

**ADOPTION OF INTEGRATED FINANCIAL MANAGEMENT INFORMATION  
SYSTEM AND PERFORMANCE OF NATIONAL TREASURY OF KENYA**

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## **DECLARATION**

I declare that, this project is my own original work and has not been presented for award of any degree in any university. No part of this proposal should be reproduced without the authority of the author and/or Kenyatta University.

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This research project has been submitted for the course examination with my approval as the University supervisor.

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## **DEDICATION**

I dedicate this research project to my wife Mercy Kanyiri and children Collins, Maxwell and Immanuel for their unwavering support.

## **ACKNOWLEDGEMENT**

I thank my parents Samuel Njau and Jedidah Wambui who gave me the basic education and gave me the morale to further my academics. I also thank my friends and colleagues for their encouragement and ideas along the process. To my Supervisor, Dr. Kinoti without whom this study would not have succeeded, I appreciate you. I also thank my lecturers and other university staffs for assisting me improve my research work. Finally, I thank my Creator for giving me a chance to be alive and strength to further my education.

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

APA:	American Psychological Association
BSC:	Balanced Scorecard
DFID:	Department for International Development
HR:	Human Resource
ICT:	Information and Communication Technology
IFMIS:	Integrated Financial Management Information System
IFRS:	International Financial Reporting Standards
KPI:	Key Performance Indicator
NACOSTI:	National Commission for Science, Technology and Innovation
NYS:	National Youth Service
PFM:	Public Finance Management
SACCOs:	Savings and Credit Cooperative
SPSS:	Statistical Package for Social Sciences
TAM:	Technology Acceptance Model

## OPERATIONAL DEFINITION TERMS

<b>IFMIS</b>	is a computerized application system that has been adopted by many government ministries, departments and agencies to automate the main elements of the budget execution and accounting processes and operations
<b>Organizational performance</b>	revolves around the ability of the leadership team to source for resources, through writing its requisition to the national government and sound of using the resources.
<b>Staff competence</b>	It is the level of knowledge, skills, experience, abilities and capacity of the employees to use, implement and monitoring IFMIS
<b>Internal controls</b>	Are measures that the management of an organization puts in place to ensure all operations, processes, systems and staff works to achieve the mission and goals of the organization
<b>Budgeting</b>	This is about linking the resources and assets to an activity, or simply a plan to spend resources like money.
<b>Financial reporting</b>	It is disclosing of all financial information to all stakeholders, managers and staff on the financial performance of the organization.
<b>Technical skills</b>	Are the abilities and knowledge needed to perform specific tasks. They are practical, and often relate to mechanical, information technology, mathematical, or scientific tasks.
<b>Control environment</b>	It is the overall attitude, awareness and actions of directors and management regarding the internal control system and its importance to the entity.

## ABSTRACT

Adoption of integrated financial management and information system (IFMIS) is for effective management and sourcing procedures within the government, and it is meant for streamlining the financial processes and provision of standard, real-time and accurate financial statements. IFMIS aims at cutting down cost of operations, corruption and fraudulent activities and increase transparency and accountability within government ministries and agencies. But the challenges associated with financial management are still prevalent as seen through misuse of financial resources, increased cases of collusion and corruption among senior management and inefficiencies within the internal control systems. This led the researcher to investigate on integrated financial management information system and performance of National treasury of Kenya; by looking at the internal control systems, staff competency, budgeting and financial reporting aspects. The study is anchored on technology acceptance model, open systems theory and institutional theory. Descriptive research design was adopted in the study and the population included the staff at the National Treasury of Kenya. The targeted staffs were those in the ICT, HR and finance and accounting departments and a sample size of 187 staff was obtained. Primary data was collected using questionnaire and the researcher adopted the drop and pick later method. A pilot test was conducted leading to testing of the validity and reliability of the research instrument and the collected data was entered into SPSS for descriptive analysis and inferential statistics using multiple regressions. The study findings were presented in charts, tables, graphs and prose discussions. A total of 140 respondents completed the data collection instruments and returned them for data analysis. The study concluded that IFMIS was significantly embraced in public finance management at the National Treasury, Kenya. It was concluded that the national treasury significantly incorporates and accrues effective internal control which has enhanced resource planning, allocation, accountability and integrity. The study further concluded that the staffs at the National Treasury to a significant extent have relevant and necessary skills, knowledge, expertise and experience to manage the system. It was also concluded that the National Treasury has streamlined its budgetary management through use of IFMIS. It was finally concluded that the IFMIS had improved financial reporting through timelines, accuracy and effectiveness. The study recommends that the National Treasury needs to enhance continued internal control improvement plan and strengthening. The National Treasury should enhance staff competency through training, mentorship and internal trainings to ensure they are able to use and manage the IFMIS. It was further recommended that the National Treasury should improve on use of IFMIS in budgeting to ensure significant public participation and involvement. The study also recommended that the National Treasury should ensure IFMIS is used more in financial reporting to enhance timely, accurate and effective reporting.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

Many countries across the globe, both the developed, developing and less-developed face challenges with performance of their government institutions and departments and they still struggle with financial management. There is a strong desire by the government employees in the different departments, ministries and agencies to improve their performance as pertains financial reporting, internal control of assets and resources, risk management of the different investment portfolios and budgeting (Shapiro & Hanouna, 2019). As the resources available are limited, the concept of financial management stems from avoiding losses theft, wastages and eradication of corruption and fraud. But more importantly, financial management aims at achieving growth and fiscal sustainability of operations and systems. According to Scherr and Ditter (2017) financial management is not a new concept or phenomenon, but it is the oldest form of recording keeping on financial information and has been in practice for many years. The invention of money has over the years brought a lot of challenges in managing its information and record keeping has been issue, leading to industry players and governments to explore on processes, methods and systems that can sanitize the aspect dealing with financial management.

Introduction of technological systems and applications has increased the desire for solutions that financial management faces. Thus, the market, industry and government agencies are using new tools and models to manage and report on their financial usage. Furthermore, as the public demand for high performance and effective operations, the need for using technological has gained interest as the possible answer (Chalu, 2020). The government of Kenya recognizes the need and value of using Information and Communication Technology (ICT) in changing its operating models, fulfilling the expectations of the public in terms of quality and accuracy and improved service delivery. One of the common systems adopted to help in managing finances is the integrated financial management information system (IFMIS). IFMIS has enabled the government agencies interlink the internal control systems, monitor and control all expenses and have audits that are accurate as they can trace and identify all transactions performed. The emergence in use of IFMIS strengthened public financial management systems leading to

enhanced transparency, accountability, and responsiveness to public expenditure policy priorities (Mbaka & Namada, 2019).

In Indonesia, Suharyanto, Mahullele and Meiria (2018) share that the improved in performance in the local governing institutions in Indonesia could only be achieved through accountability of the income and expenses and having an working internal control system. Accountability measures were led by the capacity and experiences of auditors and their ability to trace all transactions and accounting for all assets and their usage as per the corruption, collusion and nepotism free-state law No. 28 of 1999. Zeldea (2018) considers the reforms in public financial management system in Greece as eminent and part of economic adjustment programs to cushion the country as it tries to come out of its financial pressures. Some of weaknesses sighted in the public financial management is the traditional and paper transactions which would pose a big challenge in economic and financial recovery processes. The use of electronic means in financial management was a welcomed idea to ensure transparency and prudent use of financial resources.

In Nigeria, Michael, Oyewale and Oladosu (2017) share there has been an increased interest and scrutiny by both the general public and the donor community on government expenditures. The public have increased their demand for accountability and transparency in financial utilization and enhanced service delivery. In response to these demands, the Nigerian adopted the use of IFMIS in an effort to improve its public financial management, since the system is linked to improved financial reporting, internal controls and budgeting for all projects and programs. Yaokumah and Biney (2020) noted that the era of where donors gave generous aids to political allies ended, as there were little questions raised on state affairs. But the World Bank report has detailed the role of governments in developmental agenda and reduction of poverty among the citizens of Ghana. Development partners like the UK Department for International Development (DFID) would give their guidelines on public expenditure management before donating any funds. Back then in 2003, the idea of introduction and adoption of modern information technological application and systems become imminent hence the Integrated Financial Management Information Systems –IFMIS. Nuhu, Effah and Van Belle (2018) reveal that IFMIS was adopted to prevent wasteful spending, resource loses, irregularities in spending and cutting

cost of operation among government agencies. While Mugaga (2017) stated that IFMIS adoption in Uganda allowed automated bank reconciliation, audit trailing, documentation of all transactions, data checks and internal controls, which improved process and productivity in public institutions.

In Kenya, Lundu and Shale (2015) noted that since a lot of corruption and fraudulent activities start at the procurement process in government agencies; the use of modernized systems and technologies would help in streamlining the tendering and procurement process. Technology use will help in supply chain management by ensuring accessibility to the tenders, faster and cheaper processing of tenders and transparency. For effective adoption and utilization of IFMIS, Opiyo (2017) reveal that the staff must be competent in using technological application and systems, the structure and culture of the organization should be able to accommodate and advocate for the new system and sufficient resources must be put for advancement and modernization of technological infrastructure. The top management should also be supportive and commit to the implementation of new systems. While Maseh and Moseti (2019) note that managing records using digital systems led to accurate and fast access whenever needed. The use of technology and digital records allowed ease in tracking of transactions that making audit trails easier for the different public institutions. Digital records are safer and allows for sharing of information at a click of a button which means efficient public institutions as they are all networked and hence provide higher service delivery quality.

### **1.1.1 Integrated Financial Management Information System**

Integrated financial management information system is a computerized application system that has been adopted by many government ministries, departments and agencies to automate the main elements of the budget execution and accounting processes and operations (Cangiano, 2019). The adoption and utilization of IFMIS benefits the public and the government by providing real-time financial information to all those finance and accounting managers who need it. It also makes it easy to shared financial information to different staff by a click of a button, hence making it easier to develop budgets, account and trace all resources through the use of centralized treasury processing operations. Government departments use the IFMIS system to

prepare financial reports and statements for the different activities handled in one office or department. According to Mbaka and Namada (2019) IFMIS refers more specifically to the computerization of the public financial management processes, from budget preparation and execution to accounting and reporting, with the help of an integrated system for financial management of line ministries, spending agencies and other public sector operations.

The system captures all the functional processes, and the relevant financial flows, within public expenditure management. The IFMIS system is beneficial as it is able to reduce political discretion and acting as a deterrent to corruption and fraud and since it can share real-time financial information; there is more transparency, monitoring and control and accountability of resources (Ibrahim, 2017). At the same time, the IFMIS system can be used for basic general ledger accounting to complex operations like budgeting for account receivables and payables for the entire economy as broken down into departments and industry. It is also does the controlling of debt, asset and liability management, it also helps in management of revenues, procurement and it management of human resources and the entire government payroll systems. Ndegwa and Mungai (2019) the system is able to track financial activities, summarize the information and share it with the necessary units.

As any other system, it can only be effective and perform as per its expectations with the presence of other aspects like competent staff who are tech-savvy and can operate the system to maximum efficiency (Opiyo, 2017). The management must also be supportive and commitment to the adoption and usage of financial management systems, by sourcing for funds to invest in technological infrastructure and its safety. Looking at the top leadership in any organization, the structure and culture they adapt within their organization will allow the thriving of IFMIS and other technological systems and applications. An open culture and organizational structure would be open to use of modern and advanced systems to enhance its processes and systems productivity (Asmorowati, Setijanigrum, Suaedi & Dewi, 2019). In financial management, the aspect of record keeping and reporting comes in handy and the use of information and technological systems allows for ease in interaction, networking and sharing of data. Financial reporting using technology and internet allows for real-time information sharing which makes

audit trailing accurate as all the transactions are recorded and can easily be accessed (Mbaka & Namada, 2019). This then means that monitoring and controls systems will be accurate and transparency which is needed when handling public resources. As such this study looked into IFMIS and how it impacts on the performance of organization. It will explore the aspect of internal control systems, staff competence in technological usage, budgeting and financial reporting using technological application and systems.

### **1.1.2 Performance**

All institutions and organizations across the globe work very hard to ensure they meet their targets and improve their performance. The systems, processes and operations are geared towards achieving the set objectives and this has to be met within the set timelines. The performance measures and indicators have shifted from the traditional form of either being financial or non-financial terms, the current times use indicators with complicated structures that measure the alignment of the measures of performance to the organizational strategy and its mandate (John & Eeckhout, 2018). Performance, according to Bhatt and Bhatt (2017) is the output recordings as per a given time frame, efficiency in usage of the available resources for growth and advancement. In general terms, performance is a measure of how an entity has performed over a period of time, like a year. Performance is examined and evaluated specifically to the type of business organization, philosophies adopted, management thinking and organizational mission.

Performance within the study context of government agencies, institutions and departments, revolves around the ability of the leadership team to source for resources, through writing its requisition to the national government and sound of using the resources. At times the resources are used by the government ministries in investment portfolios that earn them an income that will be used in performing their mandates and objectives (Martinez, 2019). Some of the more common measures of performance is service delivery, improvement of the economy, sound use of resources and infrastructure development. The measurement is done through key performance indicator (KPI) and balanced scorecard (BSC) metrics that look at human attributes that contribute to overall improved performance. To be able to achieve high performance, the

government institutions must have a sound budgeting team that is able to effect internal controls of resources including human capital and report on the financial outcomes. Governments run with tight budgets, hence there is an increasing demand to re-examine their spending priorities, the financial reporting system should cut out misappropriation of funds and inefficiencies in the operating systems (Wilson, 2019). In this case, performance will be measured in terms of prudent financial resource usage, accurate and transparent financial records and internal control systems that track all the finances in the department.

### **1.1.3 National Treasury of Kenya**

The National Treasury was founded by the constitution of Kenya as per Article 225 section 11 and 12 of the Public Finance Management (PFM) Act 2012 and the executive order No.2/2013 (The National Treasury Strategic Plan, 2017). The specific mandates and functional assignments of national treasury is sound budgetary management and planning for resource sourcing and expenditures. The national treasury is the custodian of the government financial resources and covers currency management for the local and foreign currencies of different countries. The national treasury plays an oversight role for all financial institutions in the country that deal with financial transactions, like commercial and developmental banks.

Just like other government ministries, the National Treasury in Kenya has adopted new structural, administrative and technological changes. As one of its mandates revolves around formulating financial and economic policies in developing and maintaining sound financial and monetary policies that facilitate socio-economic development is the responsibility of the National Treasury. The Ministry of Finance and its ICT master plan for 2001 -2005 made a proposal to shift and adopt a superior system than the SIBET. The government then identified Oracle as the system provider and it came with the enterprise resource planning system and named it Integrated Financial Management and Information System (IFMIS).

IFMIS has modules like cash management, human resource module, procurement module and revenue management module and it has the ability to interact with external environment and share important data and information with other agencies and entities. Using IFMIS, the National

Treasury has the capacity to authorize payments and the Central Bank of Kenya can process that transaction, the same can be done with other government ministries. In an effort to enhance the effectiveness of IFMIS, Oracle installed a financial analyzer module for financial statement generation in real time so as to improve financial management within government agencies and departments.

## **1.2 Statement of the Problem**

Adoption of integrated financial management and information system (IFMIS) is for effective management and sourcing procedures within the government, streamlining the financial processes and provision of standard, real-time and accurate financial statements. The aim was to cut down on corruption and fraudulent activities, reduce ethical issues by ensuring transparency and accountability and cut down instances of bad governing practices like unfairness. But the challenges associated with financial management are still prevalent as seen through misuse of financial resources, increased cases of collusion and corruption among senior management and inefficiencies within the internal control systems.

The system has been in place for the last 10 years and its expectations have not been met, since there is misappropriation of fund where billions of shillings are lost in corruption and fraud. Case in point, the national youth service (NYS) I scandal where 9 billion was lost in corrupt deals and NYS II scandal with 468 million lost in dubious procurement and tendering activities in 2018 with claims that the IFMIS system was manipulated to enable the thieves embezzle funds from the public coffers. The financial report of 2016 by the national audit office showed that the government lost millions of shillings to ghost workers, yet the introduction of IFMIS was expected to correct the payroll issues.

Studies by Ibrahim (2017) on IFMIS adoption at Garissa County, Mburu and Ngahu (2016) on IFMIS and financial management within Nakuru County and Njeru and Malenya (2019) on IFMIS and financial service delivery in Kakamega County; all reveal that misappropriation of funds still continues to be rampant at the county level. Due to the shortcomings of the system,

there is need to explore further, its effectiveness and efficiency at the central point of Kenya's finances, that is the National Treasury and its performance.

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

#### **1.3.1 General Objective**

The general objective was to investigate the effect of integrated financial management information system and performance of National treasury of Kenya

#### **1.3.2 Specific Objectives**

The study was guided by the following specific objectives:

- i. To assess the effect of internal control in IFMIS on performance of National treasury of Kenya
- ii. To determine the impact of staff competency in IFMIS on performance of National treasury of Kenya
- iii. To assess the impact of budgeting in IFMIS on performance of National treasury of Kenya
- iv. To determine the effect that financial reporting in IFMIS has on performance of National treasury of Kenya

### **1.4 Research Questions**

- i. What is the effect of internal control in IFMIS on performance of National treasury of Kenya?
- ii. How does staff competency in IFMIS affect the performance of National treasury of Kenya?
- iii. How does budgeting in IFMIS affect the performance of National treasury of Kenya?
- iv. What is the effect of financial reporting in IFMIS affect the performance of National treasury of Kenya?

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

The study will be of significance to the academic fraternity as it would expand the existing knowledge on the effects of integrated financial management information system on performance. It would also suggest areas of studies for future researchers besides being cited as

empirical evidence by future scholars and researchers. The study will also be used as a source for referencing material for future scholars.

The study would be relevant to accountants and other officers in government ministries, departments and offices in realizing the benefits of computerized financial and accounting operations through the use of integrated financial management information systems and the skills required. This would help them understand the role of IFMIS on operational efficiency and overall employee productivity which results in improved performance at the department. The national treasury is also able to track and account for all financial resources through its computerized financial reporting using IFMIS.

### **1.6 Scope of the Study**

The study investigated on integrated financial management information system and performance of National Treasury of Kenya. The variables of IFMIS that were under consideration included internal control systems, staff competency, budgeting and financial reporting and how they impact on performance at the National Treasury of Kenya. The study was conducted at the National Treasury of Kenya and it targeted senior management staff in the ICT department, human resource department and Finance and accounting department. This study was carried out in the months of May and June, 2020.

### **1.7 Limitation of the Study**

Challenges that the researcher encountered when doing the research are unwillingness from the respondents to give accurate information due to fear of victimization. Others also rejected the questionnaires. The researcher however gave them assurance that the responses given will be private and only used in learning. The researcher also encountered problems with participants in answering queries since they were subjected to attitudes and perception which affected the

reliability of the information, however, the scholar motivated the respondents involved in the research that they should avoid indicating their private profile in forms.

### **1.8 Organization of the Study**

The research project covers the five chapters, with chapter one having the background information of the study, the statement of the problem, objectives and research questions, significance and scope of the study. The second chapter exposes the theories that anchor the study, it has empirical literature by other researchers, the research gaps and conceptual framework. Chapter three covers the methodologies that will be adopted in the study, the design, population, sampling techniques and the final sample size, the data collection instrument and ethical considerations. Chapter four presents study findings while chapter five covers summary of findings, recommendations and conclusions.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

In review of literature, relevant past studies and any other information is located, read and evaluated. The essence of the chapter is to extensively review the present and relevant information both in theory and in empirical form in the effort to solve the stated study problem. The specific areas covered here are theoretical framework, empirical literature review, research gaps and conceptual framework.

#### **2.2 Theoretical Review**

The research was anchored on technology acceptance model, open systems model and institutional theory.

##### **2.2.1 Technology Acceptance Theory**

The theory was introduced by Davis in 1986 which worked close in link to reasoned action theory and pushes for adoption and acceptance information system. The theory has the main agenda as looking at the determinants into play that allow the acceptance of computing technology by different industries and end-users. It allows the adaptability of information systems and its technology adoption across different economic sectors. According to Davis (2001) the model has two independent factors: perceived ease of use and perceived usefulness that influence the intention to use the new information technology systems.

Pavlou (2003) noted that TAM was developed and designed to predict the behavior of users, acceptance of information technology and information systems and its usage within different organizational tasks. Perceived Usefulness is how a user feels that the innovation contributes to make the work more effective and improves the results. Perceived Ease of Use measures the effort the user has to exert to use the system (Chuttur, 2009). These two aspects of TAM dictate and influence the behavior of external variables and usage of informational technological systems and applications. When looking at adoption and usage of IFMIS within government

ministries and agencies, its usage heavily relies on staff comprehension of the ease in usage of the system and the perceived usefulness.

On the factors that influence the perceived usefulness of systems, it largely revolves around the quality of output, demonstration of results, relevance of the system to the tasks, image and other subjective forms (Kowitlawakul, 2011). The experience, skills and training of the staff on the technological systems and voluntary ability of the management and staff to try using these systems and applications within their operations, are part of the subjective form elements. The National Treasury ability to adopt and use IFMIS in financial management will be based on the expected usefulness of the system, in aiding the government agency to meet its target and mandate. IFMIS is expected to improve the quality of financial reporting and budgeting aspect of the national treasury, hence its acceptance and usage. If the staffs at the national treasury are competent, experienced and have skills and technological knowledge, then adoption and usage of IFMIS will easily be accepted. The model is relevant in the study by exposing the fact that benefits and the perceived usefulness of IFMIS have led to be accepted in the national treasury, with the hope of delivering high quality financial reports, real-time financial transactions and provide audit trails using the internet and interconnected systems.

### **2.2.2 Open Systems Theory**

There is no one organization that exists in a vacuum, all organizations be it in the goods or service industry is influenced and also influences the environment in which they operate. The operating environment in which the organizations are located strongly affects them. The theory of open systems offers terminology and know-how for managers about how organizations function (Luhmann, Baecker & Gilgen, 2013). The open systems theory has dominated as a framework for management behavior and organizational analysis. The open system view focuses on the organization's structure as a significant component in attaining the organization's objectives.

The theory of open systems emphasizes management as having a function to decide the structures and eventually to determine the particular objectives that should be accomplished

(Barile & Polese, 2010). In this regard, the focus is on the formal structures, the formalization of roles and rules and the specificity of the objectives to be achieved. According to this theory, all organizations are distinctive entities due in part to the unique environment in which they work, and therefore these organizations need to be structured to accommodate both distinctive possibilities and environmental issues. Only those organizations that can embrace changes from the environment and use available resources as disposed in the environment, which will enable them to gain competitive edge.

The ability of the government agencies and departments to anticipate what the public needs and demands, then go back and evaluate its systems and operations to be able to supply as per the public's demands. The adoption of technological systems is based on need for accurate and real-time data by the public and different departments, which then pushed the government to invest in modern systems. This is what led to the adoption of IFMIS which is an upgrade from the SIBET system, and works to improve financial management through audit trailing, accurate financial recording and reporting and effective budgeting methods. The national treasury adopted the use of IFMIS and its modules in respond to demand for accuracy, transparency and accountability in usage of government resources that is sourced from the taxes from the public.

The theory is based on the aspect that corporations are made up of sub-systems that work together to achieve their objectives and missions. Thus the applicability of the theory in the current study is based on the different units within the National Treasury working to deliver its mandate to the public as well as other ministries and government offices that may need statements and reports on the financial position of the country. The theory works in terms of internal control systems and its influence on the external forces, hence works in the budgeting sector at the national treasury, to ensure all incomes and expenditures are correctly input. The external forces also cover the economic, social, political nature that will affect the adoption and operations of internal operating environment. These forces can affect the performance of the national treasury, in terms of funding its technological infrastructure and system quest which depends on goodwill of the executive and political and economic forces. The theory exposes the link between the general system and its sub-systems; the internal system and external forces and

sourcing for funds for technological advancement and prudent use of the financial resources. The audits and accurate financial reporting documents help in sound resource usage and cut down opportunities for corruption and fraud.

### **2.2.3 Institutional Theory**

This theory was advanced by Meyer and Rowan in 1977 and DiMaggio and Powell in 1983, who considered the institutional processes including the systems and structures that are established within the functioning aspect of the organization and guides its daily operations and workings. The organization is comprised of the social structures, cognitive aspects and technical aspect. This study concentrates on the technical aspect of the institution as it discovers the systems and applications that once adopted into the institutional structure will improve its performance in terms of quality service delivery (Powell & Colyvas, 2008).

The institutions are symbols of stability, but Suddaby (2010) shares that there is need for the leadership to consider the changing times and shifts in market needs and preferences and respond accordingly. At the times the change could be gradual increments or discontinuous, but it should be easily noted by the research and development department within the institution. As the market becomes more and more competitive, customers are knowledgeable and demanding; the organizations are adjusting their strategic plans to accommodate this, and one of the ways is adopting of technological systems and applications. This will affect the product and service delivery as it is incorporated into the internal operations of the organization.

The study looks at institutional theory as a framework that enhances the adoption of innovative and inventive measures through the use of advanced technological systems and applications in an organization. The National Treasury has adopted the use of IFMIS and its different modules like payroll management and budgeting for account receivables and payables. As the study tries to link the aspects of IFMIS to its performance, the institutional theory exposes the value and benefits accrued to the organization through adoption of usage of advanced technological systems and applications. The National Treasury is likely to adopt IFMIS and other systems, if other government agencies and departments also adopt use of technological systems. It becomes

easier to implement the public financial management act, as the government bodies will be interlinked and financial information and statement can easily be shared. Which improves the performance as auditing can trace all transactions and usage of financial resources, and it also helps to reduce instances of corruption and fraud, theft and misappropriation of public funds. The benefits gained in using different modern technological systems is explained using the institutional theory and reasons behind use of technology and its impact on improved performance. For effective adoption of IFMIS, the theory exposes the value of internal control systems like the structure and culture within an organization and reasoning in adopting new technologies in an effort to improve its performance.

## **2.3 Empirical Review**

### **2.3.1 Internal Control and Performance**

Internal controls are measures that the management of an organization puts in place to ensure all operations, processes, systems and staff works to achieve the mission and goals of the organization (Davila, Gupta & Palmer, 2018). It also refers to mechanisms that the top leadership puts in place to avoid theft, wastages and mismanagement of resources. Therefore, any organization in serious pursuit of its goals and objectives must critically look at its internal control systems as they are important aspects in measuring the progress of the organization.

According to Ibrahim, Diibuzie and Abubakari (2017) in their study on internal control systems and financial performance of the health institutions in Ghana, revealing that an effective internal control system is likely to prevent opportunities of fraud and corrupt activities within the institutions of health. An effective internal control system is one that will consider the control environment that will assess both the internal and external environment of the organization; it has indicators of risk assessment and control activities to avoid losses and theft. The internal control system that uses information and communication tools yielded higher results as the health organizations noted areas of concern and communicate the same to staff and managers as a push towards achieving its goals. The monitoring aspect would assess all areas of operations within the health institution and consolidate efforts to achieve high financial performance. The

study findings show that internal control systems and its indicators were positively linked to financial performance of the health institutions in Ghana.

Muhunyo and Jagongo (2018) investigated on internal control systems and financial performance, sharing that many public institutions have poor financial performance as compared to the private sectors. In an effort to improve the financial performance of the public institutions, it was suggested the adoption of strong internal control systems. The internal control system will cover aspects like internal audit of all resources and its assets, policies and regulations and assessment of the operations and its evaluation. The public institutions share that some employees do not take regular leaves or are not rotated to other departments, since they handle organizational cash and capital assets, which will give them room for fraud and corrupt activities. Adoption of an effective internal control system, will ensure that all employees are closely monitoring and regular audits are conducted leading to better usage of funds and other organizational resources. The study found that the control environment, risk assessment, control activities and information and communication as indicators of internal control systems have a significant influence on the financial performance of the institutions of higher. Such that to improve the financial performance of the public institutions, these institutions have develop an internal control system that allows for transparency and accountability of resources.

Umar and Dikko (2018) investigated on internal control and performance of the Nigerian commercial banks, revealing that the recent spate of fraudulent activities, globalization process and the complexity of banking transactions has led to keener interest in the internal control systems as a solution. The shake-ups and challenges facing the banking industry have pushed authorities to look at individual banks' internal control system to avoid issues like theft and fraud. This can be achieved through the aspect of monitoring and control activities to protect the industry and lead it to success. The control environment looks at the organizational culture and structure to push the banks to high performance by calculating what risks to take and seek and take opportunities that improve their returns. The study findings show that internal control system seen through control environment, control activities, monitoring and risk assessment

significantly and positively influenced the performance of the Nigerian commercial banks. Information and communication had little impact on the performance of the banks.

Lerno (2016) linked the internal controls and performance within the county government in Kenya. The study revealed that internal control operates using its five main components; namely risk assessment, control environment, control activities, communication and monitoring and evaluation aspects. The study revealed that many of the staff from the 47 counties had no idea if the county had an internal control system and whether it was effective or not. Some of the counties that had adopted internal control practices still shared that they could not link it increase in asset base, recognition of the value of receipt and expenditure of big contracts and improvement in collection of levies to cover the county expenses as to when they fall due. In general, the study found out that internal control practices in the county governments had not led to improved performance at the county level.

Dubihlela and Nqala (2017) on internal control systems and risk performance, sharing the manufacturing firms are shifting their attention to measures to protect themselves against risk exposures. The study aims at how to optimize the internal control systems to mitigate risks that the small and medium sized manufacturing firms face. The study found that a strong internal control system can help the SMEs to identify, mitigate, plan on how to handle the different risks that they face. The internal control system will inform the management team who will respond by making contingency plans and protect the firm from the risks. At the same time, the organization can come up with appropriate risk management strategies, which would lead to improved performance.

### **2.3.2 Staff Competency and Performance**

The business world has seen an increase in use in technology and innovative machines, but the place for human resources cannot be underestimated in improving the performance and profitability of the firms. The human resources manage and run the machines, technological application and systems and form an integral part of the organization. When adopting different technological systems and applications, and organizational approaches, mechanisms and

operations, there is need to consider the skills, experiences, knowledge and competencies of the staff/human resources (Alsabbah & Ibrahim, 2016). When looking at adoption and usage of technologies, then technical information technological skills is mandatory for staff in the organizations.

According to Osei and Ackah (2015) in the study on employee competency and organizational performance, the research paper shared that a competent and competitive group of employees is an essential asset for the growth, development and success of the firm. Employees with technical know-how, experience and skills are able to ensure a firm's survival in the ever-changing environment. At the same time, the management of the organization should offer opportunities to the staff for their growth and development, through training programs, career growth opportunities and job rotation to increase their skill set. The more competent, experienced and skilled the employees of an organization are, the study shares the higher the performance of the individuals and the entire organization. The study makes recommendations that the management of the firms should make provisions for continuous learning so as to improve the employee competencies, their skills, attitudes and behavior.

Kolibáčová (2015) investigated on the correlation between competency and performance as they tried to link the two aspects in a singular company. The only way to understand the competencies of the employees is through regular evaluations to know the areas of weaknesses and strengths. The study findings show that it was the role of managers and supervisors to rate the competency levels of the staff within their area of operation, and whenever one employee rates higher than their colleagues, it resulted in an increase of their performance which largely improved the performance of the entire organization. The study shared that for organizations in search of enhanced performance and productivity, it was prudent for them to invest money and time towards staff development aimed at enhancing their competencies.

On managerial competencies and the performance of business units, Velu and Manxhari (2017) noted that managers need to be competent to drive the agenda of the business through strategy development and its implementation towards achieving the set goals. The managers as part of the

staff of the organization need critical thinking skills, visionary and ability to mobilize and motivate staffs to handle their individual tasks towards achieving the organizational goals. The study findings show that managerial competencies lead to improved business performance of the SME sector in Kosovo. Yang, Fang and Huang (2017) investigation on the mediating role of competency, training and task performance, noting that competency of the staffs and managers is based on aspects like professional competency, technical competencies and core competencies. The study findings show that training improved the level of competencies of the staff which resulted in improved organizational performance. Professional competencies and technical competencies had a partial effect to the mediator role of the core competencies, but the three aspects of competencies improved the performance of the pharmacists.

Owoeye and Muathe (2018) investigated on the competence-enhancing interventions and organizational performance, the study reveal that human capital is an integral part of an organization seen through the combination of intelligence, skills and expertise that lead to high organizational performance. The findings show that enhancing the competencies of the human capital in the organization remains a significant part in attaining the organizational goals and objectives of improved performance. It also means that the organizations' and its management invest in measures and interventions that enhance the competencies of workforce through job rotation, trainings and career advancement opportunities.

Cherono (2016) examined factors affecting effective implementation of integrated financial management information systems by the county governments of Kenya. This study aimed at examining how change management, technological infrastructure, human capital development and top management commitment affected the effective implementation of IFMIS by the county governments. The findings revealed that most counties did not manage change to IFMIS effectively; the technological infrastructure for the roll out to the sub counties had not been availed; some aspects of human capital development had not been addressed; the political class is not supportive of IFMIS and the counties have not allocated enough resources towards of IFMIS.

### **2.3.3. Budgeting and Performance**

Budgeting is about linking the resources and assets to an activity, or simply a plan to spend resources like money. The spending plan is the budget and this guides the organization towards achieving its objectives. A good budgeting system is able to balance the income and the expenses (Oyebode, 2018). There are several methods of budgeting which different organizations can adopt, the first is the incremental budgeting process where the amounts in the budget plan is increased for the current period, the activity-based budgeting, the value proposition and zero-based where all expenditure is justified and it starts at the zero based.

In a study, Maher, Fakhar and Karimi (2018) on budget emphasis, budget planning models and performance, where the study sought to provide new approaches to budget planning models and relate it to performance. The results of the study showed that budget emphasis and strategy affected the budget planning models and ultimately the performance. A positive and meaningful relationship among budget planning models and organizational performance, management performance and budgetary satisfaction was found. The study notes that for improved performance in organizations, the management must be keen on the budget concepts, the value of budgeting and involving all employees and other stakeholders in the budget making process.

Eton, Fabian and Benard (2018) did a study on cash budgeting and organizational performance and shares that a sound cash budget ensures proper utilization of funds for higher returns and keeping the expenditure in line such that there is balance between in-flows and out-flows of cash. The preparation of budget is a tiresome and expensive affair but it is worth to invest in it as it ensures sound utilization of resources for the organization. The study noted that preparation of cash budget ensures balance is kept between liquidity and profitability. The findings of the study show that the organizational expenditures match the planned cash flows for improved performance of the private business entities in Uganda. In the process of using cash budgeting method, the private firms are able to stabilize their profitability levels, make sure that the expenses are in line with the planned cash flows that allow the managers and owners of the private entities to predict instances of excess cash. The excess cash can be plowed into the

business for expansion or saved for future uses in times of uncertainty. The growth of the private business units will depend on their ability to implement sound liquidity management practices and focusing on profitability levels.

Koech (2015) investigated on budgetary controls and financial performance, revealing that budgeting aspect and budgeting controls is a key aspect of the planning and control function of an organization. Many of the manufacturing companies in Kenya do not spend a lot of time in the budgeting making process but rather act accordingly and shift their strategies based on the information obtained from the budget. The study revealed that making short-term and long-term budget plans is an effective way to direct the activities of the organization; the budget should cover all teams, areas and aspects of the organization to meet the overall organizational goal. The findings also show that the companies place a lot of emphasis on abiding by the budget lines and any deviations should be reported and corrected. The management sets aside a committee that will compare and contrast, the budget plans and the final performance and the differences is not to guide the next seasons' budget making process. For improved performance of the firm, the study shows that regularly preparing and communicating to all people on the budget performance evaluation reports is an important aspect. The study concludes that involving financial managers from different departments of the company in the budget setting process and budget control process improves the performance. Participation in the budgeting process leads to ownership of the budget and strategic plans, which improves the commitment levels hence high performance at individual, group and organizational level. The general findings show that budgeting in terms of its planning, monitoring and control aspect and participative aspect led to improved performance in the manufacturing companies.

In Ghana, Wonder, Frank and Wang (2018) study was on budgeting and its impact on financial performance by looking at the three aspects of budgeting which include budget planning, monitoring and control aspect and coordination and evaluation. As the manufacturing firms fight to remain competitive, there is need for prudent use of the limited resources and this leads to budgeting as a measure. The study found that budgeting affected the financial performance of the manufacturing firms which are listed in the Ghana stock exchange. The planning aspect of the

budgets, monitoring and control and coordination and evaluation leads to improved financial performance since it cuts down on loss and wastage of resources and guides the firms to achieving its objectives. The budgets made by the managers must be comprehensive covering both the short-term and long-term plans of the firm for continuous improved performance. Monitoring and controlling ensures that risks are anticipated and managed, it also allows the firms and its management to track the progress of their tasks and make adjustments when needed. The coordination and evaluation aspect drives the activities of the firms to meet the stated goals through comparing the actual performance and the projected budget plans. It is evident that budgeting positively affects the performance of firms through cost reduction and enhanced firm productivity.

#### **2.3.4 Financial Reporting and Performance**

Financial reporting is disclosing of all financial information to all stakeholders, managers and staff on the financial performance of the organization. The financial report tracks down all information concerning the income and revenues and trails their expenditures in different departments, operations and programs. According to Al-Dmour, Abbod and Al-Balqa (2018) who investigated on quality of the financial reporting and non-financial aspect of business performance, as well as the role of the quality of financial reports on organizational demographic features like size and experiences. The stakeholders and investors like those needing credit place a lot of emphasis on the quality of the financial reports, mainly because the quality of the reports will determine their investment options, and influence their decision making process. The study reveals that relevance of the reports and faithful representation of the firm are two components of the quality of financial reporting that influenced the performance of non-financial businesses in Jordan.

Limo (2018) investigated on the financial reporting practices and their influence on financial performance sharing that financial reporting is important in ensuring that finances meant for the organization are put to use in the correct manner so as to achieve the organizational goals. At the same time, the reports ensure that wastages and losses of funds are minimized. Looking at the SACCOs in Uasin Gishu County, the researcher further noted that financial reporting practices

like full and complete disclosure of the financial position of the firm is important in guiding the activities of the organization which leads to improved performance. The study also found out that each organization and its management must make financial reports with the audience in mind, since each sector looks at the reports differently and will use them for various purposes. The study showed that financial reporting at the SACCOs is done on a full disclosure basis, monthly summaries of the income and expenses are comprehensively done and the entire financial reporting exercise considers the information usage and both external and internal users of the reports. In the quest to improve the financial performance of organizations, the management must improve the quality of their financial reporting practices and standards.

Setyawan and Gamayuni (2020) looked at the quality of financial reporting and internal control system and shares that the Indonesian government has installed e-budgeting system to improve the quality of the financial reports within the regional finance offices and the national finance office. The study findings show that the local governments that have adopted electronic budgeting format have better quality of financial reports as compared to those that have not adapted the e-budgeting system.

Ouma (2017) on the relationship between the financial reporting quality and financial performance, revealing that effective financial reports are those with characteristics like relevance and faithful representation which improve financial performance on the companies listed at the Nairobi Securities Exchange. Some of the other characteristics of quality financial reporting include timeliness of the reports, understandability, ability to be verified through documentations and comparability. The study found out that a quality financial report led to improved financial performance with indicators like high liquidity ratios, solvency ratios and efficiency ratios, which guide the activities and influence the investors in during the investment decision making.

King'wara (2015) on the effect that adopting the international financial reporting standards (IFRS) and financial reporting quality, and sharing that for financial reports to meet the IFRS merit, they have to include concepts like relevance of the reports and material that it covers and

faithfully represent the information and data needed by the managers and the industry stakeholders. IFRS demands that financial reports must be complete, neutral and free of material errors that would otherwise lead to making wrong financial decisions like investment, savings, bonuses and wages and credit. On the aspect of understandability, IFRS demands the language used in the financial reports be brief and concise, it should be transparent on the financial operations of the firm and comparability is the ability for the data in the financial reports to either be differentiated when there are differences and when same, to show the similarity. An excellent financial report also abides by the concept of timeliness, such that financial report is available, when and where it is needed to make useful decisions.

Da Paixão Duarte, Saur-Amaral and Do Carmo Azevedo (2015), investigated on IFRS Adoption and accounting quality, revealing that the quality of the financial reports does not directly affect the performance of the organization; but it minimizes the instances of information asymmetry. The relevance of the financial reporting and its quality is what can improve or enhance performance of an organization. When making the financial reports based on the IFRS mechanisms, there is need to consider the institutional factors, the social context and economic rationality, which when looked into comprehensively, is able to positively impact the performance of the firm.

## 2.4 Summary of Literature and Research Gaps

**Table 2. 1: Summary of Research Gaps**

Author/Year	Topic	Findings	Gap
Ibrahim, Diibuzie and Abubakari (2017)	Internal control systems and financial performance of the health institutions in Ghana	An effective internal control system is likely to prevent opportunities of fraud and corrupt activities within the institutions of health	The study creates a contextual as it was done in Ghana on health institutions
Lerno (2016)	The internal controls and performance within the county government in Kenya.	The study found out that internal control practices in the county governments had not led to improved	The study creates a contextual gap by looking at the 47 county governments and not

		performance at the county level.	national agencies at the central government
Dubihlela and Nqala (2017)	The internal control systems and risk performance in manufacturing firms	The study found that a strong internal control system can help the SMEs to identify, mitigate, plan on how to handle the different risks that they face.	The study creates a conceptual gap as it links internal control to risk performance
Osei and Ackah (2015)	On employee competency and organizational performance	Employees with technical know-how, experience and skills are able to ensure a firm's survival in the ever-changing environment.	The study creates a contextual gap as it was conducted in Ghana among commercial entities.
Veliu and Manxhari (2017)	Managerial competencies and the performance of business units	The study found that managers need to be competent to drive the agenda of the business through strategy development and its implementation towards achieving the set goals	The study looked at the competencies of managers, thus creating a conceptual gap
Owoeye and Muathe (2018)	Competence-enhancing interventions and organizational performance	The findings show that enhancing the competencies of the human capital in the organization remains a significant part in attaining the organizational goals and objectives of improved performance.	The study creates a conceptual gap as concentrates on competence enhancing interventions.
Eton, Fabian and Benard (2018)	Cash budgeting and organizational performance	Findings show that preparation of cash budget ensures balance is kept between liquidity and	The study was conducted in Uganda, creating a contextual gap and it creates a

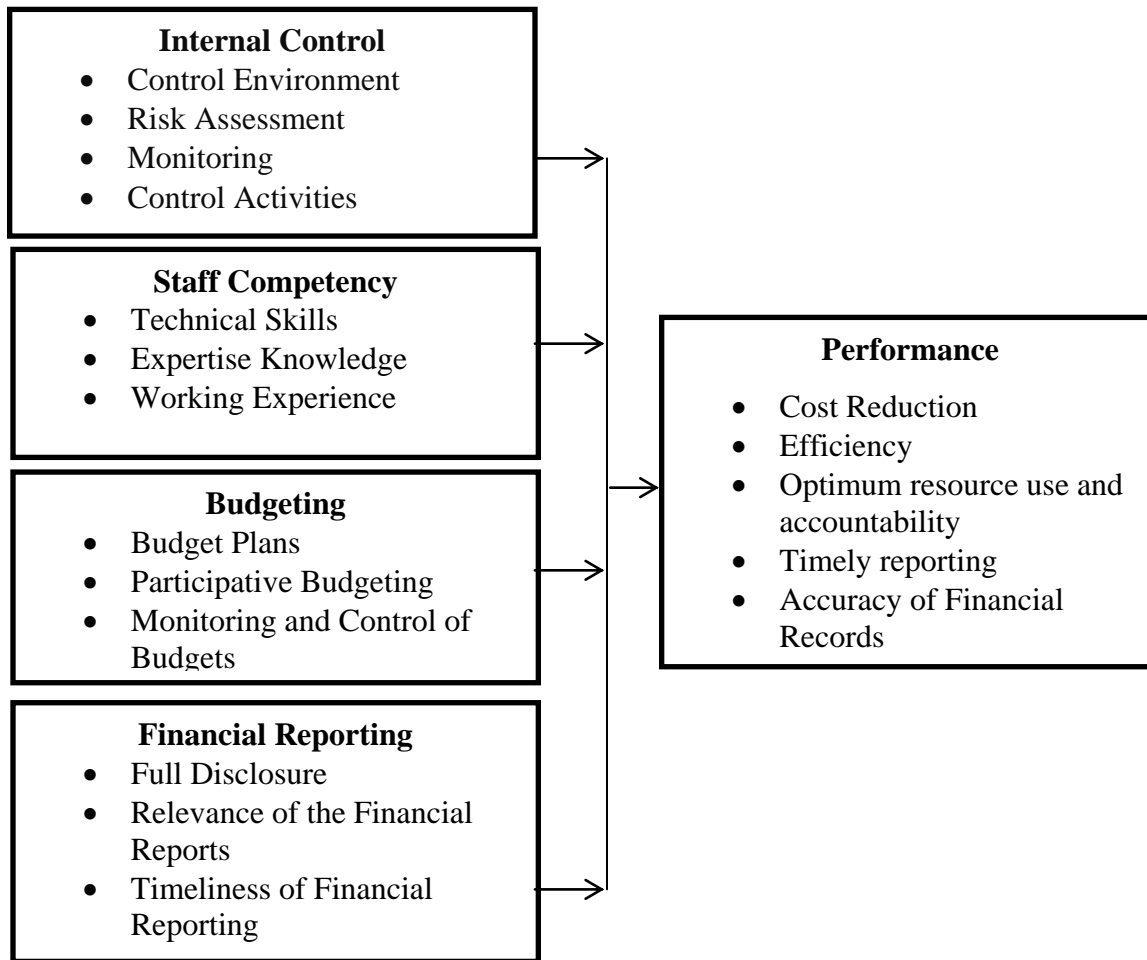
		profitability	conceptual gap by looking at cash budgeting
Koech (2015)	On budgetary controls and financial performance	The findings also show that the companies place a lot of emphasis on abiding by the budget lines and any deviations should be reported and corrected.	The study looks at budgetary controls and financial performance creating a conceptual gap.
Al-Dmour, Abbod and Al-Balqa (2018)	Quality of the financial reporting and non-financial aspect of business performance	The study reveal that relevance of the reports and faithful representation of the firm is two components of the quality of financial reporting that influenced the performance of non-financial businesses in Jordan.	The study creates a contextual gap as it was done in Jordan and a conceptual by looking non-financial aspects of performance of business units
Limo (2018)	The financial reporting practices and influence of financial performance	The study also found out that each organization and its management must make financial reports with the audience in mind, since each sector looks at the reports differently and will use them for various purposes.	The study looked at financial reporting practices on SACCOs hence creating a contextual gap

*Source: Literature Reviewed and Author (2020)*

## **2.5 Conceptual Framework**

Miles and Huberman (1994) defines a conceptual framework as a visual or written product, one that explains, either graphically or in narrative form, the main things to be studied; the key factors, concepts, or variables and the presumed relationships among them. Conceptual framework shows the relationship between independent and dependent variables. For this study, performance of the National Treasury is the dependent variable while the independent variables

include IFMIS indicators which include internal control, staff competency, budgeting and financial reporting.



*Figure 2. 1: Conceptual Framework*

*Source: Researcher (2020).*

## **CHAPTER THREE**

### **RFESRESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlined the research design and the population of interest to the researcher, the sampling techniques the final sample size. The section also discussed the data collection instrument, the procedures that were used in collecting data and how the data was analyzed and presented. It has the ethical considerations that were applied in the course of research.

#### **3.2 Research Design**

A research design is the scheme, outline or plan that is used to generate answers to research problems (Creswell, & Poth, 2016). It offers a systematic order of occurrences and activities in which to conclude the research. Descriptive research design was adopted by the study. The aim of descriptive research is to determine and report how things are without manipulation that helps to determine the current state of the study population. Descriptive design allows for more data to be tested (Leavy, 2017). Descriptive research design is chosen because it determines and reports how things are and is suitable because with definite goals it is concerned with obviously defined issues. Therefore, the study design involves a description of what the researcher does when formulating research questions and their consequences for the final analysis of information.

#### **3.3 Target Population**

A study population according to Howe and Robinson (2018) is the general large collection of elements either human or non-living that are at the core of scientific query. The target population is the elements with the necessary information and fit a set criterion to be included in the study. For this study, the population were staffs at the National Treasury of Kenya and the researcher targeted staff in the ICT department, human resource department and Finance and accounting department with the expectation that they have information on IFMIS and performance of the institution. From the records held at the national treasury, there were a total of 367 staff working in the three departments as shown in Table 3.1

**Table 3. 1: Target Population**

Department	Population
ICT department	152
Human Resource Department	96
Finance and Accounts Department	119
<b>Total</b>	<b>367</b>

**Source: Records at the National Treasury (2020).**

### 3.4 Sample Procedure

A sample population of 187 was arrived at by calculating the target population of 367 with a 95% confidence level and an error of 0.05 using the below formula taken from Kothari (2004).

$$n = \frac{Z^2 \cdot N \cdot \sigma^2}{(N - 1)e^2 + Z^2 \cdot \sigma^2}$$

Where; n = Size of the sample,

N = Size of the population and given as 367

e = Acceptable error and given as 0.05,

$\sigma$  = the standard deviation of the population and given as 0.5 where not known,

Z = Standard deviation at a confidence level given as 1.96 at 95% confidence level

$$n = \frac{1.96^2 \cdot 367 \cdot 0.5^2}{(367 - 1)0.05^2 + 1.96^2 \cdot 0.5^2}$$
$$\frac{352.4668}{0.915 + 0.9604}$$
$$\frac{352.4688}{1.8754}$$

n=187 respondents

The study used 187 respondents from all the ICT department, human resource department and Finance and accounting department as shown in the table below:

**Table 3. 2: Sample Size**

<b>Department</b>	<b>Population</b>	<b>Sample Size</b>
ICT department	152	79
Human Resource Department	96	44
Finance and Accounts Department	119	61
<b>Total</b>	<b>367</b>	<b>187</b>

*Source: Researcher (2020)*

### **3.5 Data Collection Instrument**

A questionnaire was used by the research to gather primary data. The questionnaires were used to gather information from the participants chosen. Questionnaires are suitable for studies as they collect information that cannot be directly observed and achieved as well as individual experiences (Creswell & Poth, 2016). A questionnaire would be helpful in acquiring objective information as the research does not manipulate respondents in any manner. Questionnaires have the added benefit of being less expensive and using less time as information collection tools. The questionnaire included questions that are close ended and it employed the use of the Likert scale, as such quantitative data was collected. The information tool, while subdivided into two parts, the first part had information on background information of the respondents and the second part discussed the four study independent variables and the dependent variable.

### **3.6 Data Collection Procedure**

The researcher applied for a research permit with National Commission for Science, Technology and Innovation (NACOSTI) to conduct the research. The researcher also sought for a letter of introduction from the University. Once these authorities were received, the researcher embarked on data collection in the field. While in the field, each questionnaire presented to respondents was accompanied by a letter of introduction stating the purpose of the study. A drop and pick latter method was used to distribute questionnaires to respondents. The use of this method ensures that respondents are given more time to fill in questionnaires. This also ensures the improvement of the response rate of the study as it ensures that the respondents are not interfered with their daily operations.

### **3.7 Validity and Reliability of Research Instruments**

#### **3.7.1 Validity of the Study Instruments**

Validity refers to degree to which a test measures what it purports to measure. Bolarinwa (2015) defines validity as an instrument that is used to improve judgment for this reason the university will ascertain the validity of the content presented. In general validity is degree to which results obtained. Validity is the degree to which a test measures what is intended to measure. In this study, validity was also examined through the ability of the test instruments to measure what they are supposed to measure. As such, pre-test was conducted through pilot study in which there was checking of any deficiencies in terms of unclear instructions, insufficient spaces to write responses and wrong phrasing of questions.

The researcher adopted the use of content validity by engaging academic supervisors and fellow students who reviewed the content of the questionnaire to ensure they are aligned to the overall and specific objectives of the study. The construct validity was conducted such that the items on the questionnaire are reviewed to measure the constructs in the conceptual framework.

#### **3.7.2 Reliability of Research Instruments**

Reliability is the extent to which results are consistent overtime and an accurate representation of the total population under study (Mohajan, 2017). If the results of a study can be reproduced under a similar methodology, then the instrument is considered to be reliable. To determine reliability, the Cronbach's (1951) coefficient alpha was used separately to assess the reliability of the scales adopted in the study. The researcher also checked the consistency of a measure evaluated over time using test-retest reliability. This test was to measure reliability obtained by administering the same test twice over a period of time to a group of individuals.

### **3.8 Data Analysis and Presentation**

The collected data was cleaned, coded and entered into Statistical Package for Social Sciences (SPSS version 23.0) for further analysis. The data was also checked for completeness and consistent before the analysis. Descriptive analysis and inferential statistics was conducted, such that for descriptive analysis, means, frequencies, percentages and standard deviation was

obtained from the raw data. Descriptive statistics is chosen because it makes it possible to show the distribution or the count of individual scores in the population for a specific variable.

Inferential statistics was done through multiple regression to test the relationship between the independent variables (internal control, staff competency, budgeting and financial reporting) and the dependent variable (performance).

The regression mode that was adopted is:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where:

Y = Performance

X<sub>1</sub> = Internal Control

X<sub>2</sub> = Staff Competency

X<sub>3</sub> = Budgeting

X<sub>4</sub> = Financial Reporting

β<sub>0</sub> = Constant,

β<sub>1</sub>, β<sub>2</sub>, β<sub>3</sub> and β<sub>4</sub>= Regression Coefficients

ε = Error Term

The findings of the study were presented in charts, tables, graphs and prose discussions.

### **3.9 Ethical Consideration**

The researcher abided by the ethical considerations in research work, such as seeking for consent from the participants before including them in the study. The researcher also ensured that all the material used in this study had been well referenced using APA format. Participation in the study was voluntary and respondents were not required to indicate their names on the questionnaires so as to abide by confidentiality concerns. Assurance was made to the respondents that information collected was only used for academic purpose. In addition, all ethical standards and considerations regarding research were followed.

## CHAPTER FOUR

### RESEARCH FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

This main objective of the study was to determine the effect of integrated financial management information system on performance of the National Treasury of Kenya. The study sought to establish the effect of internal control in IFMIS, staff competency in IFMIS, budgeting using IFMIS and financial reporting using IFMIS on performance of the National Treasury. Data was analyzed using both descriptive and inferential statistics. The findings were as presented in the subsequent sections;

##### 4.1.1 Response Rate

The study had 187 respondents who were the management staff in the ICT, human resource, finance and accounting departments. Out of the 187 respondents, 140 of them completed the questionnaires and returned them. This gave a response rate of 74.87% which is deemed sufficient for the study. The findings are as tabulated below;

**Table 4.1: Response Rate**

Rate	Frequency	Percentage
Response	140	74.87
Non-response	47	25.13
Total	187	100

*Source: Field data, 2020*

The findings show that the response rate was sufficient for the current study. This is supported by Mugenda and Mugenda (2013) who stated that a sample size of 70% and above is deemed statistically sufficient for a study.

### 4.1.2 Reliability Test

To ascertain the reliability of the research instruments, a Cronbach Alpha coefficient methodology was used. A Cronbach alpha was computed for each of the variables and the overall coefficient determined. The findings were as shown in Table 4.2.

**Table 4.2: Reliability Test**

Variable	Number of Items	Cronbach Alpha
Internal control in IFMIS	5	0.815
Staff competency in IFMIS	5	0.802
Budgeting using IFMIS	5	0.794
Financial reporting using IFMIS	5	0.733
Average Cronbach Coefficient		0.786

*Source: Field data, 2020*

The study established that internal control in IFMIS had a Cronbach coefficient of 0.815. Staff competency in using IFMIS had a Cronbach alpha coefficient of 0.802. Budgeting using IFMIS had a Cronbach alpha coefficient of 0.794 and financial reporting using IFMIS had a Cronbach alpha coefficient of 0.733. The average Cronbach coefficient was 0.786 which was greater than 0.7, an indication that the research instruments were reliable for the study. This is supported by Cronbach (1951) who stated that a Cronbach alpha of 0.7 and above indicates that the research instruments are sufficiently reliable for a study.

### 4.2 Demographic Background

The study assessed the bio-demographic background characteristics of the respondents ranging from gender, highest level of education, period worked at the National Treasury and relevant department. The findings are presented in the following sections.

#### 4.2.1 Gender of Respondents

The study sought to establish the distribution of the respondents in terms of their gender. The findings were as tabulated below;

**Table 4.3: Respondents' Gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Male	98	70.00
Female	42	30.00
<b>Total</b>	<b>140</b>	<b>100</b>

*Source: Field data, 2020*

The study established that 70% of the respondents were male while 30% were female. This shows that most of the management staff among the three departments at the Treasury were male.

#### 4.2.2 Highest Level of Education

The study further assessed the highest academic qualification among the management staff in the three departments at the National Treasury. The findings indicated that 10% were certificate holders, 22% were diploma holders, 59% were degree holders while 9% had post-graduate qualifications. This indicates that most of the management staff in the ICT, Human Resources and Finance & Accounting Departments at the National Treasury was undergraduate degree holders. This shows a knowledgeable, qualified, skilled and informed staff who could also easily articulate issues and respond accordingly.

#### 4.2.3 Period worked at the National Treasury

The study sought to establish the number of years that the respondents had worked at the National Treasury. The findings were as presented in the figure below;



Figure 4.1: Number of years worked

Source: Field data, 2020

The study established that 10% of the respondents had worked for less than 3 years, 29% had worked for between 3 and 7 years while 61% had worked for over 7 years. This indicates that most of the respondents had worked for over 7 years which is a significantly long period of time to understand the operations and performance at the National Treasury especially regarding IFMIS.

#### 4.2.4 Department

The study also sought to find out the departments to which the respondents belonged to. The findings were as presented below;

**Table 4.4 Respondents' Department**

Department	Frequency	Percentage
ICT	60	42.86
Human Resource	30	21.43
Finance and Accounting	50	35.71
<b>Total</b>	<b>140</b>	<b>100</b>

Source: Field data, 2020

The study established that 42.86% of the respondents were from the ICT department, 21.43% were from the human resource department while 35.71% were members of the finance and accounting department. This indicates that most of the respondents were from the ICT department, however all the departments focused on were represented in the study.

### 4.3 Descriptive Findings

#### 4.3.1 Internal Control and Organizational Performance

The respondents were asked to indicate the extent to which they agreed with the following statements on internal control as an integrated financial management information system and performance on a Likert scale of 1-5, where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree. The findings were as tabulated below;

**Table 4.5: Internal Control in IFMIS**

Statement	Mean	Std. Dev
The treasury has a tight and strict control environment	3.66	0.802
There is regular risk assessment before resource allocation and use	3.74	0.901
The IFMIS is always monitored to ensure diligent use of resources	3.88	0.711
All activities involving IFMIS at the treasury are controlled	4.01	0.697

*Source: Field data, 2020*

The study established that most of the respondents agreed that the National Treasury of Kenya has a tight and strict internal control environment, there is regular risk assessment before resource allocation and use, the IFMIS system is always monitored to ensure diligent use of resources and that all activities involving IFMIS at the treasury are controlled as indicated by a mean of 3.66, 3.74, 3.88 and 4.01 respectively. This shows that IFMIS has enhanced strong and reliable internal control mechanism ranging from strong control environment, risk assessment, monitoring and control of all resource planning, use and accountability.

#### 4.3.2 Staff Competency and Organizational Performance

The second objective of the study was to establish the impact of staff competency in IFMIS on performance of the National Treasury. The respondents were therefore asked to rate the following statements on staff competency as an aspect of IFMIS and organizational performance using a Likert scale of 1-5, where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and

5=strongly agree. The findings were presented using means and standard deviation as tabulated below;

**Table 4.6: Staff Competency and Performance**

<b>Statement</b>	<b>Mean</b>	<b>Std. Dev</b>
Our staff have adequate technical skills for IFMIS	2.91	1.520
Our organization has relevant expertise knowledge for IFMIS	3.01	0.804
Our staff have significant working experience for IFMIS	2.99	0.699
Our staff have adequate understanding of the IFMIS	2.71	0.779

*Source: Field data, 2020*

The study established that to a moderate extent, staff at the National Treasury have adequate technical skills on IFMIS, relevant expertise knowledge on IFMIS, have significant working experience for IFMIS and adequate understanding of the IFMIs as indicated by a mean of 2.91, 3.01, 2.99 and 2.71 respectively. This indicates that to an average but significant extent, the staff at the organization had technical skills, expertise, experience and understanding on use, application and management of IFMIS.

#### **4.3.3 Budgeting and Organizational Performance**

The respondents were further asked to indicate their extent of agreement with the following statements on budgeting and performance of the National Treasury on a five point Likert scale, where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree. The findings were as presented below;

**Table 4.7: Budgeting using IFMIS and Performance of the National Treasury**

<b>Statement</b>	<b>Mean</b>	<b>Std. Dev</b>
The National Treasury regularly develops and utilizes budget plans	3.77	0.801
The NT embraces participatory budgeting to ensure the public involvement	3.81	0.694
There is regular and consistent monitoring of the budgets using IFMIS	3.64	0.911
IFMIS enables budgetary control and prioritization	4.11	0.774

*Source: Field data, 2020*

The study respondents significantly agreed that the national treasury regularly develops and utilizes budget plans, embraces participatory budgeting to ensure the public involvement, there is

regular and consistent monitoring of the budgets using IFMIS and that IFMIS enables budgetary control and prioritization as indicated by a mean of 3.77, 3.81, 3.64 and 4.11 respectively. This indicates that IFMIS has significantly improved the budgetary process which ranges from development, utilization, public participation, monitoring, control and prioritization.

#### 4.3.4 Financial Reporting and Organizational Performance

The respondents were further asked to indicate the extent to which they agreed to the following statements on financial reporting and performance of the National Treasury using a Likert scale of 1-5, where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree. The findings were as tabulated below;

**Table 4.8: Financial Reporting and Performance**

Statement	Mean	Std. Dev
There is full disclosure of the financial status of the National Treasury via IFMIS	2.99	0.884
The organization ensures that there is relevance of the financial reports through IFMIS	3.39	0.791
Financial reporting at the National Treasury always meets timelines	3.01	0.822
The National Treasury financial reporting ensures that there is faithful representation through	2.64	0.750

*Source: Field data, 2020*

The respondents to a moderate extent agreed that there is full disclosure of the financial status of the National Treasury via IFMIS, the organization ensures that there is relevance of the financial reporting through use of IFMIS, financial reporting at the National Treasury is always within timelines and ensures that there is faithful representation as indicated by a mean of 2.99, 3.39, 3.01 and 2.64 respectively. This indicates that IFMIS has improved efficiency and effectiveness of financial reporting at the National Treasury through full disclosure, relevancy, timeliness and faithful representation to a moderate but significant extent.

#### 4.3.5 Performance of the National Treasury

The dependent variable of the study was performance of the National Treasury of Kenya. The respondents were therefore asked to rate the following statements on performance on a scale of

1-5 where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree. The findings were as presented below;

**Table 4.9: Performance of the National Treasury**

Statement	Mean	Std. Dev
There is a high level of efficiency at the NT hence reduced cost of operation	3.05	0.799
There is access to real time records	2.77	0.783
The NT maintains accurate financial records	2.81	0.803

*Source: Field data, 2020*

The study established that to a moderate extent, there is a high level of efficiency at the National Treasury hence reduced cost of operation and efficiency, there is real time access to records and that the National Treasury maintains accurate financial records as indicated by a mean of 3.05, 2.77 and 2.81 respectively. This indicates that IFMIS has significantly enhanced efficiency, timely reporting and accurate financial management at the National Treasury of Kenya.

#### **4.4 Inferential Statistics**

The study conducted inferential statistics to establish the extent of correlation between IFMIS and performance of the National Treasury of Kenya. The findings of Model Summary, ANOVA and Regression Coefficients are indicated in subsequent sections below.

##### **4.4.1 Model Summary**

The findings of coefficient of determination and coefficient of adjusted determination are as shown in Table 4.10.

**Table 4.10: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.873 <sup>a</sup>	.868	.870	1.713351

*Source: Field data, 2020*

The findings indicated that the coefficient of correlation R was 0.873 an indication of strong positive correlation between the variables. Coefficient of adjusted determination  $R^2$  was 0.870 which changes to 87.0% an indication of changes of dependent variable can be explained by (internal control, staff competency, budgeting and financial reporting). The residual of 13.0% can be explained by other factors beyond the scope of the current study.

#### 4.4.2 ANOVA

The study carried out an ANOVA at 95% level of significance. The findings of  $F_{\text{Calculated}}$  and  $F_{\text{Critical}}$  are as shown in Table 4.11

**Table 4.11: ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	851.612	40	20.3903	7.8992	.000 <sup>b</sup>
Residual	258.131	100	2.58131		
Total	1109.743	140			

*Source: Field data, 2020*

The findings show that  $F_{\text{Calculated}}$  was 7.8992 and  $F_{\text{Critical}}$  was 4.0011, this show that  $F_{\text{Calculated}} > F_{\text{Critical}}$  an indication that the overall regression mode was significant for the study. The p value was  $0.000 < 0.05$  an indication that at least one variable significantly influenced performance of the National Treasury, Kenya

#### 4.4.3 Coefficients of Regression

The study used coefficient of regression to establish the individual influence of the variables to organizational performance. The findings are indicated in Table 4.12.

**Table 4.12: Coefficients of Regression**

Model	Unstandardized		Standardized		T	Sig.
	Coefficients		Coefficients			
	B	Std. Error	Beta			

(Constant)	5.203	0.725		2.111	.000
Internal control	0.801	.141	.104	9.331	.000
Staff competency	0.814	.134	.011	9.012	.000
Budgeting	0.793	.121	.301	10.332	.000
Financial Reporting	0.811	.117	.237	9.191	.000

*Source: Field data, 2020*

The resultant equation was;

$$Y = 5.203 + 0.801X_1 + 0.814X_2 + 0.793X_3 + 0.811X_4$$

Where:  $X_1$  = Internal control in IFMIS

$X_2$  = Staff competency in IFMIS

$X_3$  = Budgeting using IFMIS

$X_4$  = Financial Reporting using IFMIS

The study found out that by holding all the variables constant, performance of the National Treasury will be at 5.203. A unit increase in internal control in IFMIS when holding all the other variables constant, organizational performance would be at 0.801. A unit increase in staff competency in use of IFMIS while holding other factors constant, performance of NT would be at 0.814. A unit increase in budgeting using IFMIS while holding other factors constant, performance would be at 0.793. A unit increase in financial reporting using IFMIS while other factors are held constant, performance of the National Treasury would be at 0.811. The findings pointed out that all the independent variables had a p value of  $0.000 < 0.05$  an indication that IFMIS significantly influenced performance of the National Treasury, Kenya.

This is supported by Chepkwony (2015) who investigated the relationship between public participation and public finance management act implementation and indicated that public participation needs to be enhanced at resource planning, budgeting, implementation, monitoring and evaluation and internal controls and audit and has a positive effect on public finance

management. Mbaka and Namada (2019) in their study on IFMIS and service delivery, established that adoption and utilization of IFMIS benefits the public and the government by providing real-time financial information to all those finance and accounting managers who need it. It also makes it easy to shared financial information to different staff by a click of a button, hence making it easier to develop budgets, account and trace all resources through the use of centralized treasury processing operations. Government departments use the IFMIS system to prepare financial reports and statements for the different activities handled in one office or department.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents the summary of the findings; conclusion and recommendations are based on the findings and interpretation of the variables in chapter four. Suggestions for further studies are also provided.

#### 5.2 Summary of the Findings

The aim of the study was to establish the effect of integrated financial management information systems on performance of National Treasury of Kenya. The study specific objectives were to establish the effect of internal control, staff competency, budgeting and financial reporting on performance of the National Treasury. The study had a coefficient of correlation R of 0.871 an indication of strong positive correlation between the variables and coefficient of adjusted determination  $R^2$  was 0.870 which changes to 87.0%.

##### 5.2.1 Internal Control in IFMIS and Performance of National Treasury

The study established that most of the respondents agreed that the National Treasury of Kenya has a tight and strict internal control environment, there is regular risk assessment before resource allocation and use, the IFMIS system is always monitored to ensure diligent use of resources and that all activities involving IFMIS at the treasury are controlled. This shows that IFMIS has enhanced strong and reliable internal control mechanism ranging from strong control environment, risk assessment, monitoring and control of all resource planning, use and accountability.

##### 5.2.2 Staff Competency in IFMIS and Performance of the National Treasury

The study established that to a moderate extent, staff at the National Treasury have adequate technical skills on IFMIS, relevant expertise knowledge on IFMIS, have significant working experience for IFMIS and adequate understanding of the IFMIs. This indicates that to an average

but significant extent, the staff at the organization had technical skills, expertise, experience and understanding on use, application and management of IFMIS.

### **5.2.3 Budgeting using IFMIS and Performance of the National Treasury**

The study respondents significantly agreed that the national treasury regularly develops and utilizes budget plans, embraces participatory budgeting to ensure the public involvement, there is regular and consistent monitoring of the budgets using IFMIS and that IFMIS enables budgetary control and prioritization. This indicates that IFMIS has significantly improved the budgetary process which ranges from development, utilization, public participation, monitoring, control and prioritization.

### **5.2.4 Financial Reporting using IFMIS and Performance of the National Treasury**

The respondents to a moderate extent agreed that there is full disclosure of the financial status of the National Treasury via IFMIS, the organization ensures that there is relevance of the financial reporting through use of IFMIS, financial reporting at the National Treasury is always within timelines and ensures that there is faithful representation. This indicates that IFMIS has improved efficiency and effectiveness of financial reporting at the National Treasury through full disclosure, relevancy, timeliness and faithful representation to a moderate but significant extent.

## **5.3 Conclusions**

The study concluded that IFMIS was significantly embraced in public finance management at the National Treasury, Kenya. It was concluded that the national treasury significantly incorporates and accrues effective internal control which has enhanced resource planning, allocation, accountability and integrity.

The study further concluded that the staffs at the National Treasury to a significant extent have relevant and necessary skills, knowledge, expertise and experience to manage the system. It was also concluded that the National Treasury has streamlined its budgetary management through use of IFMIS. It was finally concluded that the IFMIS had improved financial reporting through timelines, accuracy and effectiveness.

#### **5.4 Recommendations**

The study recommends that the National Treasury needs to enhance continued internal control improvement plan and strengthening.

The National Treasury should enhance staff competency through training, mentorship and internal trainings to ensure they are able to use and manage the IFMIS.

It was further recommended that the National Treasury should improve on use of IFMIS in budgeting to ensure significant public participation and involvement.

The study also recommended that the National Treasury should ensure IFMIS is used more in financial reporting to enhance timely, accurate and effective reporting.

#### **5.5 Suggestions for Further Studies**

The main objective of the study was to find out the effect of IFMIS on performance of the National Treasury, future research should be carried out on other counties and public sector entities. The coefficient of adjusted determination  $R^2$  was 0.870; therefore, the residual of the study was 13.0% and can be explained by other factors beyond the scope of the current study that future scholars should focus on. Further studies should be conducted on other IFMIS indicators and how they affect public finance management and organizational performance. The challenges in financial management systems and process should also be researched on and solutions sought thereof.

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## APPENDICES

### APPENDIX I: LETTER OF INTRODUCTION

Kenyatta University

P.O. Box 43844-00100

Nairobi,

Kenya.

Dear Sir/Madam,

#### **REF: Invitation to Participate in a Research**

I am a student at Kenyatta University currently conducting a research on **INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEM AND PERFORMANCE OF NATIONAL TREASURY, KENYA**. I am writing to humbly request that you spare a few minutes off your time to complete the attached questionnaire. The questions seek your opinions regarding your organizations' IFMIS use and performance. Kindly respond with your most honest opinion. Your anonymity is assured and the information you provide will be treated with utmost confidentiality.

Thank you for participating in this study. Your cooperation and contribution in this research is highly appreciated.

Yours faithfully,

**Cyrus Njau**

## APPENDIX II: QUESTIONNAIRE

Kindly fill in this questionnaire on **Integrated Financial Management Information System and Performance of National Treasury of Kenya**. Note that all information given will only be used for academic purpose. Do **NOT** write your name on this questionnaire.

### SECTION A: GENERAL INFORMATION OF RESPONDENTS

1. What is your gender?

Male ( ) Female ( )

2. What is your highest level of education?

Certificate ( ) Diploma ( ) Degree ( ) Post-graduate ( ) Other ( )

3. How many years have you worked in the National Treasury?

Less than 3 years ( ) 3-7 Years ( ) Over 7 Years ( )

4. Which department do you belong to?

ICT Department ( ) Human Resource ( ) Finance and Accounting ( )

### SECTION B: INTERNAL CONTROL AND ORGANIZATIONAL PERFORMANCE

5. Below are several statements on internal control as an integrated financial management information system and performance. Kindly indicate the extent of your agreement with each of these statements. Use a Likert scale of 1-5, where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree.

Statement	1	2	3	4	5
The treasury has a tight and strict control environment					
There is regular risk assessment before resource allocation and use					
The IFMIS is always monitored to ensure diligent use of resources					
All activities involving IFMIS at the treasury are controlled					

### SECTION C: STAFF COMPETENCY AND ORGANIZATIONAL PERFORMANCE

Below are statements on staff competency as an aspect of IFMIS and organizational performance. Kindly indicate the extent of your agreement with each of these statements. Use a Likert scale of 1-5, where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree.

Statement	1	2	3	4	5
Our staff have adequate technical skills for IFMIS					
Our organization has relevant expertise knowledge for IFMIS					
Our staff have significant working experience for IFMIS					
Our staff have adequate understanding of the IFMIS					

### SECTION D: BUDGETING AND ORGANIZATIONAL PERFORMANCE

7. Below are several statements on Budgeting and Performance. Kindly indicate the extent of your agreement with each of these statements. Use a Likert scale of 1-5, where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree.

Statement	1	2	3	4	5
The National Treasury regularly develops and utilizes budget plans					
The NT embraces participatory budgeting to ensure the public involvement					
There is regular and consistent monitoring of the budgets using IFMIS					
IFMIS enables budgetary control and prioritization					

**SECTION E: FINANCIAL REPORTING AND ORGANIZATIONAL PERFORMANCE**

8. Below are several statements on financial reporting and performance. Kindly indicate the extent of your agreement with each of these statements. Use a Likert scale of 1-5, where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree.

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
There is full disclosure of the financial status of the National Treasury via IFMIS					
The organization ensures that there is relevance of the financial reports through IFMIS					
Financial reporting at the National Treasury always meets timelines					
The National Treasury financial reporting ensures that there is faithful representation through					

**SECTION F: PERFORMANCE OF THE NATIONAL TREASURY**

9. Below are several statements on Performance of the National Treasury. Kindly indicate the extent of your agreement with each of these statements. Use a Likert scale of 1-5, where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree.

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
There is a high level of efficiency at the NT hence reduced cost of operation					
There is access to real time records					
The NT maintains accurate financial records					

**THANK YOU**