THE EFFECTS OF INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEM ON FINANCIAL PERFORMANCE OF COMMERCIAL STATE CORPORATIONS IN KENYA

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DECLARATION

This Management Research Project is my original work and has not been presented for any academic credit in this or any other university.

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Signed ……………………… Date……………………

This management research Project has been submitted for examination with my approval as a university supervisor.

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DEDICATION

This research project is dedicated to all those who gave me inspiration of pursuing my dreams. A special dedication to Graham and the rest of my family members and friends, thanks a lot for your support and encouragement during my academic journey.
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To My heavenly father for taking me through this academic journey successfully and giving me strength, endurance, patience and wisdom during this research period. To my entire family for their support and understanding. Graham, thank you for always being there for me and for being my reason to want to excel even more. To my employer for giving me the opportunity to pursue my academic dream.

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Special mention also goes to all the respondents who took time for their busy schedules to offer a variety of information and data enabled this study to be a success. It is not possible to mention each person by name, but I wish to convey special thanks to each and every one who played a role in the success of this study.
ABSTRACT

The last decade has seen a revolutionary shift towards Integrated Public Financial Management in Kenya due to the dynamic nature of local and global macroeconomic forces. The potential to create, process and use information instantaneously, without barriers of geography or physical constraints is enormous and continues to grow exponentially underscoring the need for Integrated Financial Management. A descriptive survey was used to answer the research questions on the current status of the subject of the study and in reference to the objectives of the study. The target population of the study was all the Commercial state corporations in Kenya totalling fifty three (53). A census survey of all the 53 commercial state corporations was undertaken in which case questionnaires were used to collect primary data from the respondents. The data was quantitatively and qualitatively analyzed and presented as frequency and percentage tables. The study found out that state corporations have adopted various IFMIS practices to enhance their financial performance. The regression analysis conducted revealed that the respective IFMIS practices adopted by commercial state corporations have had a significant impact on their financial performance as indicated by the high Coefficient of Multiple Determination of (R² Square) 0.843 and P-Value of 0.001. This implies that, 84.3% of the financial performance of commercial state corporations can be attributed to the Integrated Financial Management practices they have adopted. The study recommends that; owing to the fact that 31.6% commercial state corporations are yet to adopt IFMIS, the National government through line ministries should put an effort to bring the remnant state corporations to the fold given the fact that public expenditure through state corporations accounts for over 45% of the GDP of the country. The study reiterates the need for the relevant government organs to address the various challenges outlined in the study in order to make the goals of the IFMIS e-project feasible. According to the research there is need for more investments into research in critical success factors for successful adoption and implementation of Integrated Financial Management among state corporations in Kenya. The study was limited by cost and time.
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LIST OF ABBREVIATIONS

AGA: Autonomous Government Agencies
DAC: Development Assistance Committee of OECD
ERP: Enterprise Resource Planning
e-POS: Electronic point of Sale
GDP: Gross Domestic Product
GFS: Government Financial Statistics
ICT : Information and Communication Technology
IFMIS: Integrated Financial Management Information System
IAASB: International Auditing and Assurance Standards Board
IFAC: International Federation of Accountants
INTOSAI: International Organization of Supreme Audit Institutions
IPSAS: International Public Sector Accounting Standards (of IFAC)
ISPPIA: International Standards for the Professional Practice of Internal Auditors
LDCs: Less Developed Countries
MDAs: Ministries Departments and Agencies
MDA: Ministries, Departments and Agencies
MOF: Ministry of Finance
OECD: Organization for Economic Co-operation and Development
PFM: Public Financial Management
PFM-PR PFM: Performance Report
PI: Performance Indicator
PE: Public Enterprise
RA: Revenue Administration
ROA: Return On assets
RFID: Radio Frequency Identification
SIDA: Swedish International Development Aid
VIM: Vendor Managed Inventories
CHAPTER ONE: INTRODUCTION

1.1 Background

Neoliberalism coupled with the second global oil shock and hyperinflation of 2008 has led to massive economic crises fuelling a series of financial reform policies across the world. This has compelled individual states to pursue greater economic openness and liberalization in the recent past. Though strengthening financial management in government departments has been a continuous focus since 1990s; the last decade has seen a revolutionary shift towards the integration of public financial systems in a significant number of developing and developed countries (Heo, 2013).

Koth and Roberts (2011) asserts that; due to the dynamic nature of local and global macroeconomic forces, the potential to create, process and use information instantaneously, without barriers of geography or physical constraints is enormous and continues to grow exponentially underscoring the need for integrated financial management systems. In Kenya and the rest of Sub-Saharan Africa; the push for integrated public financial systems stems from the need to mitigate the drawbacks of the hitherto specialized approach in which case emphasis has tended to shift between the broader contribution of financial management to effective program management and a narrower focus on internal control and reporting (Charko, 2010).

The main reasons behind the current financial management revolution include: the rapid structural change that has taken place in financial markets spurred by the acceleration in financial innovation which has led to a change in the risk characteristics of firms; the fact that financial activities have become increasingly complex; increased demand for enhanced regulation and supervision of financial products like insurance and pension schemes; and the increasing internationalization of banking and other financial services has implications for the institutional structure of agencies at national and international levels (Galera et al., 2011).

Bai and Henesey (2012) portend that; the current global financial crisis has attracted the attention of policy makers in their quest to find solutions aimed at averting such a future global crisis. Public finance strategists study the livability level problem (first order casual effects), and the sustainability level problem, the second order problem that is about fundamental structure and social subsystems relationships. System livability does not care about the effects of unregulated
actions, whereas system sustainability tries to keep a system functioning within its environment by avoiding excessive behaviors.

Past empirical findings indicate that developing countries particularly in Africa have reported positive progress; either in the form of specific countries scoring better on assessments over time or in better performance across countries in the adoption of integrated financial management systems (Renzio and Dorotinsky, 2007). It is however worth noting that, while performance indicator scores have increased across developing countries, these reflect uneven improvements across processes and evidence of improvements in overall public performance management system quality and impact on the overall goals is elusive (Westcot, 2008).

In recent years, the adoption of integrated financial management systems among state corporations in Kenya has been championed as the best strategy in mitigating the ensuing effects of financial misappropriations that have dogged the public sector since independency. The World Bank (1998) for example, outlines the three main objectives of public sector financial management as ensuring: aggregate fiscal discipline; allocation of resources in accordance with strategic priorities, and efficient and effective use of resources in the implementation of strategic priorities.

In addition, integrating financial management systems will enable state corporations: Increase ability to undertake control and monitoring of expenditure and receipts in Government Departments; Increase ability to access information on financial and operational performance; increase ability to access information on Government’s cash position and Information on Economic performance; and increase ability to demonstrate accountability to donors and the public (Jobe, 2009).

There is broad agreement that a fully functioning IFMIS can improve governance by providing real-time financial information that financial and other managers can use to administer programs effectively, formulate budgets, and manage resources. Sound IFMIS systems, coupled with the adoption of centralized treasury operations, can not only help developing country governments gain effective control over their finances, but also enhance transparency and accountability, reducing political discretion and acting as a deterrent to corruption and fraud (USAID, 2004).
1.1.1 Integrated Financial Management Information System

According to Hendriks (2012), an IFMIS is an information system that tracks financial events and summarises financial information. It supports adequate management reporting, policy decisions, fiduciary responsibilities and the preparation of auditable financial statements. Basically, an IFMIS is little more than an accounting system configured to operate according to the needs and specifications of the environment in which it is installed (Rodin-Brown 2008).

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

The scope and functionality of an IFMIS can vary from a basic general ledger accounting application to a comprehensive system covering budgeting, accounts receivable or payable, cash management, commitment control, debt, assets and liability management, procurement and purchasing, revenue management, human resource management and payroll (Rozner, 2008). Its role is to connect, accumulate, process and then provide information to all parties in the budget system on a continuous basis. It is therefore imperative that the system should be able to provide the required information timely and accurately, because if it does not it will not be used and cease to fulfil its central function as a system (Diamond & Khemani, 2006).

According to Cole (2006) the goal of an integrated financial management system is to support the achievement of fiscal discipline, strategic & efficient allocation and use of funds, value for money and probity in the use of public funds. In this context, system sustainability aims at sustaining a system in the longer term. The main objective of integrating public financial systems is thus; to reinforce system sustainability by exploring the role of improved financial service delivery and government supervision to ameliorate the government’s effort to cushion itself from the impact of the ongoing global financial crisis (Shaw, 2010).

According to Hove and Wynne (2010), an IFMIS assists management in ensuring accountability for the deployment and use of public resources and in improving the effectiveness and efficiency
of public expenditure programmes. By tracking financial events through an automated financial system, management is able to exercise improved control over expenditure and to improve transparency and accountability in the budget cycle as a whole. Diamond and Khemani (2006) argue further that, as a management tool, an IFMIS should support the management of change. As such, it should be viewed as part of the broader financial reforms of government, such as budget reforms.

Barata and Cain (2001) argue that, as a management tool IFMIS also enables management to do the following: Control aggregate spending and the deficit; Prioritise expenditure across policies, programmes and projects to achieve efficiency and equity in the allocation of resources; Make better use of budgeted resources, namely, to achieve outcomes and produce outputs at the lowest possible cost.

1.1.2 Financial Performance of Commercial State Corporations

Commercial State corporations in Kenya have traditionally been less competitive due to poor financial management characterized by: Poor system design and lacked critical functionality, controls, automated bank reconciliation, audit trails and systems documentation; Lack of system data checks and controls; Poor response time; Limited ability to generate reports; Weak access security; and Lack of remote access. Traditionally, financial management among state corporations aimed at avoiding wastage and extravagant spending, and especially, the loss of resources through possible fraud, irregularity or improper spending. But the rise of New Public Management, associated with neo-liberalism, has significantly reduced the emphasis given to public financial management regularity and probity.

According to Rosen (2002), the world of financial management, and for a country to be developed, it must be built an effective economy. Public financial management concerns the taxing and spending of government, which in turn influences resource allocation and income distribution. The spending portion covers the budget cycle, including budget preparation, internal controls, accounting, internal and external audit, procurement, and monitoring and reporting arrangements. In the public institutions, financial management is one of the fields which must be developed in order to build the country’s economy and fighting the waste of resources. Public
finances to be well managed, there must have a well-designed financial management systems in order to achieve their objectives.

1.1.3 IFMIS & Financial Performance of Commercial State Corporations
In broader sense, financial performance refers to the degree to which financial objectives are being or have been accomplished. It is the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure firm's overall financial health over a given period of time and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Chung and Fung, 2007).

The central aim behind performance information systems is that systematic and continuous evaluation of organizational performance should be used to improve future performance. By analyzing performance and relating it to existing organizational arrangements, performance information is argued to promote organizational learning and, consequently, improve the quality of organizational decision making (Moynihan and Landuyt, 2009).

Developed economies are convinced that the information society will result in economic and social benefits (Audenhove, 2008). Information infrastructures are expected to stimulate economic growth, increase productivity, create jobs and improve the quality of life. The establishment of an IFMIS has become an important benchmark for the country’s budget reform agenda often regarded as a precondition for achieving effective management of budgetary resources (Diamond et al, 2005).

Integrated Financial Management Information System (IFMIS) enhance the financial performance of the state corporation by enabling them track financial events and summarize financial information. In addition, the use of IFMIS in their operations will support management and budget decisions, fiduciary responsibilities, and the preparation of financial reports and statements. IFMIS will connect, accumulate, process and then provide information to all parties in the budget system on a continuous basis. It is therefore imperative that the system should be able to provide the required information timely and accurately, because if it does not it will not be used and cease to fulfil its central function as a system. The adoption and implementation of IFMIS will improve not only the financial performance of state corporations but also enhance their competitiveness. This will overcome the obstacles arising from the hitherto poor system
designs that lack critical functionality, controls, automated bank reconciliation, audit trails and systems documentation and weak access to security.

1.1.4 Commercial State Corporations in Kenya
A commercial State Corporation is a legal entity created by the government to undertake commercial activities on its behalf. In Kenya there are two hundred and ten state corporations which fall under established ministries in which they work collaboratively to achieve the overall goals of the respective ministries. The volume of public expenditure was established at approximately 45% of the GDP (Economic survey, 2012). Financial management in Kenya’s State corporations has been dogged by; corruption, political patronage, procurement system inefficiency, lack of sound procurement policy guidelines; lack of a genuinely open and competitive system of procurement; and above all lack of an integrated financial management system (Nyangweso, 2013).

In almost all the state corporations in Kenya, the existing financial management subsystems are failing to cope with the demands placed on them. Planning systems have typically lost credibility with the failure to achieve targets in earlier plans. Budgets are often poor predictors of financial out-turns and rarely act as an effective resource allocation tool. Accounting systems are being asked to handle government transactions of a scale and complexity not envisaged when the systems were designed, and government accounts are often years in arrears (Macknnnon, 2013).

The financial performance of commercial state corporations has remained poor since independency due to poor internal control systems that are necessary in any sound financial system. Against this backdrop, IFMIS offers a major avenue to public financial reforms that will provide an infrastructure that can ameliorate the performance of the state corporations by making them more agile and transparent enough to seal the existing loopholes in the public financial system.

Past studies concur on the fact that there exists a positive correlation between IFMIS and financial performance of public financial systems. This is evident in the following key functional areas: reduction in response time, enhanced ability to generate reports, improved data security, and provision of remote access that limit chances of possible fraud and improper spending.
1.2 Research Problem

Emerging Information and Communication Technology (ICT) can play an important role in fighting corruption in public finance systems by promoting greater comprehensiveness and transparency of information across government institutions. As a result, the introduction of Integrated Financial Management Systems (IFMIS) has been promoted as a core component—and in many cases a driver—of public financial reforms in many developing countries. Yet, experience shows that in spite of the considerable amount of resources allocated to such schemes, IFMIS projects tend to stall in developing countries, as they face major challenges of institutional, political, technical and operational nature (Greta et al., 2011).

The introduction of Integrated Financial Management Systems (IFMIS) has become a critical component of financial reforms to promote efficiency, security of data management and comprehensive financial reporting. IFMIS provide an integrated computerized financial package to enhance the effectiveness and transparency of public resource management by computerizing the budget management and accounting system for a government. It consists of several core sub-systems which plan, process and report on the use of public resources. The scope and functionality of IFMIS can vary across countries, but sub-systems normally include accounting, budgeting, cash management, debt management and related core treasury systems. In addition to these core subsystems, some countries have chosen to expand their IFMIS (Hendricks, 2012).

A fully functioning IFMIS can improve governance by providing real-time financial information and manage resources. Sound IFMIS systems, coupled with the adoption of centralized treasury operations, can not only help developing country governments gain effective control over their finances, but also enhance transparency and accountability, reducing political discretion and acting as a deterrent to corruption and fraud (Chiang and Birtch, 2012).

State corporations play a critical role in service delivery. They are both service and commercial agencies through which the government delivers certain services and generate revenues. Cost effectiveness through enhanced financial performance is important in this endeavor and their operations. State corporations thus have a significant bearing on public expenditure and financial allocation (Herring and Carmassi, 2012).
A number of studies have been carried out on integrated financial management. Musee (2011) in his study found out that; effective use of IFMIS is affected largely by sabotage and resistance. The study also established that management support is lacking and top management does not inspire the user. The capacity and technical knowhow was found to be low due to lack of training and the hurried implementation of the system. The study however falls short of establishing the relationship between IFMIS and financial performance of state corporations which was the domain of the current study.

Kaindi (2012) in her study found out that IFMIS influences the impact of internal control systems on the financial performance. Her study however fails to outline the specific benefits of adopting IFMIS particularly on public financial management systems and how the respective benefits enhance the financial performance of state agencies. Despite the limitation, the current study sought to apply some of the approaches in her findings.

Wamuyu (2013) in her study found out that; ICT and technology have a significant bearing on financial system efficiency in the public sector hence the call for IFMIS. Her study is however limited to the extent that it does not outline the performance metrics that can be used to determine the impact of IFMIS on the financial performance of state corporations hence the current study.

While past studies have unraveled the impact of sound Integrated Financial Information Management Systems, most of them have not exhaustively investigated the impact of adopting IFMIS on the financial performance of state corporations. It is against this backdrop that the current study set to establish the link between IFMIS and financial performance among state corporations in Kenya.

1.3 Objective of the study
The study sought to establish the effect of integrated financial management information system on financial performance of commercial state corporations in Kenya.

1.4 Value of the study
The findings of the study will be of importance to policy makers and stakeholders in the public finance system in Kenya. By establishing the relationship between IFMIS and financial
performance, the findings of the study will be a key ingredient in the; planning, designing and implementation of a sound public finance management system that will align itself to the overall economic strategy.

The study will address output indicators that can be used in measuring and evaluating the quality, efficiency, and effectiveness of financial services delivery both in public or private sectors. In this context it will equally benefit private enterprises that are interested in building sound financial management practices. The study will fill the existing literature gap on the impact of IFMIS on performance among state corporations in Kenya. Thus the findings of the study will be beneficial to future researchers.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction
This chapter reviews theoretical and empirical literature from past studies on the subject of IFMIS. The chapter focuses on the following issues: Integrated Public Financial Management; benefits of IFMIS; critical success factors in the implementation of IFMIS and financial performance.

2.2 Theoretical Literature
According to Crowson (2011), there are a good number of theories and models employed in studying individuals’ ICT adoption and post-adoption behaviors. Social psychology and its applied theories and models have been mainly used in this strand of research. These theories and models focus on people’s intention to engage in a certain behavior (i.e., adopt and use ICT) as a major theoretical foundation.

2.2.1 Meta Theory Model
Ruchala and Mauldin (1999), argue that; previous applications of information technology in accounting systems were mainly processes of transactions that would reciprocate the manual processes. Meta theory is the integration and the synthesis of technical orientations, cognitive as well as the overarching model into the research on AIS. The meta theory has helped in addressing the IT limitations that are imminent and addressed in previous researches such as the failure to recognize the task to which IT is being applied, the failure to recognize the adaptive nature of the artificial phenomena, the failure to account for the design science in the actual field research and the failure to direct the act of making or choosing the necessary decisions and treating all the transactions in an equal manner (Gorry and Scott-Morton, 1971).

Reneau and Grabski (1987) assert that; information systems in accounting are used by accountants and other key decision makers that employ the accounting information or make use of the accounting data. The Meta theory model is built on past frameworks on the management information systems.

2.2.2 Technology Acceptance Model (TAM)
While TRA and TPB mainly focus on the adoption and use of ICT, the TAM theory explains the determinants of user acceptance of a wide range of end-user computing technologies. TAM
identifies two theoretical constructs including Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) that affect the intention to use a system. There are a number of studies that have used TAM as their theoretical background for explaining ICT adoption and use. Scholars already confirmed that PU has a positive relationship with both adoption intention (Davis, 1989) and continuance intention (Ritu and Agarwal, 2000).

In post adoption studies, PU has been found to influence satisfaction (Anol, 2001; Moez, Hirt and Cheung, 2007) and attitude toward the technology (Anol and Hikmet, 2008). PEOU has been found to influence both PU and adoption intention (Davis, 1989). Even though TAM was found to be a valid theoretical framework in studying ICT adoption and use, it has been criticized for its several limitations including the original model’s intended generality and parsimony (Dishaw and Strong, 1999), not considering non-organizational setting (Venkatesh and Davis, 2000), and overlooking the moderating effects of ICT adoption and use in different situations (Sun and Zhang, 2006).

2.2.3 Circumvention Innovation Theory

American economist Kane (1981) pioneered circumvention innovation theory. He thinks that many forms of government regulations and controls which have the same property of implicit taxation embarrass the profitable activity engaged by the company and the opportunity of earning profit, so the market innovation and regulation innovation should be regarded as the continuous fighting process between independent economic force and political force. Because financial industry is special, it has the stricter regulations. Financial institutions deal with the status such as the reduction of profits and the failure of management induced by government regulations in order to reduce the potential loss to the minimum.

Therefore, financial innovation is mostly induced by the purpose of earning profits and circumventing government regulations. It comes true through the game between government and microcosmic economic unity. Kane’s theory is different from the reality. The regulation innovation he assumed is always towards the direction of reinforcing regulation, however, the regulation innovation in reality is always towards the direction of liberal markets innovation, the result of the game is release of financial regulation and markets become more liberal. But his theory is better than constraint-induced financial innovation theory. It not only considered the
origin of innovation in the market but also researched the process of regulation innovation and 
their dynamic relation.

2.3 Determinants of Financial Performance of State Corporations

2.3.1 Stock and monitoring of expenditure payment
IFMIS offer a budget preparation sub-system which may or may not be based on a Medium-Term Expenditure Framework (MTEF). Further to this it also provides for a budget execution and expenditure management sub-system to monitor and account for revenues and public expenditures. Important elements typically include an accounting system, a cash management system to monitor the cash flow within government, a commitment control system to monitor commitments, an aid and debt management system to track external aid and debt, and a payroll system. To ensure consistency, the introduction of a uniform Chart of Accounts to capture receipts, expenditures, and commitments is required. Other related expenditure control mechanisms could focus on public procurement and inventory control. Reporting and auditing sub-systems to ensure transparency, accountability, and compliance with the budget or with existing regulations that govern public expenditure management (Rezaian, 2001).

2.3.2 Transparency of inter-governmental fiscal relations
The integration of different functions and entities within a shared database provide managers with tools to plan, manage, and control public resources. Automation is an important IFMIS feature whose benefits include: improved transparency of public sector operations; rapid expedition of many transactions at once (contrary to manual systems which are cumbersome and slow); improved efficiency of financial controls and other expenditure management procedures; rapid compilation of data from many sources for improved financial analysis and decision making; and improved consistency of information and improved checks and balances. Technical solutions range from a stand-alone accounting system to a complex network based IT system. Experience indicates that the use of a standard IFMIS package is the most cost-effective solution. These IFMIS packages allow customization of specific user requirements formulated at the design stage. Modern integrated IFMIS systems have in particular two key features: a uniform classification of accounts (new Chart of Accounts) used for the budget and expenditure management data; and communication and data exchange capabilities across the
system or across the Local Area Network (LAN) and Wide Area Network (WAN), regardless of technology platform used within the system (Helene, 2001).

2.3.3 Fiscal risk from other public entities
The components of financial risks include: Interest rate risk which refers to the magnitude and likelihood of unanticipated changes in interest rates that influence both the costs of different capital sources in a particular currency denomination and the demand for the product; Exchange rate risk which refers to the magnitude and likelihood of unanticipated changes in exchange rate; Inflation rate which refers to the magnitude and likelihood of unanticipated changes in inflation rate; and Currency risk which includes Inflation and exchange rate risk taken together (Kathelijn, 2011).

Exchange, interest and inflation changes in the market constitute the three foremost forces that affect a firm’s value and are the major causes of a firm’s risk exposure and volatility. The three factors can influence the company’s value in a positive way, when the company is worth more than expected (upside risk), or in the negative way - the amount the company’s value decreasing more than it was expected (downside risk). Poor risk management practices coupled by lack of the right management strategy causes financial distress, while the smoothening of the upside risk gives the company value in the terms of lower taxation (Dione, 2013).

Furthermore, it should be recognized from the start that there is no single “optimal” model for the organizational structure of financial regulation. Local circumstances in a particular country are very important in determining the best institutional arrangement for that country. Therefore, no specific organizational model can be applicable to all countries, including countries in the same region. Moreover, it must be noted that the countries that have adopted an integrated approach have done so in different ways. The issue of an integrated versus a specialized approach to financial regulation is, thus, well defined, of much interest, and very relevant to the Sub-Saharan Africa. The different trade-offs need to be carefully balanced to assess the relative efficacy and efficiency of each institutional arrangement in meeting the main objectives of financial regulation.
2.3.4 Public access to key fiscal information

One of the major benefits of an IFMIS is the impact that it can have on corruption, by increasing the risk of detection. A well-designed IFMIS can provide a number of features that may help detect excessive payments, fraud and theft. These include, for example, automated identification of exceptions to normal operations, patterns of suspicious activities, automated cross-referencing of personal identification numbers for fraud, cross-referencing of asset inventories with equipment purchase to detect theft, automated cash disbursement rules and identification of ghost workers (Chene, 2009).

In Kenya there has been remarkable improvement in public access to fiscal information since the inception of IFMIS by the treasury. The public, NGOs, and other interested parties’ at least have had access to some key data unlike in the past. For instance the current drive for e-procurement for public works and services is a major window of public access to vital data which is indeed a key milestone in the fight against corruption in Kenya’s public sector (Economic Review, 2013).

2.4 Review of Empirical Literature


The study employed the OLS method to examine the relationship between nominated macroeconomic variables which are proxies to public sector financial management and IFMIS. The governments have consistently failed in the management of Inflation, Government expenditure and Government revenue. There was also the issue of investments which though had the right sign but with almost an insignificant positive value in the two periods. After IFMIS public sector appear to perform better than before IFMIS in these respects and also better in terms of the contributions of government revenue and government expenditure. Expectedly Gross Domestic Product Per Capita (GDPPC) had the highest contribution and also with the right
sign. The log-log model to establish the trend of incremental growth for the periods under study and found a very disturbing trend for the economy under study.

The computation of the GINI Index placed the period before IFMIS below the period after IFMIS which indicated the state of income distribution, human development and standard of living in Kenya. These results agree with the numbers representing the state of economic development of the economy under study for the two periods as computed by international organizations. The study found out that IFMIS has greatly contributed to improvement in financial management in Kenya. The study recommended that IFMIS should therefore be rolled out to all public sector departments in the country.

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

Study results indicated that lack of adequate knowledge by the users (F=5.638, p<.05), hurried implementation of the system (F=.304, p=.041), sabotage by top and technical level management (F=9.851, p=.001) and passive resistance (f=18.298, p=.000) had significant impact on the effective use of the IFMIS (F=4.735, p=0.017). Top management support was found to be critical for successful implementation of the IFMIS. Commitment by top management had significant effect on IFMIS has shown by the results (F=1.423, p=.05), their lack of commitment (F=.917, p=.042) and lack of proper understanding of IFMIS on the part of staff (F=.052, p=.021).

Miheso (2013) carried out a study on the adoption of integrated financial management information system (IFMIS) by the National government in Kenya. The study sought to establish the challenges facing the adoption of IFMIS in the national government in Kenya.
Training of IFMIS had been conducted to 100% of respondents. The same was also seen with training materials where 98% reported provision of training materials.

Over 90% have been informed how IFMIS will affect their current work practices and 95% say that IFMIS is stable with little or no down time. 83% are sure that IFMIS processes match with their manual processes and 73% said that all activities in the department are run within the IFMIS system. 23% respondents said that the exchequer budget release of funds on the IFMIS does not coincide with the manual funds release process. 25% did not agree that all payments approval are only carried out in IFMIS. 45% indicated that purchase orders were not exclusively through IFMIS. 78% are sure that LPO’s and invoices were manually captured into the IFMIS system.

The regression analysis showed that the R value of 0.494 indicates a low degree of correlation. The R square value of 24.4% indicates the dependent variables can be explained in a very small part by the independent variables. The coefficient tables all show that some of the independent variables have a significant effect on the module Records to Report. Even with moderating factors, the strong and reliable ICT infrastructure and Capacity building still had a significant effect on the module records to report-GL.

Nyabuto (2009) undertook a Survey of the Extent of Implementation of Integrated Financial Management Information System (Ifmis) As a Tool for Sustainable Financial Management in Government. The study was carried out using questionnaires which were administered to forty (40) accountants in 40 Ministries. The data was analyzed using preliminary analysis procedures that included percentages and frequencies. It was through such a descriptive survey that the study established that IFMIS implementation was behind schedule. The results revealed that there was resistance in the Ministries for the use of IFMIS. This implies that for IFMIS to succeed, such resistance must be overcome. Possible reasons for resistance included lack of training and fear of the unknown. Despite the resistance, it was found out that IFMIS had succeeded though still implementation was behind schedule. Consequently the government of Kenya has immensely benefited from the advantages of a computerized accounting system which is more reliable than the former stand-alone legacy systems.

Chebet (2013) carried out a study on the critical success factors in the implementation of the re-engineered integrated financial management information system in government ministries,
Kenya. The findings indicated that 54 respondents were targeted from which 45 of them completed and returned the questionnaires resulting in a response rate of 83.3%. This response rate was representative and excellent to make conclusions for the study. The findings showed that respondents had worked long enough in the ministries to have an intricate knowledge and understanding of the ministry and how IFMIS works. In addition, the study found that the majority of the departments which participated in the study actively participated in the re-engineered IFMIS implementation process. Most of the employees in the ministry were satisfied with the installation of the re-engineered IFMIS.

According to the findings, IFMIS can be used by system users to carry out transactions, that the system is functioning as it should with minimum problems and all the system features or capabilities for IFMIS were delivered while there is uncertainty as to whether the implementation was completed within the set budget and the implementation was accomplished within the planned timeline. The research identified 9 groups of factors that were critical in the re-engineering implementation process including: user involvement in the process and clear procedures for recruitment and risk management; proper management of resources; good communication strategies among stakeholders, team spirit and good support teams, skilled team; and clear.

Goonetilleke (2012) carried out a study on the identification of best practices for software application and outsourcing success in public sector organizations in Sri Lanka. The data was collected from the survey of fourteen (14) organizations based on thirty (30) projects and two hundred and twelve (212) system users from the public sector organizations. The users were included from the all the categories of the organizations such as top, middle and junior staff members. The status of those projects include success, failure, partial failure and in developing stage. The study identified key issues were identified in application software life cycle. The research has identified success, failure factors and software outsourcing success from the literature survey to design a conceptual model and introduced the Best Practices for the Sri Lankan context. The model was tested by identifying the relationship between success and prevention of failure factors with outsourcing success. This study will help the management and the Information Technology staff to identify the failure factors and take the necessary precautions using Best Practices. Hence, this study is timely and relevant for the public sector organizations in Sri Lanka as they are working towards the e-Government.
Nixon (2009) carried out a study on the e-Government artifact in the context of a Developing Country: Towards a nomadic Framework. According to findings of the study, the realization of e-government models such as G2G, G2B and G2C would depend on their conceptualization based on the digital content. There should be a shift in the mindset of stakeholders in developing countries on how to conceptualize the focus of e-government. The current focus is dominated by economic rationalization; however, when embracing the concept of community networks and other counter networks, the need to embrace political rationalization of e-government is clearly paramount.

The dependence relationship on the central government puts to question a well articulated meaning of e-government relevant to local context. Thus the central government's intention is to use ICT to enhance a *paternalistic relationship* with the local government agencies. This is propagated in the form of certain meanings and roles of e-government propagated by the technocrats from central government to achieve their professional objectives; which may be in opposition to the personal agendas of political officers, largely unclear of the role of e-government. The resulting paternalistic relationship between central government and the semi-autonomous local government agencies is likely to enhance the meaning of e-government to be within a managerialist discourse. The research recognizes the speculativeness of these consequences, given the assumption that was highlighted earlier. At both the local and national levels, lack of resources impairs the quick realization of e-government objectives, as well as the ambiguity of emerging meanings of e-government.

Peterson (2011) undertook a study on Reforming Public Financial Management in Africa. Reforms succeed when they are aligned with the four drivers of public sector reform: COPS—context, ownership, purpose and strategy. Public financial management is a core function of the state and its sovereignty and it is not an appropriate arena for foreign aid intervention—governments must fully own it, which was a key to the success of Ethiopia’s reform. The purpose of PFM reform should be building stable and sustainable ‘plateaus’ of PFM that are appropriate to the local context and they should not be about risky and irrelevant ‘summits’ of international best practice. Plateaus not summits are needed in Africa. Finally, a strategy of reform has four processes: recognize, improve, change, and sustain. Ethiopia succeeded because it implemented a recognize-improve-sustain strategy to support the government policy of rapid
decentralization. All too often, much of PFM reform in Africa is about the change task and climbing financial summits.

Spriano (2013) carried out a study on the successes and failures of e-Government projects in Developing Countries: a case study of Zambia. The study used an online survey based on a modified version of the Heeks Factor Model that focuses on soft human aspects known to be critical in the implementation of e-government projects. Data was collected from 121 respondents from Zambia between the month of September and October 2012. The results of the study indicted a rating score of 55.1 based on Heeks 100 point scale implying a mighty fail totally or partially. In addition the awareness of the e-government projects was found to be inadequate.

Kandiri (2014) carried out a study on the Effective Implementation of Technology Innovations in Higher Education Institutions: Study focused on a Survey of Selected Projects in African Universities. The projects that were implemented between 2008 and 2012 endeavored to stimulate technology uptake in African universities. The study was based on 26 technology implementation projects drawn from seven universities spread in six countries in Sub-Saharan Africa. The exploratory study adopted a critical realism method so as to unearth the issues that affect technology implementation effectiveness. A total of 105 usable survey responses were received with 53 interviews conducted. Due to the dichotomous nature of determining implementation effectiveness (successful or failure), logistic regression was used to determine the factors that influence technology innovation implementation effectiveness.

The items within the broader variables were subjected to exploratory factor analysis using principal component method. It was found that 30 percent of the projects were partial successful since they met only some of the objectives, 55 percent had techno-political failure with 15 percent absolute failures. The results showed that monitoring and evaluation, top management, organizational culture, team leadership, financial motivation, organizational climate and innovation efficacy were important determinant to technology implementation effectiveness. Technology framing, innovation environment and innovation attributes were found to be underlying issues in technology implementation. The study recommended need to manage technology transfer problem, develop innovation adopting nature and absorptive capacity in universities so as to enhance technology innovation implementation effectiveness.
2.5 Summary of the Literature Review.

The ensuing research is based on a summary of the literature thus presented. Much of the review considers empirical works published in academic journals from 1990 to 2014. The review started by looking at the theoretical perspective of IFMIS and the benefits of adopting IFMIS in state corporations based on past empirical studies. It then presented divergent Critical Success Factors in the adoption and implementation of IFMIS and finally provided an overview of the empirical findings on the impact of adopting and implementing IFMIS on financial performance. Empirical outcomes of past studies support the idea that public organizations can enhance their procurement performance through the adoption of IFMIS under the governance of facilitators to financial performance, in spite of the realization that barriers to IFMIS adoption and implementation also exist.

IFMIS provide an integrated computerized financial package to enhance the effectiveness and transparency of public resource management by computerizing the budget management and accounting system for a government. From the ensuing discussion it is clear that; sound IFMIS systems, coupled with the adoption of centralized treasury operations, can not only help developing country governments gain effective control over their finances, but also enhance transparency and accountability, reducing political discretion and acting as a deterrent to corruption and fraud.

The road to implementing successful IFMIS in Kenya like other developing countries is paved with challenges, such as resistance from the bureaucracies involved; lack of decision-making from the top; weak human capital; corruption and fraud; and, in the case of conflict-ridden countries, the instability and violence that impair any efficient long-term work. Obstacles notwithstanding, the task is still feasible. For successful adoption and implementation of IFMIS, critical success factors must therefore be in place to overcome the challenges noted above.

While abundant literature exists on the subject of IFMIS, most of the studies have however not exhaustively investigated the relationship between IFMIS and financial performance. The current study therefore seeks to fill this literature gap by establishing the link between IFMIS and financial performance among state corporations in Kenya.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction
This chapter introduces the logical framework followed in the process of conducting the study. It is divided into: research design, population and sample, data collection and data analysis, data validity and reliability.

3.2 Research Design
The study adopted a descriptive survey design. A descriptive survey enables the researcher to obtain large amounts of data from a sizable population in a highly effective, easy and in an economical way using questionnaires. In addition, a descriptive survey enables a researcher to obtain quantitative data which he can analyse using descriptive and inferential statistics (Saunders et al., 2002).

3.3 Population and Sample Size
Mugenda and Mugenda (2003) defines a population as an aggregate of all that conform to a given characteristics. A census survey was conducted on the 53 commercial state corporations in Kenya. The respondents in the study included managers and supervisors.

3.4 Data Collection
Both primary and secondary data was used in this study. The primary data was collected using a semi-structured questionnaire subdivided into two parts. Part 1 consisted of open-ended questions aimed at obtaining general information on the corporation while Part 2 consisted of questions aimed at obtaining data on financial performance.

3.5 Data Analysis
3.5.1 The Conceptual Model
The study sought to examine how IFMIS relates to the financial performance of commercial state corporations in Kenya. The independent variables included: The Corporation’s application of IFMIS in stock and monitoring of expenditure payment; the corporations’ use of IFMIS to enhance transparency of inter-governmental fiscal relations; the agency’s application of IFMIS to oversight aggregate fiscal risk from other public entities; the corporation’s application of IFMIS to enhance public access to key fiscal information; and the corporation’s application of IFMIS to facilitate orderliness and participation of the annual budget process.
The dependent variable was the financial performance of the commercial state corporations. The relationship among the variable was estimated using the function;

\[ F_p = f(\text{IFMISPs}) \]

Where;

- \( F_p \) = Financial Performance (ROA) of the state corporations
- \( \text{IFMISPs} \) = Integrated Financial Management Practices

The respective variables are discussed below;

Financial Performance determines specific measurements that could measure the success of a company in generating profits (Sucipto, 2003). Financial performance is calculated by using financial ratios. The ratios are the results of a comparison between numbers of one financial figure and other financial figures. In the current study, ROA (Return on Assets) will be used as a performance metric. The key financial statements consist of the balance sheet, profit / loss, cash flows, and changes in equity positions.

There are several categories of the ratio that can be used as a measurement of financial performance: profitability, liquidity, solvency, turn-over, efficiency, and effectiveness (Djohanputro, 2008). Financial performance measures such as profitability and market share price will be used. To measure financial performance data on financial results especially profit after tax will be obtained and analyzed using descriptive frequency analysis will be used to analyze and SPSS will be used to draw the graphs.

In order to determine the significance of IFMIS application on Stock and monitoring of expenditure descriptive frequency analysis was used to analyze and MS-Excel was applied to draw the graphs. To measure transparency the research focused on corporate governance practices such as board meeting attendance, customer complaints, conflict of interest and board composition. Descriptive Analysis tools was used to find out the percentage of each scale and average number of response was considered in order to establish the significance of IFMIS application in enhancing transparency in state corporations.

Financial risk refers to the extent that an entity will be exposed to financial loss as a result of fraudulent dealings. In this case measures such as internal controls will be used to determine the significance of IFMIS application on the reduction and or eradication of financial risk exposure.
The significance of the relationship was checked using Pearson’s correlation. Information access by the public was measured by the ease and adequacy at which citizens are able to access information and this will be analyzed using descriptive Frequency Analysis was used to analyze and SPSS will be used to draw the graphs.

3.5.2 The Regression model

\[
Y (ROA) = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \varepsilon
\]

Where;

\(Y\) = Financial Performance (ROA)

\(\beta_0\)= Constant

\(\beta_1, \beta_2, \beta_3, \beta_4, \beta_5\) = Coefficients of determination

\(X_1\) = The Corporation has aligned her goals to the overall public financial sector reforms

\(X_2\) = The Corporation has adopted e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information

\(X_3\) = The Corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers

\(X_4\) = the corporation’s application of IFMIS to enhance public access to key fiscal information by maintaining a website and platform which is accessible to the public

\(X_5\) = The corporation is able to enhance its flexibility and responsiveness to changes in customer demand

\(X_6\) = The corporation partakes in knowledge sharing in the design stage with other state corporations

\(\varepsilon\) = Random error
3.6 Data Validity and Reliability

F-test was used to test the joint significance of all the coefficients and t-test for significance of individual coefficients. Measures of central tendency (mean) and measures of dispersion (standard deviation) will be used to analyze the data. T-test was interpreted based on the p-significance value.
4.1 Introduction

Data on Integrated Financial Management practices adopted by commercial state corporations in Kenya in their quest to enhance their financial performance was analysed. The demographic data was examined using descriptive statistics and summarized in various frequency tables. With the help of SPSS statistical software, data on Integrated Financial Management practices adopted and their impact on the financial performance of the respective commercial state corporations was analysed using; mean scores, standard deviations, coefficients of variation and regression analysis. The factors were ranked in order of importance, the correlation between them yielded the key factors that loaded most on the components and therefore had the greatest impact on the financial performance. Fifty-three (53) questionnaires were administered to the selected commercial state corporations. Thirty-eight (38) of these questionnaires were returned representing a response rate of 71.6 percent. The analysis, findings, and discussion are presented below.

4.2 Demographic Information

The demographic characteristics of the respondents that were tested include age and sector under which the state corporations fall and whether the respective corporations have participated in integrated financial Management.

4.2.1 Sector under which the state Corporations fall

Different sectors contribute to the National gross domestic product proportionate to their economic potential. The study sought to determine the distribution of commercial state corporations across the sectors in Kenya. The respondents were required to indicate the economic sector under which their corporations fall. The results are shown in Table 4.1.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>13</td>
<td>34.2</td>
</tr>
<tr>
<td>Financial sector</td>
<td>3</td>
<td>7.9</td>
</tr>
<tr>
<td>Building &amp; construction</td>
<td>2</td>
<td>5.3</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----</td>
<td>-----</td>
</tr>
<tr>
<td>Education</td>
<td>8</td>
<td>21.1</td>
</tr>
<tr>
<td>Health sector</td>
<td>3</td>
<td>7.9</td>
</tr>
<tr>
<td>Telecommunication</td>
<td>5</td>
<td>13.2</td>
</tr>
<tr>
<td>Energy &amp; Mining</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Author (2014)

The findings in Table 4.1 show that most state corporations in Kenya fall in the agricultural sector with 34.2% while the least number of commercial state corporations fall under building & Construction sector. This is attributed to the fact that agriculture is the main economic activity in Kenya. These findings compliments those of Chiang and Bitch (2012) while investigating the role of IFMIS in enhancing transparency and accountability in public financial management in developing countries.

A fully functioning IFMIS can improve governance by providing real-time financial information and manage resources. Sound IFMIS systems, coupled with the adoption of centralized treasury operations, can not only help developing country governments gain effective control over their finances, but also enhance transparency and accountability, reducing political discretion and acting as a deterrent to corruption and fraud (Chiang and Bitch, 2012).

4.2.2 Participation in Integrated Financial Management
Successful adoption and implementation of a sound public finance policy depends on the extent to which the respective strategies are adopted by key stakeholders in the economy. The current public finance reforms spearheaded by the treasury under the umbrella of financial process reengineering calls for all state corporations to partake in Integrated Financial Management.

The study sought to determine the number of commercial state corporations that have participated in Integrated Financial Management in line with the national public finance strategy. The results are shown in Table 4.2
Table 4.2 Participation in Integrated Financial Management

<table>
<thead>
<tr>
<th>Participation level</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The state corporation has not participated in Integrated Financial Management</td>
<td>12</td>
<td>31.6</td>
</tr>
<tr>
<td>State corporation has participated in Integrated Financial Management</td>
<td>26</td>
<td>68.4</td>
</tr>
<tr>
<td>Total</td>
<td>38.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Author (2014)

The results in Table 4.2 indicate that 68.4% of state corporations in Kenya participate in Integrated Financial Management. This is a clear indication that the government’s effort to reform public financial management in Kenya has started bearing fruit. However, the fact that 31.6% of state corporations have not participated in Integrated Financial Management raises implies that the country has a long way to go in ensuring that its current public financial management reform model is fully adopted in tandem with the 2013 Vision. These findings concur with Spriano (2013) who carried out a study on the successes and failures of e-Government projects in Developing Countries: a case study of Zambia. According to him, the implementations of e-government projects in Sub-Saharan Africa largely fail due to poor communication and lack of adequate awareness among the key stakeholders.

4.3 Integrated Financial Management

Integrated Financial Management is fast becoming the best reform strategy in public financial management today not only in Kenya but across Sub-Saharan Africa due to its agility and scalability. The study sought to determine; the various IFMIS practices and the extent to which they have been adopted by commercial state corporations in Kenya, and to establish the relationship between Integrated Financial Management and the Financial performance of commercial state corporations in Kenya.
4.3.1 Integrated Financial Management Practices

The effectiveness of an Integrated Financial Management system lies in the implementation of specific IFMIS practice. The study sought to determine the various IFMIS approaches/practices undertaken by the state corporations. In the initial step, a correlation matrix was generated to identify any significant relation between the items. Descriptive statistics were used to determine the variance of the integrated Financial Management practices as shown in Table 4.3 below;

Table 4.3: Integrated Financial Management Practices - Descriptive analysis

<table>
<thead>
<tr>
<th>IFMIS practice</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Analysis N</th>
</tr>
</thead>
<tbody>
<tr>
<td>The corporation has aligned her goals to the overall public financial sector reforms</td>
<td>1.1957</td>
<td>1.85802</td>
<td>38</td>
</tr>
<tr>
<td>The corporation is able to enhance its flexibility and responsiveness to changes in customer demand</td>
<td>4.2391</td>
<td>1.16866</td>
<td>38</td>
</tr>
<tr>
<td>The corporation applies e-POS (electronic Point of Sale) solution to enhance efficiency in expenditure payment</td>
<td>3.8261</td>
<td>1.22572</td>
<td>38</td>
</tr>
<tr>
<td>The agency has Inter-organizational relationship and interdependency with other state corporations as regards to proper financial reporting in order to enable the public access key data</td>
<td>4.0652</td>
<td>1.33020</td>
<td>38</td>
</tr>
<tr>
<td>The corporation maintains a website and platform which is accessible to the public</td>
<td>4.0217</td>
<td>1.57289</td>
<td>38</td>
</tr>
<tr>
<td>The corporation has adopted e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information</td>
<td>2.0870</td>
<td>1.71076</td>
<td>38</td>
</tr>
<tr>
<td>The corporation partakes in the presentation of timely and relevant financial data and reporting that is adequate to meet the information needs of the public and other stakeholders</td>
<td>3.5435</td>
<td>1.43022</td>
<td>38</td>
</tr>
<tr>
<td>The corporation has established automated identification of exceptions to normal operations and cross-referencing of inventories and assets</td>
<td>3.5435</td>
<td>1.43022</td>
<td>38</td>
</tr>
<tr>
<td>The corporation partakes in knowledge sharing in the design stage with other state corporations</td>
<td>3.4348</td>
<td>1.50404</td>
<td>38</td>
</tr>
<tr>
<td>The corporation partakes in an established effective information flow among</td>
<td>3.7609</td>
<td>1.45268</td>
<td>38</td>
</tr>
</tbody>
</table>
The state corporations on financial matters

<table>
<thead>
<tr>
<th>The corporation is able to enhance its flexibility and responsiveness to changes in customer demand</th>
<th>3.6957</th>
<th>1.53599</th>
</tr>
</thead>
<tbody>
<tr>
<td>The corporation applies modern Control &amp; Assets tracking techniques like; barcode based data capture &amp; tracking devices</td>
<td>3.8043</td>
<td>1.33378</td>
</tr>
<tr>
<td>The Corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers</td>
<td>2.0621</td>
<td>1.65090</td>
</tr>
</tbody>
</table>

**Source: Researcher (2014)**

The findings in Table 4.3 above indicate that all the commercial state corporations have adopted IFMIS practices to some extent. The adoption of Inter-organizational relationship and interdependency with other state corporations as regards to proper financial reporting in order to enable the public access key data has the highest mean of 4.062 meaning that most corporations have adopted this practice to a large extent. The corporation’s alignment of her goals to the overall public financial sector reforms is adopted to the lowest extent with a mean value of 1.1957. The findings above support the fact that many state corporations are now responding to the current public financial reforms. The findings concur with Chebet (2013) who found that most state corporations fast adopting IFMIS to enhance their financial performance.

Factor analysis was applied where in the initial step; a correlation matrix was generated to identify any significant relation between the items. The number of factors corresponded to the number of respondents responses to the questions on Integrated Financial Management practices. The principle component matrix is presented in Table 4.4 below;
Table 4.4: IFMIS practices – Component Matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>The corporation has adopted e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information</td>
<td>1.00</td>
<td>0.888</td>
</tr>
<tr>
<td>The corporation partakes in the presentation of timely and relevant financial data and reporting that is adequate to meet the information needs of the public and other stakeholders</td>
<td>1.00</td>
<td>0.732</td>
</tr>
<tr>
<td>The corporation applies modern Control &amp; Assets tracking techniques like; barcode based data capture &amp; tracking devices</td>
<td>1.00</td>
<td>0.797</td>
</tr>
<tr>
<td>The corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers</td>
<td>1.00</td>
<td>0.859</td>
</tr>
<tr>
<td>The corporation applies e-POS (electronic Point of Sale) solution to enhance efficiency in expenditure payment</td>
<td>1.00</td>
<td>0.763</td>
</tr>
<tr>
<td>The corporation is able to enhance its flexibility and responsiveness to changes in customer demand</td>
<td>1.00</td>
<td>0.625</td>
</tr>
<tr>
<td>The corporation partakes in an established effective information flow among the state corporations on financial matters</td>
<td>1.00</td>
<td>0.723</td>
</tr>
<tr>
<td>The corporation partakes in knowledge sharing in the design stage with other state corporations</td>
<td>1.00</td>
<td>0.810</td>
</tr>
<tr>
<td>The corporation is able to enhance its flexibility and responsiveness to changes in customer demand</td>
<td>1.00</td>
<td>0.817</td>
</tr>
<tr>
<td>The corporation maintains a website and platform which is accessible to the public</td>
<td>1.00</td>
<td>0.820</td>
</tr>
<tr>
<td>The corporation has established automated identification of exceptions to normal operations and cross-referencing of inventories and assets</td>
<td>1.00</td>
<td>0.774</td>
</tr>
<tr>
<td>The agency has Inter-organizational relationship and interdependency with other state corporations as regards to proper financial reporting in order to enable the public access key data</td>
<td>1.00</td>
<td>0.641</td>
</tr>
<tr>
<td>The corporation has aligned her goals to the overall public financial sector reforms</td>
<td>1.00</td>
<td>0.891</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
6 components extracted.
Source: Author (2014)
Before extraction there were thirteen eigenvectors from which six principal components were extracted for Integrated Financial Management. Observations indicated that the six decision factors accounted for 78.019% of the total thirteen factors as illustrated in table 4.3 above. This indicates that six major integrated financial management practices account for 78.019% of the total variation. The findings are presented in Table 4.5 below;

**Table 4.5: Integrated Financial Management Practices – Total variance**

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>2</td>
<td>1.873</td>
<td>14.406</td>
<td>36.344</td>
</tr>
<tr>
<td>3</td>
<td>1.635</td>
<td>12.573</td>
<td>48.917</td>
</tr>
<tr>
<td>4</td>
<td>1.484</td>
<td>11.417</td>
<td>60.334</td>
</tr>
<tr>
<td>5</td>
<td>1.287</td>
<td>9.902</td>
<td>70.236</td>
</tr>
<tr>
<td>6</td>
<td>1.012</td>
<td>7.783</td>
<td>78.019</td>
</tr>
<tr>
<td>7</td>
<td>.850</td>
<td>6.537</td>
<td>84.556</td>
</tr>
<tr>
<td>8</td>
<td>.558</td>
<td>4.296</td>
<td>88.852</td>
</tr>
<tr>
<td>9</td>
<td>.449</td>
<td>3.453</td>
<td>92.305</td>
</tr>
<tr>
<td>10</td>
<td>.383</td>
<td>2.943</td>
<td>95.248</td>
</tr>
<tr>
<td>11</td>
<td>.229</td>
<td>1.765</td>
<td>97.013</td>
</tr>
<tr>
<td>12</td>
<td>.217</td>
<td>1.669</td>
<td>98.682</td>
</tr>
<tr>
<td>13</td>
<td>.171</td>
<td>1.318</td>
<td>100.000</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

**Source: Author (2014)**

The communalities (Table 4.4) were greatest for The corporation has aligned her goals to the overall public financial sector reforms, The corporation has adopted e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information, with The
corporation is able to enhance its flexibility and responsiveness to changes in customer demand ranking lowest. The communalities after extraction for each factor were a reflection of the variance that the factor contributed to the component. The triple constraints loaded significantly on the first component and were identified as the key clustering within this component due to the high correlation among them. Items that did not load at least 0.40 on the components matrix made little contribution to the discourse and were not included in the analysis, with at least three items loading on each of the retained components (Goonetilleke, 2012).

The results in Tables 4.4 and 4.5 above indicate that six integrated financial management practices that have the greatest impact on the financial performance of commercial state corporations. These IFMIS practices include: The Corporation has aligned her goals to the overall public financial sector reforms; The Corporation has adopted e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information; The Corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers; The corporation maintains a website and platform which is accessible to the public; The corporation is able to enhance its flexibility and responsiveness to changes in customer demand; and The corporation partakes in knowledge sharing in the design stage with other state corporations. The findings above complement those of Dione (2013) in his study of the critical success factors in public financial management efficiency in the third world.

Table 4.5 shows that the corporation’s alignment of goals to the overall public financial sector reforms is having the greatest influence on the financial performance of commercial state corporations since it accounts for 20.404% of the financial performance variation followed by The Corporation’s adoption of e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information (12.892%), The Corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers (12.487), The corporation maintains a website and platform which is accessible to the public (11.889%), The corporation is able to enhance its flexibility and responsiveness to changes in customer demand (10.725%), and The corporation partakes in knowledge sharing in the design stage with other state corporations (9.622%).
Going by the findings above, it is clear that most of the key IFMIS approaches have been adopted to a small extent thus underscoring the need for the government to undertake capacity building in key public financial management institutions to achieve the goals of the current public financial reforms. The findings support Show (2010) who found that effective public financial management systems require other related expenditure control mechanisms including reporting and auditing sub-systems to ensure transparency, accountability, and compliance with the budget or with existing regulations that govern public expenditure management.

4.3.2 Financial Performance of State Corporations
The adoption and implementation of IFMIS improves not only the financial performance of state corporations but also enhances their competitiveness. IFMIS overcome the obstacles arising from the hitherto poor system designs that lack critical functionality, controls, automated bank reconciliation, audit trails and systems documentation and weak access to security.

Several performance indicators are used to determine the financial performance of an organization. The study focused ROA (Return on Assets) as a key financial performance indicator among state corporations. Respondents were required to provide information regarding the financial performance of their corporations. In addition, the respondents were required to respond to eight questions on the financial performance indicators including: recurrent savings, resource utilization, transaction cost reduction, reduction in process time, training utilization, total expenditure of the department to total budget of the department, and recurrent cost not incurred under parallel systems.

A five year average of ROA of all the state corporations was then determined for analysis as indicated in Table 4.6 below;
### Table 4.6 Average Financial Performance

<table>
<thead>
<tr>
<th>CORPORATION</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>APP (ROA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X1</td>
<td>X2</td>
<td>X3</td>
<td>X4</td>
<td>X5</td>
<td>N</td>
</tr>
<tr>
<td>F1</td>
<td>10.3</td>
<td>26</td>
<td>58.5</td>
<td>83.5</td>
<td>47.6</td>
<td>38</td>
</tr>
<tr>
<td>F2</td>
<td>12.2</td>
<td>69.5</td>
<td>69.5</td>
<td>69.5</td>
<td>11.2</td>
<td>38</td>
</tr>
<tr>
<td>F3</td>
<td>31.2</td>
<td>24.2</td>
<td>51.6</td>
<td>32</td>
<td>66.11</td>
<td>38</td>
</tr>
<tr>
<td>F4</td>
<td>45.1</td>
<td>50.4</td>
<td>45.1</td>
<td>33.9</td>
<td>58.1</td>
<td>38</td>
</tr>
<tr>
<td>F5</td>
<td>10</td>
<td>69.5</td>
<td>53.5</td>
<td>45.6</td>
<td>50.4</td>
<td>38</td>
</tr>
<tr>
<td>F6</td>
<td>5.6</td>
<td>43.5</td>
<td>35.8</td>
<td>66.2</td>
<td>48.1</td>
<td>38</td>
</tr>
<tr>
<td>F7</td>
<td>44</td>
<td>62.8</td>
<td>36.5</td>
<td>41.2</td>
<td>75.2</td>
<td>38</td>
</tr>
<tr>
<td>F8</td>
<td>32.8</td>
<td>66.7</td>
<td>68.4</td>
<td>55.1</td>
<td>45.9</td>
<td>38</td>
</tr>
<tr>
<td>F9</td>
<td>20.5</td>
<td>44.2</td>
<td>59.3</td>
<td>74.2</td>
<td>43.8</td>
<td>38</td>
</tr>
<tr>
<td>F10</td>
<td>48.8</td>
<td>62.4</td>
<td>50.1</td>
<td>42.6</td>
<td>26.5</td>
<td>38</td>
</tr>
<tr>
<td>F11</td>
<td>22.4</td>
<td>33.6</td>
<td>20.7</td>
<td>33.9</td>
<td>44.9</td>
<td>38</td>
</tr>
<tr>
<td>F12</td>
<td>26.1</td>
<td>45.7</td>
<td>66.2</td>
<td>37.9</td>
<td>57.5</td>
<td>38</td>
</tr>
<tr>
<td>F13</td>
<td>62.8</td>
<td>74.2</td>
<td>51.2</td>
<td>57.4</td>
<td>31.8</td>
<td>38</td>
</tr>
<tr>
<td>F14</td>
<td>29.5</td>
<td>56.2</td>
<td>50.7</td>
<td>33.1</td>
<td>59.6</td>
<td>38</td>
</tr>
<tr>
<td>F15</td>
<td>74.2</td>
<td>36.5</td>
<td>41.2</td>
<td>44.6</td>
<td>33.8</td>
<td>38</td>
</tr>
<tr>
<td>F16</td>
<td>33.6</td>
<td>20.7</td>
<td>33.9</td>
<td>22.6</td>
<td>60.2</td>
<td>38</td>
</tr>
<tr>
<td>F17</td>
<td>25.3</td>
<td>45.3</td>
<td>26.1</td>
<td>62.8</td>
<td>62.8</td>
<td>38</td>
</tr>
<tr>
<td>F18</td>
<td>36.5</td>
<td>41.2</td>
<td>68.9</td>
<td>22.4</td>
<td>33.6</td>
<td>38</td>
</tr>
<tr>
<td>F19</td>
<td>68.9</td>
<td>83.5</td>
<td>28.2</td>
<td>74.2</td>
<td>77.6</td>
<td>38</td>
</tr>
<tr>
<td>F20</td>
<td>11.2</td>
<td>36.8</td>
<td>20.7</td>
<td>33.9</td>
<td>22.6</td>
<td>38</td>
</tr>
<tr>
<td>F21</td>
<td>62.8</td>
<td>51.2</td>
<td>83.5</td>
<td>33.5</td>
<td>51.2</td>
<td>38</td>
</tr>
<tr>
<td>F22</td>
<td>51.2</td>
<td>62.8</td>
<td>62.8</td>
<td>62.8</td>
<td>33.1</td>
<td>38</td>
</tr>
<tr>
<td>F23</td>
<td>86.1</td>
<td>36.5</td>
<td>41.2</td>
<td>51.2</td>
<td>23.2</td>
<td>38</td>
</tr>
<tr>
<td>F24</td>
<td>41.2</td>
<td>28.2</td>
<td>69.5</td>
<td>13.6</td>
<td>35.9</td>
<td>38</td>
</tr>
<tr>
<td>F25</td>
<td>51.2</td>
<td>83.5</td>
<td>19.5</td>
<td>51.2</td>
<td>19.5</td>
<td>38</td>
</tr>
<tr>
<td>F26</td>
<td>82.1</td>
<td>36.9</td>
<td>56.8</td>
<td>75.2</td>
<td>74.3</td>
<td>38</td>
</tr>
</tbody>
</table>
4.4 IFMIS and Financial Performance

The integration of different functions and entities within a shared database provide managers with tools to plan, manage, and control public resources. Automation is an important IFMIS feature whose benefits include: improved transparency of public sector operations; rapid expedition of many transactions at once (contrary to manual systems which are cumbersome and slow); improved efficiency of financial controls and other expenditure management procedures; rapid compilation of data from many sources for improved financial analysis and decision making; and improved consistency of information and improved checks and balances.

To establish the relationship between Integrated Financial Management and financial performance among commercial state corporations a regression analysis was done using SPSS version 21 statistical package. The independent variables included: The Corporation has aligned her goals to the overall public financial sector reforms; The Corporation has adopted e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information; The Corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost
workers; The corporation maintains a website and platform which is accessible to the public; The corporation is able to enhance its flexibility and responsiveness to changes in customer demand; and The corporation partakes in knowledge sharing in the design stage with other state corporations. The dependent variable was financial performance (ROA). The performance indices for the state corporations indicated in Table 4.6 above were used as the dependent variable in the regression analysis.

4.4.1 Establishing the link between IFMIS and Financial performance
With the help of SPSS version 19 package the above data was analyzed to establish the relationship between Integrated Financial Management practices (Independent variables) and Financial performance (dependent variable). A multiple regression model was used in this analysis. The resulting regression coefficients have been used to interpret the direction and magnitude of the relationship. The beta coefficients show the responsiveness of the dependent variable as a result of unit change in each of the independent variables (IFMIS practices). The error term ε captures the variations that cannot be explained by the model.

Table 4.7 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.918a</td>
<td>.843</td>
<td>.805</td>
<td>0.51038</td>
<td>.843 1.242 4 36 0.001 3.109</td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), The Corporation has aligned her goals to the overall public financial sector reforms; The Corporation has adopted e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information; The Corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers; The corporation maintains a website and platform which is accessible to the public; The corporation is able to enhance its flexibility and responsiveness to changes in customer demand; and The corporation partakes in knowledge sharing in the design stage with other state corporations

b. Dependent Variable: Financial Performance

Source: Author (2014)
From Table 4.7 above, the Coefficient of Multiple Determination ($R^2$) is 0.843 which implies that the model is of high ‘goodness of fit’. This means that the regression line explains 84.3% of the variation in financial performance.

Table 4.8 ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.852</td>
<td>4</td>
<td>0.213</td>
<td>1.242</td>
<td>.001</td>
</tr>
<tr>
<td>Residual</td>
<td>6.173</td>
<td>36</td>
<td>0.171</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.024</td>
<td>40</td>
<td>0.171</td>
<td>1.242</td>
<td>.001</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), The Corporation has aligned her goals to the overall public financial sector reforms; The Corporation has adopted e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information; The Corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers; The corporation maintains a website and platform which is accessible to the public; The corporation is able to enhance its flexibility and responsiveness to changes in customer demand; and The corporation partakes in knowledge sharing in the design stage with other state corporations

b. Dependent Variable : Financial Performance

Source: Author (2014)

Table 4.8 above indicted that the F static was 1.242 with a significant change of 0.001%. This implies that the impact of IFMIS practices on financial performance is significant at 5% confidence level.

Table 4.9 IFMIS – Model Coefficients

<table>
<thead>
<tr>
<th>Constant</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>0.565</td>
</tr>
<tr>
<td>The Corporation has adopted e-government models such as G2G, G2B, and G2C which enhance public access to key</td>
<td>X1</td>
<td>0.131</td>
<td>0.048</td>
<td>0.254</td>
</tr>
</tbody>
</table>
The Corporation has aligned her goals to the overall public financial sector reforms

<table>
<thead>
<tr>
<th>Practice</th>
<th>X2</th>
<th>0.170</th>
<th>0.045</th>
<th>-0.300</th>
<th>3.778</th>
<th>0.000</th>
</tr>
</thead>
</table>

The corporation maintains a website and platform which is accessible to the public

<table>
<thead>
<tr>
<th>Practice</th>
<th>X3</th>
<th>0.051</th>
<th>0.023</th>
<th>0.113</th>
<th>2.217</th>
<th>0.002</th>
</tr>
</thead>
</table>

The corporation is able to enhance its flexibility and responsiveness to changes in customer demand

<table>
<thead>
<tr>
<th>Practice</th>
<th>X4</th>
<th>0.048</th>
<th>0.022</th>
<th>0.093</th>
<th>2.182</th>
<th>0.000</th>
</tr>
</thead>
</table>

The Corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers;

<table>
<thead>
<tr>
<th>Practice</th>
<th>X5</th>
<th>0.075</th>
<th>0.066</th>
<th>1.124</th>
<th>0.270</th>
<th>-0.061</th>
</tr>
</thead>
</table>

The corporation partakes in knowledge sharing in the design stage with other state corporations

<table>
<thead>
<tr>
<th>Practice</th>
<th>X6</th>
<th>0.031</th>
<th>0.020</th>
<th>1.496</th>
<th>0.145</th>
<th>-0.072</th>
</tr>
</thead>
</table>

**Source: Author (2014)**

The results in Table 4.9 above indicate all the IFMIS practices have a positive effect on financial performance. The most influential IFMIS practice is the Corporation’s alignment of her goals to the overall public financial sector reforms with a regression coefficient of 0.170 and a P-value of
The Corporation’s adoption of e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information follows with a correlation coefficient of 0.131 and a P-value of 0.00. Next is the Corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers with a correlation coefficient of 0.075 and P-Value of -0.061; The corporation maintains a website and platform which is accessible to the public with a correlation coefficient of 0.051 and P-value of 0.002; The corporation is able to enhance its flexibility and responsiveness to changes in customer demand with a correlation coefficient of 0.048 and P-Value of 0.000; and the corporation partakes in knowledge sharing in the design stage with other state corporations with a correlation coefficient of 0.031 and P-value of -0.072.

From Table 4.7 the Coefficient of multiple Determination (R² Square) is 0.843 indicating that the regression line explains 84.3% of the variation in the financial performance of commercial state corporations. As per the SPSS generated results shown in Table 4.9 the Equation \( Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \varepsilon \) becomes;

\[
Y = 0.260 + 0.131X_1 + 0.170X_2 + 0.051X_3 + 0.048X_4 + 0.075X_5 + 0.031X_6 + \varepsilon
\]

Where;

\( Y = \) Financial performance (ROA)

\( X_1 = \) The Corporation has adopted e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information.

\( X_2 = \) The Corporation has aligned her goals to the overall public financial sector reforms.

\( X_3 = \) The corporation maintains a website and platform which is accessible to the public.

\( X_4 = \) The corporation’s application of IFMIS to enhance public access to key fiscal information by maintaining a website and platform which is accessible to the public.

\( X_5 = \) The corporation is able to enhance its flexibility and responsiveness to changes in customer demand.

\( X_6 = \) The Corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers;
\(X_6 = \) The corporation partakes in knowledge sharing in the design stage with other state corporations

\(e = \) Random error

According to the regression equation established above, taking all other independent variables at zero, the financial performance of commercial state corporations will be 0.260. The data findings analyzed also shows that holding all other independent variables constant, a unit increase in the corporation’s alignment of her goals to the overall public financial sector reforms lead to a 0.170 increase the financial performance of the state corporations. Keeping all other variables constant, a unit increase in the corporation’s adoption of e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information will lead to an increase of 0.131 in the financial performance of the state corporations. Taking all other independent variables constant, a unit increase in the corporation’s application of IFMIS to enhance public access to key fiscal information by maintaining a website and platform which is accessible to the public will lead to a 0.051 increase the financial performance of state corporations.

On the other hand, taking all other independent variables constant, a unit increase in the corporation’s ability to enhance its flexibility and responsiveness to changes in customer demand will lead to a 0.048 increase in the financial performance of the commercial state corporations. Taking all other independent variables constant, a unit increase in the corporation’s The Corporation’s maintenance of automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers will lead to a 0.075 increase in the financial performance of state corporations. Finally, taking all other independent variables constant, a unit increase in the corporation’s partaking in knowledge sharing in the design stage with other state corporations will lead to a 0.031 increase in the financial performance of the commercial state corporations.
4.5 Summary and Interpretation of the findings

The findings indicate that all the state corporations have adopted IFMIS practices to some extent given the fact that all the IFMIS practices have a mean of over 1.1957. Using Principal component analysis six major IFMIS practices accounting for 78.019% of the total variation in the Financial performance of the corporations where identified. The corporation’s alignment of goals to the overall public financial sector reforms is having the greatest influence on the financial performance of commercial state corporations since it accounts for 20.404% of the financial performance variation followed by the Corporation’s adoption of e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information (12.892%). The corporation partakes in knowledge sharing in the design stage with other state corporations has the least impact on the financial performance of the state corporations at 9.622%.

The outcome of the regression analysis indicates that IFMIS practices have had a significant impact on the financial performance of state corporations in Kenya during the period under study. This is supported by the high Coefficient of Multiple Determination (R$^2$ Square) of 0.843 and significance change of 0.001 implying that the impact of e-procurement practices is significant at 5% confidence interval. The most influential IFMIS practice is the Corporation’s alignment of her goals to the overall public financial sector reforms with a regression coefficient of 0.170 and a P-value of 0.000. The Corporation’s adoption of e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information follows with a correlation coefficient of 0.131 and a P-value of 0.00. Next is the Corporation’s maintenance of automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers with a correlation coefficient of 0.075 and P-Value of -0.061. The corporation partakes in knowledge sharing in the design stage with other state corporations with a correlation coefficient of 0.031 and P-value of -0.072 has the least impact on the financial performance of the commercial state corporations.

The ensuing data analysis and discussion that the respective IFMIS practices adopted by commercial state corporations have had a significant impact on their financial performance as indicated by the high Coefficient of Multiple Determination of (R$^2$ Square) 0.843 and P-Value of 0.001 ( refer to Table 4.7: Model Summary). This implies that, 84.3% of the financial
performance of commercial state corporations can be attributed to the Integrated Financial Management practices they have adopted. The fact that 31.6% commercial state corporations are yet to adopt IFMIS, the National government through line ministries should put an effort to bring the remnant state corporations to the fold given the fact that public expenditure through state corporations accounts for over 45% of the GDP of the country.

The findings of the study thus concur with those of Dione (2013) in his study of the critical success factors in public financial management efficiency in the third world. In his study he found a near positive linear relationship between integrated financial management practices and financial efficiency in the public sector obtaining a coefficient of Multiple Determination (R² Square) of 0.801 and P-value of 0.001.
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary
The study sought to establish the relationship between Integrated Financial Management System (IFMIS) and the financial performance of commercial state Corporations in Kenya. The findings indicate that all the state corporations have adopted IFMIS practices to some extent given the fact that all the IFMIS practices have a mean of over 1.1957. The adoption of Inter-organizational relationship and interdependency with other state corporations as regards to proper financial reporting in order to enable the public access key data has the highest mean of 4.062 meaning that most corporations have adopted this practice to a large extent. The corporation’s alignment of her goals to the overall public financial sector reforms is adopted to the lowest extent with a mean value of 1.1957.

Using Principal component analysis six major IFMIS practices accounting for 78.019% of the total variation in the Financial performance of the corporations where identified. The corporation’s alignment of goals to the overall public financial sector reforms is having the greatest influence on the financial performance of commercial state corporations since it accounts for 20.404% of the financial performance variation followed by the Corporation’s adoption of e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information (12.892%), The Corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers (12.487), The corporation maintains a website and platform which is accessible to the public (11.889%), The corporation is able to enhance its flexibility and responsiveness to changes in customer demand (10.725%), and the corporation partakes in knowledge sharing in the design stage with other state corporations (9.622%).

The outcome of the regression analysis indicates that IFMIS practices have had a significant impact on the financial performance of state corporations in Kenya during the period under study. This is supported by the high Coefficient of Multiple Determination (R² Square) of 0.843 and significance change of 0.001 implying that the impact of e-procurement practices is significant at 5% confidence interval. The most influential IFMIS practice is the Corporation’s
alignment of her goals to the overall public financial sector reforms with a regression coefficient of 0.170 and a P-value of 0.000. The Corporation’s adoption of e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information follows with a correlation coefficient of 0.131 and a P-value of 0.00. Next is the Corporation’s maintenance of automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers with a correlation coefficient of 0.075 and P-Value of -0.061; The corporation’s maintenance of a website and platform which is accessible to the public with a correlation coefficient of 0.051 and P-value of 0.002; The corporation is able to enhance its flexibility and responsiveness to changes in customer demand with a correlation coefficient of 0.048 and P-Value of 0.000; and the corporation partakes in knowledge sharing in the design stage with other state corporations with a correlation coefficient of 0.031 and P-value of -0.072 has the least impact on the financial performance of the commercial state corporations.

5.2 Conclusions
The high coefficient of Multiple Determination (R² Square) of 0.843 postulates that 84.3% of the financial performance of commercial state corporations can be attributed to the IFMIS practices they have adopted hence the centrality of adopting and implementing IFMIS in public finance management. To enhance their competitiveness and agility, commercial state corporations have hidden to the clarion call to adopt IFMIS practices in tandem with the current public finance management reforms while complementing the effort of the treasury in implementing financial process reengineering.

The fact that most state corporations in Kenya fall in the agricultural sector with 34.2% implies that the strategies for implementing the public financial reform agenda could be biased or need to be holistic enough to ensure uniformity across the sectors. However, the fact that most of the IFMIS practices have been adopted to a moderate extent is a step in the right direction for the state corporations since it implies that they are not only more receptive and agile but also keen to enhance their competitiveness in the global economy now more than ever before.

The adoption of Inter-organizational relationship and interdependency with other state corporations as regards to proper financial reporting in order to enable the public access key data
has the highest mean of 4.062 meaning that most corporations have adopted this practice to a large extent. The corporation’s alignment of her goals to the overall public financial sector reforms is adopted to the lowest extent with a mean value of 1.1957. The findings above support the fact that many state corporations are now responding to the current public financial reforms this underscores the need for the implementing agency to create impetus to encourage all the commercial state corporations to partake in integrated financial management.

The challenges identified in the study on the other hand shed light on the critical success factors that need to be put in place to ensure that the Integrated Financial Management policy is successful at least in the medium-term.

**5.3 Recommendations to Policy and Practice**

Public finance policy makers should focus on the scope and functionality of an IFMIS system which can vary from a basic general ledger accounting application to a comprehensive system covering budgeting, accounts receivable or payable, cash management, commitment control, debt, assets and liability management, procurement and purchasing, revenue management, human resource management and payroll. The fact that 31.6% of commercial state corporations have not adopted IFMIS raises eyebrows particularly going by the current economic realities. The huge proportion of non-conforming state corporations underscores the need for the National government through line ministries to bring the remnant state corporations to the fold owing to the fact that public expenditure through the state corporations accounts for over 45% of the GDP of the country.

The spread of commercial state corporations undertaking IFMIS practices is skewed with 34.2% of the corporations falling in the agriculture. Thus there is for policy makers to come up with implementation approaches that will compel all state corporations to integrate their respective financial systems to align their operations to the overall National public finance policy.

The outcome of the Principal Component Analysis indicate areas for further improvement in the adoption and implementation of IFMIS where; the corporation’s alignment of goals to the overall public financial sector reforms is having the greatest influence on the financial performance of commercial state corporations since it accounts for 20.404% of the financial
performance variation followed by the Corporation’s adoption of e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information (12.892%), the Corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers (12.487%), the corporation maintains a website and platform which is accessible to the public (11.889%), the corporation is able to enhance its flexibility and responsiveness to changes in customer demand (10.725%), and the corporation partakes in knowledge sharing in the design stage with other state corporations (9.622%).

5.4 Limitations of the Study
The main objective of the study was to establish the relationship between the various Integrated Financial Management System (IFMIS) practices undertaken by commercial state corporations in Kenya and their financial performance. A study of this magnitude should include possibly a census a survey of all state corporations in Kenya. However time and material resources did not make this feasible and for this reason the study concentrated on the commercial state corporations only.

On the other hand, the study period was a little bit narrow for a study of this nature. Despite these challenges the validity of the findings emanating from this study cannot be compromised. The researcher had to juggle between work and the field particularly during data collection. This was a major hindrance particularly in ensuring that the research work did not hamper the performance and productivity of the researcher at the workplace.

Some of the respondents were non-committal posing major challenge in the field during the data collection costing the researcher since she had to do a lot of data editing after field work. The problem was further aggravated by the fact that the research assistants were relatively new in financial surveys.

Most of the state corporations were reluctant to give critical data due to the sensitivity of top government information. It was at times impractical to obtain data particularly regarding expenditure for some state corporations.
5.5 Suggestions for further Research

Studies involving confirmatory factor analysis will need to be carried out to further test the model so established and to confirm the findings of the study. Further studies can be conducted to test and confirm the factor loadings in different commercial state corporations so as to establish the validity and strength of the model. In the same context, there is need for further research to focus on the critical success factors for successful adoption and implementation of Integrated Financial Management Systems (IFMIS).

The fact that the degree to which various IFMIS practices influence the financial performance of state corporations varies from one IFMIS practice to the other calls for further research efforts to identify optimal IFMIS practices and on the possibility of setting benchmarks. The need for further research into this aspect of IFMIS is further compounded by the fact that IFMIS is a relatively new phenomenon in public financial management.

During the study, a number of challenges facing IFMIS adoption were identified. There is need for further research to focus on the critical success factors for successful adoption and implementation of Integrated Financial Management Systems (IFMIS). Critical success factors constitute the enabling environment for effective adoption of any policy.

Future research should shed light on critical complementary assets particularly in the sphere of government operations by identifying the following basic features that are necessary for integration: standard data classification for recording financial events; internal controls over data entry, transaction processing and reporting; common processes for similar transactions and a system design that eliminates unnecessary duplication of data entry.
REFERENCES


World Bank (2008). Financial market regulation in Developing countries. *A sessional paper No.10*

APPENDIX – I: The Questionnaire

Part 2: General Information
i. Name of your Corporation ………………………………………….. (Optional)
ii. Your position in the company………………………………………….(Optional)
iii. In which ministry does your corporation fall?…………………………

Part 2: IFMIS adoption and Implementation

I. Has your state corporation participated in the adoption of IFMIS?

Yes ☐ ☐ No ☐ ☐
Please tick where appropriate

II. To what extent has your corporation participated in the following IFMIS activities?
Please indicate on a Scale of 1 – 5 where: 1 = To Avery Small Extent; 2 = Small extent; 3 = Moderate Extent; 4 = Large Extent; 5 = Very Large Extent

<table>
<thead>
<tr>
<th>No</th>
<th>IFMIS PRACTICES</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
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<tbody>
<tr>
<td>A. The Corporation applies IFMIS in Stock and Monitoring of Expenditure payment</td>
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<td>i. The corporation applies VMI and EDI technologies to control inventories</td>
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<td>ii. The corporation applies modern resource scheduling techniques like ERPIII in managing its stocks</td>
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<td>iii. The corporation applies modern Control &amp; Assets tracking techniques like; barcode based data capture &amp; tracking devices</td>
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<td>iv. The corporation maintains automated cross-referencing of personal identification numbers for fraud detection, automated cash disbursement rules and identification of ghost workers</td>
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<td>v. The corporation applies e-POS (electronic Point of Sale) solution to enhance efficiency in expenditure payment</td>
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<td>B. The corporation uses IFMIS to enhance Transparency of Inter-governmental Fiscal relations</td>
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<td>i.</td>
<td>The corporation partakes in an established effective information flow among the state corporations on financial matters</td>
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<td>ii.</td>
<td>The corporation partakes in knowledge sharing in the design stage with other state corporations</td>
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<td>iii.</td>
<td>The corporation is able to enhance its flexibility and responsiveness to changes in customer demand</td>
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<th></th>
<th>C. The corporation applies IFMIS to enhance Public access to key Fiscal information</th>
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<tr>
<td>i.</td>
<td>The corporation maintains Cooperation and effective communication mechanisms</td>
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<td>ii.</td>
<td>The corporation has adopted e-government models such as G2G, G2B, and G2C which enhance public access to key fiscal information</td>
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<td>iii.</td>
<td>The corporation maintains a website and platform which is accessible to the public</td>
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<td>iv.</td>
<td>The corporation has established automated identification of exceptions to normal operations and cross-referencing of inventories and assets</td>
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<td>v.</td>
<td>The corporation partakes in the presentation of timely and relevant financial data and reporting that is adequate to meet the information needs of the public and other stakeholders</td>
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<td>vi.</td>
<td>The agency has Inter-organizational relationship and interdependency with other state corporations as regards to proper financial reporting in order to enable the public access key data</td>
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|   | D. The corporation applies IFMIS to oversight Aggregate Fiscal Risk from other Public Entities |   |
|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
i. The corporation has aligned her goals to the overall public financial sector reforms

ii. The corporation has adopted optimal risk management models to mitigate: liquidity risks, exchange rate risks, and operations risks

III. Please provide us with the following information regarding the financial performance of your corporation for the last five years.

<table>
<thead>
<tr>
<th>MEASURES OF FINANCIAL PERFORMANCE</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tr>
<td>Recurrent savings %</td>
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<td>Resource utilization %</td>
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<td>Transaction Cost reduction%</td>
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<td>Reduction in process time / Reduction in cycle time%</td>
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<td>Training utilization%</td>
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<td>Total expenditure of the department to total budget of the department%</td>
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<td>Recurrent cost not incurred under parallel systems %</td>
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Thank you very much for your valuable time!!!!!!!!!
Appendix II: List of Commercial State Corporations

1. Kenya seed company
2. Kenya sisal board
3. National cereals and produce board
4. Nzoia sugar company
5. Pest control products board
6. Tea board of Kenya
7. Tea research foundation of Kenya
8. Muhoroni sugar company (in receivership)
9. Miwani sugar company (in receivership)
10. Agro-chemical and food company
11. New Kenya co-operative creameries
12. Kenya literature bureau
13. Jomo Kenyatta foundation
14. Kenya school equipment production unit
15. Kenya power
16. Kenya electricity transmission company
17. National oil corporation of Kenya
18. Kenya pipeline company
19. Kenya petroleum refineries Consolidated bank of Kenya
20. Public procurement oversight authority
21. Registration of certified public secretaries
22. Insurance regulatory authority
23. Kenya revenue authority
24. Kenya post office savings bank
25. Kenya investments authority
26. KASNEB
27. Privatization commission
28. Kenya reinsurance corporation
29. Postal corporation of Kenya
30. Kenya commercial bank
31. National bank of Kenya
32. KBC
33. Uchumi supermarkets
34. Central bank of Kenya
35. National Housing corporation
36. NHIF
37. National bio-safety authority
38. Higher education loans board
39. Commission for higher education
40. Kenya meat commission
41. Kenya roads board
42. NHIF
43. Kenya airports authority
44. Kenya railways corporation
45. EwasoNgiro South development authority
46. Kerio valley development authority
47. Lake basin development authority
48. Tana and Athi rivers development authority
49. Kenya national trading corporation
50. Kenya export processing zone
51. Numerical machining complex
52. Kenya bureau of standards
53. East African Portland cement