the same was implemented. Findings, therefore, meant that almost half (49.3%) of the respondents had used and were well conversant with IFMIS while the remaining proportion 42 (50.7%) had not used IFMIS at all or were not conversant with it.

4.4.2 The IFMIS modules fully implemented

To collect data on the usage of the IFMIS modules in the National Treasury the study further sought to find out which modules of IFMIS were fully implemented. Respondents were asked to indicate between ‘Procure to pay,’ ‘Plan to budget’ and Revenue to cash modules.' Those
would give an indication of which modules were commonly implemented at the National Treasury. Figure 4.4 below shows the responses.

![Pie chart showing module usage]

Figure 4:4 Modules of IFMIS Fully Implemented

As figure 4.4 above indicates, the majority of respondents (52.3%), affirmed that ‘Procure to pay’ was the most used module, followed by (36.1%) affirming to ‘Plan to budget’ then (11.6%) affirming to ‘Revenue to cash.’

The foregoing findings imply that the level of sensitization regarding IFMIS and its use in the study area was considerably low, and rigorous awareness creation and sensitization on the system use needed to be conducted. Findings further revealed that the ‘Procure to Pay’ IFMIS module was the most widely used in the study area. The system was best applied in other areas including supplier, requisition, quotations, contract, purchase order, receipt of goods, invoicing and payment including the
inventory management. However, it came out clearly that not all of the
modules were functional since not all of them were implemented.

Results, therefore, indicated that half of the respondents had mostly used
the ‘Procure to Pay’ module, while the majority of the other half were
conversant with the ‘Plan to budget’ module while the ‘Revenue to cash’
had the fewest respondents acquainted with it. Those results were in line
with the key informant interviews conducted:

“……We are yet to roll out all the modules in IFMIS…. The idea is to give
civil servants a gradual and smooth transition from the analog system to a
fully digitized and integrated system in a gradual process to enhance
uptake... Eventually, all modules will be fully operational…”

Interview with a Senior Internal Auditor

4.4.3 Impact of IFMIS on service delivery
The study was to examine the impact of IFMIS on service delivery at the
National Treasury. To this end, respondents were asked, on a five-point
Likert scale, to indicate the extent to which they agreed with pertinent
statements posed: 1= Strongly Disagreed; 2=Disagreed; 3=Neutral;
4=Agreed; 5=Strongly Agreed.

As presented in Table 4:1 below, majority of respondents 48 (57.8%)
agreed that the Procure pay module of IFMIS made procurement of goods
and services more efficient; improved efficiency in budgeting process 43
(51.8%) and that payments made electronically improved accountability
and transparency in service delivery 46 (55.4%). A majority of respondents however only moderately agreed that the system had a feedback mechanism that enabled the organization to determine the area of improvement 53 (64.9%) and that the system had made operations more cost-effective 53 (64.9%)

Table 4: Impact of IFMIS on service delivery

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>NA/D</th>
<th>A</th>
<th>SA</th>
<th>M</th>
<th>Std/ D</th>
</tr>
</thead>
<tbody>
<tr>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td></td>
</tr>
<tr>
<td>Statement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>-----------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Has improved efficiency in budgeting process</td>
<td>2</td>
<td>2.4</td>
<td>5</td>
<td>6.0</td>
<td>25</td>
<td>30.1</td>
<td>43</td>
</tr>
<tr>
<td>Procure to pay module has made procurement of goods and service delivery more efficient</td>
<td>1</td>
<td>1.2</td>
<td>3</td>
<td>3.6</td>
<td>27</td>
<td>32.5</td>
<td>48</td>
</tr>
<tr>
<td>Payments are made electronically hence improved accountability and transparency in service delivery</td>
<td>4</td>
<td>4.8</td>
<td>5</td>
<td>6.0</td>
<td>23</td>
<td>27.7</td>
<td>46</td>
</tr>
<tr>
<td>The system has generally made operations cost effective</td>
<td>3</td>
<td>3.6</td>
<td>8</td>
<td>9.6</td>
<td>53</td>
<td>64.9</td>
<td>15</td>
</tr>
<tr>
<td>The system has a feedback mechanism</td>
<td>3</td>
<td>3.6</td>
<td>10</td>
<td>12</td>
<td>53</td>
<td>64.9</td>
<td>13</td>
</tr>
</tbody>
</table>

**Margin of error:** 4%

**Key:** SD = Strongly Disagreed; D = Disagreed; NA/D = Neutral; A = Agreed; SA = Strongly Agreed; Std/D = Standard deviation

On average a majority of respondents (3.904) agreed that the Procure pay module of IFMIS made procurement of goods and services more efficient; improved efficiency in budgeting process (3.861) and that payments made electronically improved accountability and transparency in service delivery (3.856). A majority of respondents however only moderately agreed that the system had a feedback mechanism that enabled the organization to determine the area of improvement (3.368) and that the system had made operations more cost-effective (3.324).
From the preceding, it was notable that IFMIS had a significant impact on service delivery, most notably through streamlining procurement of goods and services, improvement of efficiency in the budgeting process and the electronic payment which improved accountability and transparency in service delivery. Similar results were established from the key informant interviews conducted. For instance, when asked whether they were satisfied with the services offered through IFMIS, all interviewees affirmed. When further prodded whether services offered by the use of IFMIS were satisfactory respondents affirmed that: “……IFMIS has so far been very satisfactory on various fronts, key among which include accountability and transparency… The system is efficient as it has significantly led to a reduction of errors previous committed on the manual system of especially auditing….” Interview with a Senior Finance Officer

Asked on whether customers served through the IFMIS were satisfied with the services offered, respondents further affirmed: “…..Yes, the public is fairly satisfied as the system has considerably reduced the issue of having to queue for long waiting to be served….” Interview with a senior procurement officer

4.4.4 Impact of IFMIS reengineering on service delivery

On the question of whether IFMIS re-engineering improved service delivery, a senior accounts officer affirmed that accounting errors
previously committed had significantly reduced. The respondents further affirmed that they would advocate continuing with IFMIS for financial management as compared with other systems. A responded added: “…..I would give IFMIS 4 out of 5 simply because of its improvement in financial accountability, improved budgetary allocation, and transparency in financial management…..” Interview with a senior officer in the budget section

The foregoing findings affirm that indeed IFMIS Re-engineering improved service delivery adding that the accounting errors previously committed had significantly been reduced. They further affirmed that they would advocate continuing with IFMIS for financial management as compared with other systems.

Accordingly, Andrews (2013) noted that the implementation of IFMIS in government institutions had both positive and negative impact on service delivery. On the other hand, if not well implemented it would result in poor services leading to the dissatisfaction of, users, customers and misuse of resources. Emles (2011) observed that organization’s bureaucracy, user skills, attitudes, politics and policy on IFMIS grossly contributed to inefficiency in service delivery. Wanyama and Zheng (2011) argued that if adequately applied, IFMIS as its sole accounting system could spearhead the numerous benefits which were envisaged from its use and facilitated a smooth eventual replacement of some of the existing systems as expected.
4.5 Effects of authorization procedure through the IFMIS on service delivery

The study was also intended to determine the effects of IFMIS authorization procedures on service delivery. To this end, respondents were required to indicate their views on the authorization levels in the organization and to comment on the cause of delay in service delivery. They were also requested to indicate which information management systems were used at the National Treasury; find out whether or not IFMIS was integrated with other identified information management systems; find out how complexity of IFMIS affects service delivery in the organization; and finally, suggest the best methods to address the various identified challenges in the use of IFMIS. This section presents findings to pertinent questions and statements posted in this regard.

4.5.1 IFMIS Authorization procedure

The study first sought respondents’ opinions on the effect of IFMIS authorization levels in the organization. Respondents were requested to indicate their level of agreement with pertinent statements posed. The summary of responses is as indicated in Table 4:2 below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>NA/D</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureaucracy in IFMIS authorization greatly</td>
<td>1</td>
<td>1.2</td>
<td>2</td>
<td>20</td>
<td>24.1</td>
</tr>
</tbody>
</table>

Table 4: 2: IFMIS authorization procedure
Results in Table 4.2 indicates that majority of respondents highly agreed that bureaucracy in IFMIS authorization greatly contributed to inefficiency in service delivery 52(62.7%) that authorization levels should be minimal and where necessary 52(62.7%) and that authorization should be delegated to as many officers as possible to hasten information processing and service delivery 50(60.2%) From the foregoing, it was notable that IFMIS authorization levels impacted negatively on service delivery to a significant level, most notably because respondents felt that it contributed to inefficiency in service delivery, that authorization levels should be minimal and where necessary and that authorization should be delegated to as many officers as possible to hasten information processing and improve service delivery.

4.5.2 Cause of delay in service delivery

Respondents were further asked to indicate in their opinion, their levels of agreement to the pertinent statement posed on various causes of delays in service delivery as regards the use of IFMIS.
As presented in Table 4.3 below, the majority of respondents 59 (71.1%) highly agreed that the many levels of IFMIS authorization were the major cause of delay in service delivery. 55(66.3%) agreed that change management had not been done effectively thus some modules had not been implemented and 53(64.9%) agreed that inadequate training of the users contributed to the inefficiency of the system. Other respondents however only moderately agreed that political factors regarding the IFMIS had a negative impact on its efficiency 48 (57.8%). From the preceding, it was notable that IFMIS caused delays in service delivery through the key aspects which included the many levels of IFMIS authorization, the ineffective change management which caused some modules not to be implemented and inadequate training of the users which contributed to inefficiency in service delivery.

Table 4: 3: Cause of delay in service delivery

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>NA/D</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The many levels of IFMIS authorization are the major cause of</td>
<td>1</td>
<td>1.2</td>
<td>1</td>
<td>1.2</td>
<td>13</td>
</tr>
</tbody>
</table>
delay in service delivery

Inadequate training of the users contributes to inefficiency of the system

Political factors regarding the IFMIS have negative impact on its efficiency

The change management has not been effectively done thus some modules have not been implemented

Margine of error=4%

Key: SD= Strongly Disagreed; D=Disagreed; Na/N=Neutral; A=Agreed; SA=Strongly Agreed

4.5.3 Systems in use

The study further sought to find out which information management systems were used at the National Treasury. This would give an indication of which line systems IFMIS was integrated with, in the study area.

Responses are shown in figure 4.6 below.

Figure 4.5: System in Use
As indicated in figure 4.5 above, IFMIS was the most prevalent information management system applied in the National Treasury, as indicated by a majority of respondents (42.0%). This was followed by (24.2%) affirming the use of Pensions Information Management System (PIMS); then Integrated Personnel Payment Data (IPPD), indicated by (11.8%) of respondents; then Government Payment System (G-pay) indicated by (10.8%) of respondents while Government Human Resource Information System (GHRIS) was affirmed to by (4.5%) while Budgetary information system (BIS) was affirmed to only by 1.2% of respondents. Going by responses by a majority, it could be deduced that IFMIS, Pensions Information Management System (PIMS) and the Integrated Personnel Payment Data (IPPD), were the most prevalent information management system applied at the National Treasury.

4.5.4 Integration of IFMIS with other systems
The study further sought to investigate whether or not IFMIS was integrated with other information management systems like the Pensions Information Management System (PIMS) and the Integrated Personnel Payment Data (IPPD). The summary of responses is indicated in figure 4.6
Figure 4.6: IFMIS Integration with Other Systems

Figure 4.6 above illustrates, that a majority of respondents (63.9%) affirmed that IFMIS was integrated with other information management systems while (24.1%) responded to the contrary. This implied that indeed IFMIS was significantly integrated with other information management systems.

4.5.5 Complexity of IFMIS

The study sought to establish how, according to the respondents, the complexity of IFMIS affected service delivery in the organization.

Table 4: 4: Complexity of IFMIS

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>NA/D</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std/D</th>
</tr>
</thead>
<tbody>
<tr>
<td>The complexity of IFMIS causes technophobia and affects service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1.2</td>
<td>3</td>
<td>3.6</td>
<td>16</td>
<td>19.3</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>61.1</td>
<td>19.3</td>
<td>16</td>
<td>19.3</td>
<td>54</td>
<td>65</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>10.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.834</td>
<td>.447</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statement</td>
<td>1</td>
<td>1.2</td>
<td>3</td>
<td>3.6</td>
<td>22</td>
<td>26.5</td>
<td>49</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
<td>-----</td>
<td>---</td>
<td>-----</td>
<td>----</td>
<td>------</td>
<td>----</td>
</tr>
<tr>
<td>Delay in implementation of all the modules of IFMIS impedes service delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of integration with other systems contributes to more delays in service delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFMIS requires a lot of training for one to understand its operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Margin of error=4%

Key: SD= Strongly Disagreed; D=Disagreed; Na/N=Neutral; A=Agreed; SA=Strongly Agreed

As presented in Table 4.4 above, the majority of respondents [54 (65.1%)] highly agreed that the complexity of IFMIS caused technophobia and affected service delivery by the users. 49 (59.0%) of the respondents indicated that Lack of integration with other systems equally contributed to more delays in service delivery and 52 (62.7%) noted that IFMIS required much training for one to understand its operations and that delay in implementation of all the modules of IFMIS impeded service delivery 50 (60.2%). On average, the majority of respondents (3.834) highly agreed that the complexity of IFMIS caused technophobia and affected service delivery by the users; that Lack of integration with other systems equally
contributed to more delays in service delivery (3.771); that IFMIS required much training for one to understand its operations (3.842); and that delay in implementation of all the modules of IFMIS impeded service delivery (3.793).

From the preceding, it was clear that the complexity of IFMIS affected service delivery in the organization. Most notably, since the complexity of IFMIS caused technophobia and affected service delivery by the users, lack of full integration with other systems equally contributed to more delays in service delivery. Besides, IFMIS required much training for one to understand its operations and the delay in implementation of all the modules of IFMIS impeded service delivery. The findings were in line with Carlos (2014) who noted that too much bureaucracy was detrimental to effective services in the organization.

4.6 Challenges affecting the users of IFMIS in service delivery

The study’s sought to isolate the challenges facing the users of IFMIS while providing services and how they could be addressed. To this end, respondents were asked to indicate the various challenges they faced in the use of IFMIS and how the identified challenges could be addressed. This section presented findings to pertinent questions and statements posed in this regard.

4.6.1 Challenged faced while using IFMIS

Respondents were asked to indicate various challenges they faced in the use of IFMIS in the organization. This would help to show the prevalence
of various technological, proficiency and or technical challenges thereof.

Figure 4.8 below gives the responses.

![Challenges Faced in the use of IFMIS](image)

**Figure 4.7: Challenges Faced in the use of IFMIS**

As presented in figure 4.7, the majority of respondents (19.3%), indicated that system complexity and lack of training as the most prevalent challenges faced in the use of IFMIS in the study area. This was followed by (18.1%) respondents affirming to change resistance, then (14.5%) to bureaucracy in authorization and those affirming to all. A further (14.3%) affirmed to technophobia.

“......The most common challenges we face include lack of adequate training, technophobia and change resistance......” Interview with a senior finance officer

Going by responses by a majority of respondents, it could be deduced that the various challenges they faced in the use of IFMIS in the organization
included system complexity, lack of training, resistance to change, bureaucracy in authorization and technophobia.

4.6.2 Overcoming the challenges
The study further sought to examine how the identified challenges could be addressed, from the users’ perspectives. This would enable the researcher to inform both policies, and practical recommendations concerning the use of IFMIS and the challenges faced thereof.

As illustrated in figure 4.8 above, the majority of respondents (25.9%) indicated that both user training and conducting more research on IFMIS would go a long way in addressing the challenges users faced in their day to day operations with IFMIS. A further (17.8%) affirmed to both effective change management and complete implementation of the IFMIS module while (12.6%) affirmed the use of appropriate policies.

Going by responses from the majority, it could be construed that both users' training and conducting more research on IFMIS would go a long
way in addressing the challenges faced by users in their day to day operations with IFMIS. Equally effective change management and complete implementation of modules and use of appropriate policies would overcome the challenges faced in the use of IFMIS.

The foregoing findings imply that the challenges prevailing at the National Treasury, on IFMIS use ranged from technological, proficiency and technical. The most prevalent technological challenge faced was technophobia, which could be explained by the realization that a majority of users were more conversant and used to the analog mode of operations; hence fear the relatively radical change to technologically oriented operations as the case was with IFMIS. The complexity of the IFMIS, resistance to change and bureaucracy in authorization were the most prevalent technical challenges while lack of training was the most prevalent proficiency related challenge. This called for pertinent measures aimed at addressing the various challenges in their forms.

It was also notable from the findings that among the most cost-effective measures to be taken to address the user challenges proposed by respondents included user training, more research, as well as effective change management and complete module implementation. User training and more research on IFMIS were particularly highlighted by the majority, implying that there still existed key policy loopholes that impeded the effective uptake of IFMIS. That could be attributed to the observed bureaucracy in its administration especially during authorization. Making
the administrative process leaner would thus enhance its uptake and support change. It also followed that adequate research needed to be further conducted on the system to make it more user-friendly, with easier commands and more engaging user interfaces. The findings were further supported by Denver and Young (2013) who observed that the IFMIS was considered a complex system that had a network of diverse components that interacted non-linearly to give rise to emergent behavior out of a multiplicity of relatively simple interactions. Hendricks (2012) further supported that view in that people in any organization may resist change in the implementation of a new system because of various factors that might be related to the system, management and or their shortcomings.
CHAPTER FIVE

5.0 SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction
This chapter delves into the summary of key findings, conclusions drawn from the findings and the recommendations to address the challenges identified in the use of the IFMIS. Suggestions for further studies based on the gaps identified in the course of the study are also presented.

5.2 Summary of findings

5.2.1 Effect of user training on IFMIS
The National Treasury through the IFMIS department established IFMIS training school at the Kenya school of government back in May 2012 to enhance skills and build capacity among the IFMIS users. The training was aimed at minimizing resistance from users due to a lack of technical skills, training. It was deduced that quality employee training programs significantly improved employee performance and service delivery. It was further pointed out that high standard training programs would positively influence efficient and effective service delivery. The study revealed that training through the IFMIS, user capacity which is built on training, as well as the technical skills acquired have a positive effect on the user performance as far as service delivery is concerned. However, due to inconsistency in training, majority of respondents suggested the use of internship, workshops, training manuals and apprenticeship as training
methods which could supplement long term structured training programs and help to overcome the observed challenges.

5.2.2 Impact of IFMIS implementation
Not all the modules of IFMIS have been implemented; procure to pay, plan to budget and revenue to cash are the modules that were found to be fully implemented thereby limiting full operations of the system. This was confirmed by a majority of the respondents who affirmed that indeed IFMIS was implemented in the study area. The delay in implementation of all the modules was also considered one of the causes of poor service delivery. The IFMIS has facilitated timely decision making, prompt reporting on financial matters, allowing internal controls on financial processes, and provision of consistent compliance to financial regulations. In addition to that IFMIS has greatly influenced transparency of operations, checking on financial misappropriations and reducing corruption in the public sector.

The procure to pay module has made procurement of goods and services more efficient, improved efficiency in budgeting process made payment electronic; hence, improved accountability and transparency in service delivery. Since not all the modules were implemented the users were not fully motivated as the system could not serve their needs to satisfaction. A majority of respondents agreed that the Procure pay module of IFMIS made procurement of goods and services more efficient and improved
efficiency in budgeting process and that payments made electronically improved accountability and transparency in service delivery.

5.2.3 Effect of IFMIS authorization on service delivery
The problem with procedural bureaucracy is that the procedures may not correlate with the expected positive outcomes. Too much bureaucracy was detrimental to efficient services in the organization as it causes unnecessary delays in decision making along the organization hierarchy. Application of IFMIS in the National Treasury was done within a sequence of authorization levels along the organization hierarchy which were the major cause of delay in service delivery.

5.2.4 Challenges facing the users of IFMIS in service delivery and solutions
The most cited challenges included system complexity, inadequate training, change resistance, and bureaucracy in authorization levels. Effective change management and completion of the modular implementation was necessary for the users to work through an efficient system.

5.3 Conclusion
From the preceding findings and discussion thereof, the study concluded that the ‘Procure to Pay’ IFMIS module was the most used at the National Treasury. Equally, IFMIS had to a significant extent been implemented, however, it was noted that some modules were not implemented. That implied that the level of sensitization regarding IFMIS
and its use at the National Treasury was considerably low, and rigorous awareness creation and sensitization on the system use needed to be conducted.

The researcher realized that the challenges prevailing in the study area, concerning IFMIS use ranged from technological, proficiency to technical. The most prevalent technological challenge faced was fear of the new technology which could be explained by the realization that a majority of users were more conversant with the old analog mode of operations hence the fear of the relatively radical change to technologically oriented operations. The complexity of the system, resistance to change and bureaucracy in authorization were the most prevalent technical challenges while lack of training was the most prevalent proficiency related challenge.

Delays in service delivery with respect to the IFMIS application were attributed to the many levels of IFMIS authorization. The bureaucratic system of IFMIS management in the public sector was weighing down on technological approaches to reforms. IFMIS has moderately to significantly improved service delivery at the National Treasury and more need to be done to realize its full capacity. Most notable areas that have been improved include procurement of goods, efficiency in budgeting process and payments which were made electronically hence improving accountability and transparency. However, rampant complaints, especially in the county governments, are currently being experienced to the effect
that there are delays in financial disbursements through the system. As much as this could be politically inclined, IFMIS re-evaluation and further re-engineering would minimize most of the complaints from affected areas.

5.4 Recommendations

5.4.1 Recommendation to the National Government
To address the challenges faced by users of IFMIS, the researcher recommended that the National Government should have a clear and better policy and legal framework to support IFMIS. The system should be set up to make sure that the IFMIS implementation processes match with staff training needs and proficiency. The manual system in place should gradually be phased out as the IFMIS is finally implemented and efficiency tested. It is advisable to ensure that all activities are run within the IFMIS to reap the benefits of accountability and transparency among others. All other systems in the ministries should be integrated with IFMIS for efficiency and cost-effectiveness.

5.4.2 Recommendation to the National Treasury
To address bureaucracy, the system needs to be implemented in a lean manner, without several authorization levels, from the management down to the user level. The management should be responsive to the needs of IFMIS implementation and continue facilitating the users where necessary. The bureaucracy should be minimized, and training programs should be regularly tailor-made to improve user capacity and address any
emerging changes in financial management in the country. The policy on the management of IFMIS must be regularly updated, enforced and supported through adequate financial resources.

5.4.3 Recommendations to address the identified challenges

The parallel implementation of the system has several bottlenecks, and it would be appropriate to try a phased out implementation on some modules to speed up the changeover and reduce over-reliance on manual system. The management should reduce the many steps and bureaucratic authorization levels and adopt a flat structure which would be more efficient for service delivery. The top management should give support to the users through policy re-evaluation and authorize the necessary changes. Training and sensitization of users and other stakeholders in the ministry should not only be done once but regularly. This would eliminate the phobia about the system and boost users’ confidence which is necessary for them to discharge their duties efficiently. The tools of work including computers and computer consumables to support consistent use of IFMIS must be quite appropriate and availed to ensure the safety of users. The organization should provide the right furniture, ample working space, and a conducive working environment. A medical cover for the users of the system would ensure not only health of the users but also motivation for better service delivery. The organization should adopt a good change management strategy to make users and other affected people accept the new system.
5.4.4 Recommendation to IFMIS users
The IFMIS users should be encouraged to be responsive to various training platforms and opportunities available so as to familiarize themselves with various modules of the system. They should also be flexible and ready to embrace new changes in the system which is continuously updated to meet the emerging issues and needs of a larger customer.

5.5 Suggestions for further studies
The study assessed the challenges facing users of the IFMIS in service delivery in the National Treasury, Nairobi County. The study also highlights the need for further studies on the topic. However, no study is ever exhaustive, and in this regard, a study on IFMIS could not be fully exhausted as the system keeps on being improved to match the dynamics of information technology on which it is hosted and to meet emerging needs of the customers. The researcher suggested that future studies may seek to determine the impact of IFMIS re-engineering as well as the effect of IFMIS implementation in the light of the time it has taken to have all the modules finalized and implemented and the expanded government through devolution.
REFERENCES


C.Paul et al (2019). Advances in questionaire design development evaluation and testing. John Wesley & sons Incl., USA.


_Nairobi IFMIS Conference, November 2004_. Nairobi, Kenya.


Rickson, J. (2012). Service delivery through information systems in 
Tanroads: Challenges and possibilities in Dar es Salaam and 

Rickson, J. (2016). Service delivery through information systems in 
Tanroads: Challenges and possibilities in Dar es Salaam and 

Management Reform in the Middle East and North Africa: An 
overview of regional experience. Washington DC: Library of 
Congress-In Publication data.

Systems. A Practical Guide. USAID, January; report prepared by 
The Louis Berger Group, Inc. and Development Alternatives, Inc.

Nairobi, Kenya: IFMIS Department (Unpublished).

Integrated Financial Management System and the automation of 
the budget process (Country Learning Notes). ODI, Budget 
Strengthening Initiative.

The World Bank.

Sherif, V (2018). Evaluating Preexisting Qualitative Research Data for 
Secondary Analysis. Forum Qualitative Sozialforschung / Forum:


Thakur, R (2013) Customer Adoption of Mobile Payment Services by Professionals across two Cities in India: An Empirical Study Using Modified Technology Acceptance Model. Business Perspectives and Research


APPENDICES

KISII UNIVERSITY
OFFICE OF THE COORDINATOR NAIROBI CAMPUS
Phone: 0721 883024
Email: postgraduateenrb@kisiiuniversity.ac.ke
P.O. Box 408 - 40200
KISII – KENYA

Our Ref: KSU/PG/01/15

DATE: 26th August, 2015

The Director,
National Council of Science and Technology (NACOSTI)
P. O Box 30623 00100
NAIROBI

Dear Sir/Madam,

RE: INTRODUCTION LETTER FOR NJAGI STEPHEN NYAGA – MIN11/20124/12

This is to confirm that the above mentioned student is a burside member of Faculty of Information Science and Technology of Kisii University. He is undertaking a course leading to Masters of Information Science.

He has successfully completed her coursework and is now embarking on research. Any assistance accorded to is highly appreciated.

Thank you.

Yours faithfully,

Dr. Alice S. Wangamati (PhD)
Coordinator – Postgraduate Programmes
Appendix II: Research authorization

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241349, 310571, 2219420
Fax:+254-20-318245, 318249
Email: secretary@nacostit.go.ke
Website: www.nacostit.go.ke

Ref: No. NACOSTI/P/15/53280/8326

Stephen Nyaga Njagi
Kisii University
P.O. Box 402-40800
KISII.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Challenges facing users of the Integrated Financial Management Information System in service delivery in the National Treasury Nairobi County,” I am pleased to inform you that you have been authorized to undertake research in Nairobi County for a period ending 2nd November, 2016.

You are advised to report to the Principal Secretary, National Treasury, the County Commissioner and the County Director of Education, Nairobi County before embarking on the research project.

On completion of the research, you are expected to submit two hard copies and one soft copy in pdf of the research report/thesis to our office.

DR. S. K. LANGAT, OGW
FOR: DIRECTOR GENERAL/CEO

Copy to:

The Principal Secretary
National Treasury.

The County Commissioner
Nairobi County.

Date: 23rd November, 2015
Appendix III: Letter of authority

The National Treasury
P.O. Box, 30007 -00200
NAIROBI
1st July 2014

The Principal Secretary,
The National Treasury
P.O. Box, 30007
NAIROBI
Dear Sir,

RE: AUTHORITY TO COLLECT OF DATA FOR ACADEMIC RESEARCH

I am a post graduate student at Kisii University. As part of the fulfillment of the requirements for the award of a degree in Master of information science, am required to do a research study on the problem am studying. I am conducting a research on the “challenges facing the users of IFMIS in National Treasury Nairobi, Kenya”. I have selected your organization for this study. The study will take three months starting from 1st July to 30th September 2014.

By this letter, I wish to request for your permission to collect data from officers in your organization. This will contribute information that is necessary for completion of my study.

Yours Faithfully

Stephen N. Njagi
Appendix IV: Questionnaire covering letter.

Dear Respondent,

I am a postgraduate student at Kisii University. I am conducting a research study on the challenges facing users of IFMIS in the National Treasury, Nairobi Kenya. This is a partial fulfillment of the course leading to the award of a master degree in information science.

I would appreciate if you kindly spare a few minutes of your time to fill this questionnaire to your best. The information given in respect of this questionnaire will be treated as confidential. The information given will not be used for any other purpose other than for this study.

Your assistance in facilitating the success of this project will be highly appreciated and a copy of this work will be availed to you on request.

Yours Sincerely

Stephen N. Njagi
Appendix V: Interview Schedule

1) Are you satisfied with the services offered through IFMIS? (Please elaborate)

2) Are services offered by the use of IFMIS efficient? (Please elaborate)

3) Are the customers served through the IFMIS satisfied with the services you offer? (Please elaborate)

4) Are all the modules in IFMIS fully operational? (Please elaborate)

5) Is everybody using IFMIS well trained to operate the system? (Please elaborate)

6) In your own opinion do you think IFMIS Re-engineering has improved on service delivery? (Please elaborate)

7) Would you advocate continuing with IFMIS for financial management as compared with other systems? (Please elaborate)

8) In the ratings of 1-5, how would you rate efficiency of IFMIS? (Please elaborate)

9) Do you think the organization has done enough on training and sensitization of officers on the use of IFMIS? (Please elaborate)

(10) What are some of the challenges you face when using IFMIS (Please elaborate)
Appendix VI: The Questionnaire

This questionnaire is meant to collect data on the challenges faced by the users of the Integrated Financial Management Information System in the National Treasury, Kenya. Kindly fill the questionnaire by ticking in the boxes provided or by writing a brief answer where applicable. The information you give will be strictly treated as confidential.

SECTION A: General information

1 Personal information

SECTION A: Adoption and use of IFMIS in the National Treasury

5 How was the IFMIS acquired?

(a) Off-the shelf [ ]

(b) Internally developed [ ]

(c) Customized [ ]

(e) Any other please specify…………………………

6 Were the users involved in the acquisition of the system?

(a) Yes[ ]

(b) No [ ]

(C) If no please elaborate…………………………
7 Has the IFMIS been fully adopted in The National treasury?

(a) Yes [ ]

(b) No [ ]

(c) If not please explain………………

8 Which departments use IFMIS in the National Treasury?

(a) IFMIS department [ ]

(b) Procurement [ ]

(c) Pay and Account [ ]

(d) Human Resource [ ]

(e) Internal audit [ ]

(f) Budgetary supply [ ]

(g) Debt Management [ ]

(h) Any Other (Please specify) ……………

9 What are the levels of IFMIS authorization?

(a) Initiation [ ]

(b) Approval [ ]

(c) Commitment [ ]
(d) Authorization

(d) Audit

Any other please specify………………

(B) Challenges facing the users of IFMIS in service delivery.

10 In the question below indicate whether you agree with the statement by ticking any of weighted answers from 1-5 where 5 is the strongest and 1 weakest.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The levels of IFMIS authorization have greatly slowed the pace of service delivery.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authorization should be delegated to as many officers as possible to hasten information processing and service delivery.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authorization levels should be minimal and where absolutely necessary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10 Which of the following Information management systems are used in the National Treasury?

(A) Integrated Financial Management Information System (IFMIS)

(b) Integrated Personnel Payment Data (IPPD)

(c) Government Human Resource Information System (GHRIS)

(d) Pensions Information Management System (PIMS)
(e) Government Payment System (Gpay) [  ]
(f) Budgetary Information System (BIS) [  ]

SECTION C: The challenges faced by the users of IFMIS

11. What are some of the challenges facing the users of IFMIS?

(a) The complexity of the system [  ]
(b) Resistance to change [  ]
(c) Lack of training among the users [  ]
(d) Bureaucracy [  ]
(e) Techno-phobia [  ]
(f) Any other, (Please specify……………………

Levels of Skills and training in the use of IFMIS at the National Treasurt

12. I have the requisite skills in the use of the IFMIS
<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate in IT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma in IT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree in IT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters in IT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Induction training on IFMIS use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. I have enough experience in the use of IFMIS

<table>
<thead>
<tr>
<th>Experience</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-15 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 15 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. To what extent do you agree that the use of IFMIS has made service delivery more efficient in the National treasury?

<table>
<thead>
<tr>
<th>Efficiency</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved work output</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency in service delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduction in use of the manual system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section D: Suggested ways/recommendations of alleviating the challenges facing users of the IFMIS

15. What will be the best method of providing training to the users of IFMIS? (Please tick all the appropriate options)

(a) Workshop [ ]
(b) Internship [ ]
(c) Apprenticeship [ ]
(d) Through training manuals [ ]
(e) Others, (Please specify)…………………………

16. In your own opinion, how do you think the challenges facing the users of IFMIS can be overcome?

(a) Through training of the users [ ]
(b) By enacting appropriate policies on IFMIS
(c) Through more research on the system [ ]
(d) Effective change management [ ]
(e) Complete implementation of all the modules [ ]
Appendix vii: Plagiarism report

Turnitin Originality Report 2
CHALLENGES FACING USERS OF THE INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEM IN SERVICE DELIVERY: A CASE OF THE NATIONAL TREASURY, NAIROBI KENYA by Stephen Nyaga Njagi
From Information Systems (Information Science)
- Processed on 22-Oct-2019 11:06 EAT
- ID: 1197910683
- Word Count: 16203

Similarity Index
19%
Similarity by Source
Internet Sources: 12%
Publications: 2%
Student Papers: 15%