AN ASSESSMENT OF THE EFFECTIVENESS OF INTEGRATED FINANCIAL MANAGEMENT SYSTEM IN PUBLIC SECTOR FINANCIAL REPORTING IN KENYA

BY

ALICE WANJIRU MWANIKI

D53/CTY/PT/20696/2010

A Research Project Submitted to the School of Business in Partial Fulfillment for the Award of the Degree of Masters in Business Administration (Finance) of Kenyatta

JUNE 2012
DECLARATION

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

STUDENT

ALICE WANJIRU MWANIKI

Signature

Date

SUPERVISOR:

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

F.W.S NDEDE

Signature

Date

CHAIRMAN

DEPARTMENT OF ACCOUNTING AND FINANCE

KENYATTA UNIVERSITY

Signature

Date
I do acknowledge and salute all those who led to the successful completion of my research project. My sincere appreciation is expressed to my supervisor Mr. F. W. S Ndede who guided me consistently through the research proposal. His encouragement and support gave me the courage to complete the assignment.
DEDICATION

This research project is dedicated to my loving daughter Caroline and workmates, and especially Edith and Jane who served as a source of inspiration and encouragement during the period of my study.
ABSTRACT

Since 1997, the Government of Kenya has been implementing wide ranging public financial management reforms aimed at improving financial management, accountability, and transparency of public fund. During the first two phases over the first three years, a number of diagnostic reviews were conducted and a Financial Management Information Systems Strategy developed. Despite its introduction, IFMIS have not achieved its key objectives which led to a re-engineering of the IFMIS in 2011. The purpose of this study was to assess the effectiveness of integrated financial management system in public sector financial reporting in Kenya. The researcher used descriptive design. The population of the study consisted of 343 respondents from five selected ministries. These respondents were the IT officers, Accountants, finance officers and procurement officers in the Ministries. Stratified sampling was used to get the sample size from the target population. This study collected primary data through the use of a questionnaire. Descriptive statistics was used to analyze the findings through means, standard deviation and measures of relative frequencies among others. The quantitative findings has been presented in tables, figures and charts while the qualitative data has been presented in prose. The findings showed that organization capacity and organizational change influenced the implementation of IFMIS in the public sector. The study concluded that binding constraint when introducing IFMIS’s e.g. technical constraints were prevalent in the organization. Change management lacked an effective organizational structure thus delaying the effectiveness and use of IFMIS in the organization. The study therefore recommends that IFMIS projects reforms should be easy to use by the manager. Secondly they should address an external reporting requirement by the manager and confined to the manager’s area of concern. It is also recommended that the public institutions should develop an IFMIS that caters not just those of the central agencies, but also line agencies. Lastly but not least, the management should ensure that implementation of IFMIS takes into consideration the norms, meanings and power of an organization to avoid resistance and issues such as sabotage.
ABBREVIATIONS

ACCA - Association of Chartered Certified Accountants

CIDA - Canadian International Development Agency

CoA - Chart of Accounts

DCs – Developing Countries

GDP- Gross domestic product

ICT- Information and communications technology

IFMIS - Integrated Financial Management Information System

IMF - International Monetary Fund

IT – Information Technology

MOF- Ministry of Finance

OECD - Organization for Economic Co-operation and Development

OTS - Off-The-Shelf

PFM - public financial management

SIDA - Swedish international Development Cooperation Agency

USAID- United States Agency for International Development

USD- United States Dollar

MIS – Management Information System
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DEFINITION OF TERMS

Effectiveness- refers to the degree to which objectives are achieved and intent to which targeted problems are resolved.

Financial Management- is the planning, organizing, directing and controlling the financial activities of an organization.

Financial Reporting – it refers to presenting financial data of an organization operating performance, position and funds flow for an accounting period.

Integrated Financial Management Information System- refers to an information system that tracks financial events and summarizes financial information.

Integrated-Is a popular computer buzzword that refers to two or more components merged together into a single or where it is a software this would refer to application that combine word processing, database management, spreadsheet functions and communication into a single package.

Public Sector –This refers to that of economic and administrative life that deals with the delivery of goods and services by and for the government, whether national, regional or local/municipal.

Systems- Aggregation of things to combine to form an integral or complex interdependent group of items forming a unified whole or combination of components that act together to perform a function not possible with any other individual parts.
1.1 Background of the Study

Integrated Financial Management Information Systems (IFMIS) is 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. Over the past decade, developing, transition and post-conflict countries have increasingly embarked on efforts to computerize their government operations, particularly with respect to public financial management (PFM). Most common among these have been efforts to introduce Integrated Financial Management Information Systems (IFMIS) that computerize and automate key aspects of budget execution and accounting operations across the institutions of government. IFMIS can enable prompt and efficient access to reliable financial data and help strengthen government financial controls, improving the provision of government services, raising the budget process to higher levels of transparency and accountability, and expediting government operations. Donors and international institutions like the International Monetary Fund (IMF), the World Bank, and USAID have played a critical role, and will continue to do so, in supporting and shaping developing countries’ financial management systems through projects that provide a combination of technical assistance, training, financial resources and procurement support to partner governments.

In its basic form, an IFMIS is little more than an accounting system configured to operate according to the needs and specifications of the environment in which it is installed. Generally, the term “IFMIS” refers to the use of information and communications technology in financial operations to support management and budget decisions, fiduciary
responsibilities, and the preparation of financial reports and statements. In the government realm, IFMIS refers more specifically to the computerization of public financial management (PFM) processes, from budget preparation and execution to accounting and reporting, with the help of an integrated system for financial management of line ministries, spending agencies and other public sector operations.

The principal element that "integrates" an IFMIS is a common, single, reliable platform database (or a series of interconnected databases) to and from which all data expressed in financial terms flow. Integration is the key to any successful IFMIS. In a nutshell, integration implies that the system has the following basic features: standard data classification for recording financial events; internal controls over data entry, transaction processing, and reporting; and common processes for similar transactions and a system design that eliminates unnecessary duplication of data entry. Integration oftentimes applies only to the core financial management functions that an IFMIS supports, but in an ideal world it would also cover other information systems with which the core systems communicate, such as human resources, payroll, and revenue (tax and customs). At a minimum, the IFMIS should be designed to interface with these systems.

1.1.1 Importance and role of IFMIS

An IFMIS stores, organizes and makes access to financial information easy. It not only stores all the financial information relating to current and past years’ spending, but also stores the approved budgets for these years, details on inflows and outflows of funds, as well as completes inventories of financial assets (e.g., equipment, land and buildings) and liabilities (debt). The scale and scope of an IFMIS can vary, from simple General Ledger System to a comprehensive system addressing Budget, Revenue, Expenditure Control, Debt, Resource Management, Human Resources, Payroll, Accounting, Financial Reporting, and Auditing.
A more comprehensive, well integrated system will: provide timely, accurate, and consistent data for management and budget decision-making; support government-wide as well as agency-level policy decisions; integrate budget and budget execution data, allowing greater financial control and reducing opportunities for discretion in the use of public funds; provide information for budget planning, analysis and government-wide reporting; facilitate financial statement preparation; and provide a complete audit trail to facilitate audits. By recording information into an integrated system that uses common values, IFMIS users can access the system and extract the specific information they require to carry out different functions and tasks (ACCA, 2010).

All manner of reports can be generated: balance sheets, sources and uses of funds, cost reports, returns on investment, aging of receivables and payables, cash flow projections, budget variances, and performance reports of all types (SIDA, 2005). Some systems have libraries consisting of hundreds of standard reports. Managers can use this information for a variety of purposes: to plan and formulate budgets; examine results against budgets and plans; manage cash balances; track the status of debts and receivables; monitor the use of fixed assets; monitor the performance of specific departments or units; and make revisions and adjustments as necessary, to name a few. Reports can also be tailored to meet the reporting requirements set by external agencies and international institutions like the IMF. These include the typical functions that make up the PFM cycle, from budget formulation to budget execution and review, to audit and evaluation of financial performance and results (ACCA, 2010). An IFMIS will generally consist of several distinct components or modules that use information to perform different functions. Furthermore a typical government IFMIS,
includes several core components, as well as non-core components that will either be integrated into the system or connected to the system via an interface; bearing in mind that some systems are far simpler, while many are far more complex in scope and functionality.

Today, the systems themselves are based on tried and tested software and hardware platforms, which have worked thousands of times successfully. The problem when it comes to government environments is not an engineering problem, but one of inertia: inertia that is political and bureaucratic at its core (IMF 2005). Introducing modern financial management systems demands a commitment to change: change in technology, in processes and procedures, as well as changes in skills, responsibilities and behaviors. Changes of this nature and magnitude have to be accepted from within and not simply imposed from the outside (Murphy, 2002). Successes like the Slovak Republic were the result of real acceptance, at the highest levels of the political system. IFMIS success also requires donors to provide firmer monitoring, and firmer support to ensure sustainability. Too often these projects underperform or take much more time and effort than anticipated because costly mistakes were made, whether in the assessment and design stages, in the tender process, or in the course of system implementation (Murphy, 2002).

1.1.2 **Factors that hinder development of IFMIS**

The Chart of Accounts (CoA) represents the basic building block of any accounting system, IFMIS included. The CoA lists all accounts tracked by the system. Each account in the chart is assigned a unique identifier, or an account number, involving a series of information tags that denote certain things about the data being entered into the system. For example, these tags may denote the cost center, the department or unit responsible for the transaction, the program or purpose for which the transaction is being made, the nature of the transaction, and so on (World Bank, 2003). In an African perspective, the World Bank initiated the
implementation of IFMIS in Malawi by providing support for it under its ID II project (1994-1999). After 1999, various donors provided support and technical advice, and in 2003 IFMIS was included in the World Bank project FIMTAP (World Bank, 2003b). External financing for IFMIS is essential since it is a very costly project: a rough estimate of the expected cost is 1.3 billion Kwacha (Malawian currency), or slightly less than 1% of GDP.

The complexity of the task of implementing and running IFMIS can be illustrated by looking at hardware requirements. For Malawi this includes 50 servers: one central IFMIS server, a local IFMIS server in each ministry with several PCs connected via a separate Local Area Network, and a local IFMIS server connection to the Government-Wide Area Network (G-WAN). Moreover, since power shortages are common in Malawi, uninterruptible power supply units and generators are needed.

In another African perspective, Uganda offers an example of a country where introduction of a government IFMIS has moved in fits and starts. The most recent IFMIS implementation started in 2002. This is the second effort to set up a government-wide IFMIS with World Bank loan financing. The previous attempt never went live, after faltering in the design stage. The current system, based on the Oracle Financials platform, is basically a good system, but is fraught with key design problems that will necessitate a system migration. In a World Bank (2003) report, the Government of Uganda signed off on the Chart of Accounts (CoA) and the system was configured, only to discover several months later that there were several deficiencies in the design of the CoA fields—a discovery that led to months of delays and considerable cost overruns. Most CoA’s have this limitation: Once the structure is created, it is very difficult and costly to change (Murphy, 2002).

This challenge is easily avoided, but once the CoA was approved and the software configured it was too late (SIDA, 2006). The problem was discussed but the cost involved for a rebuild
of the system would have added more than US$6 million to the project cost. This would have meant going back to the World Bank to negotiate an increase in funding. Rather than go back to the donor, the system was put into operation with the defects unaltered. The Uganda IFMIS has limped along ever since, under-performing its potential, with patches and workarounds that only serve to decrease the efficiency of what could have been an excellent system. Various other problems were encountered, most of them common to IFMIS projects around the world. These included: inadequate planning; poor communications between implementers, donors, and Government; shortage of management capacity and resources, changes in systems design documents without full agreement; poorly implemented trainings; and unnecessary and spurious project expenditures. These types of problems are common to many public sector reforms, whether donor-funded or self-financed (ACCA, 2010).

The introduction of Integrated Financial Management Systems (IFMIS) has become a core 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 with non-core sub-systems such as tax administration, procurement management, asset management, human resource and pay roll systems, pension and social security systems and other possible areas seen as supporting the core modules (ACCA, 2010).
The scale of IFMIS may also vary and be limited to specific country-level institutions such as the Ministry of Finance. However, IFMIS is generally meant to be used as a common system across government institutions, including in the more ambitious schemes for federal, state and local governments. The integration of IFMIS across the board ensures that all users adhere to common standards, rules and procedures, with the view to reducing risks of mismanagement of public resources (World Bank, 2003).

1.1.3 Integrated Financial Management Information System in Kenya

The Government of Kenya has been enhancing its financial management function since 1997. Part of this effort has been to integrate all financial related issues in one system: the Integrated Financial Management System (IFMIS). IFMIS aims at enhancing access and sharing of financial information between the Ministry of Finance and other Ministries and departments. This is an initiative that was brought on board to address the issue of discrete systems that did not “speak to each other” so to speak. While taking on this project there were systems in place that had been established and operated within given structures and an established organization culture (Republic of Kenya, 1999).

Following a procurement delay of almost two years, a contract for the purchase of the software implementation was finally awarded in late 2002, the hardware procurement having been undertaken separately from the software. The project was to be implemented in phases, with the initial phase targeting the procurement and the accounting modules at the Treasury and two line ministries during the financial year 2003/2004 Republic of Kenya (1999). The roll-out of these two modules has since been done for all ministries and departments across government. However the budgeting, asset management, debt management, external resource and the human resource management modules are yet to be implemented.
The IFMIS sought to introduce computers and train financial management staff at all levels of government to aid the data-handling processes and active use of information. However, bringing about this change in practice has proved to be an extremely complex and long-term task. One of the reasons for this is the nature of existing work practices and organizational culture that is evident in many an organization, which we argue need to be understood when developing and implementing initiatives such as the IFMIS (World Bank, 2003). It is on the basis of the above that this study is being undertaken to assess the effectiveness of the system.

1.2 Statement of the Problem

The IFMIS was introduced in public sector financial management as part of the financial management reforms agenda. However, questions have been raised on its effectiveness in public finance management.

According to IMF (2005), IT reforms are perceived as complex, risky, resource intensive and requiring major procedural changes however, this often involves high-level officials lacking incentives for reform (Marie, 2009). It is of crucial importance for the government agencies recognize the need for a new system (IFMIS) for successful implementation of government financial activities. Many IFMIS projects have failed due to the lack of clarity in ownership of the system and unclear authority to implement. Further this leads to duplication of work and lack of clear response. Due to the institutional segmentation of public expenditure management, it is not always immediately clear who, from the Ministry of Finance or Accountant General Department, should be in charge of an IFMIS project (SIDA (2006).

Implementing and maintaining IFMIS is a complex task that involves the Ministry of Finance and all line ministries. Failure to undertake parallel reforms required by IFMIS is one of the reasons that often impede successful implementation (SIDA (2006). A USAID practical
guide on IFMIS implementation published in 2008 identifies a series of issues that commonly accompany IFMIS reforms. On the other hand, a 2005 IMF working paper on introducing Financial Management Information Systems more specifically highlights a number of challenges that explain why IFMIS projects tend to stall in developing countries (USAID, 2008).

IFMIS projects have also failed because the basic system functionality had not been clearly specified from the onset of the intervention. (World Bank 2003) In spite of their complexity and implementation challenges, IFMIS have become a core component and driver of public finance reform in many developing countries. As of 2005, the World Bank had funded IFMIS projects in 27 countries (Kenya included) at a cost of USD 1.1 billion. However, the implementation of IFMIS has proven very demanding, especially for developing countries and according to the Bank’s own account, has not always been successful. Yet, in spite of challenges involved and many failed implementation attempts across the world, there are a number of countries where IFMIS implementation is viewed as having been a relatively smooth and successful process.

It is against this background that the researcher conducted a study to fill this gap. The study was to assess the effectiveness of integrated financial management information system (IFMIS) in the public sector in Kenya.

1.3 Objective of the Study

The objective of the study was to assess the effectiveness of integrated financial management system in public sector financial reporting in Kenya.

1.3.1 Specific Objectives

The study was guided by the following specific objectives:
To determine the effect of capacity on the effectiveness of implementing integrated financial management information system in the public sector financial reporting in Kenya

To determine the effect of technical complexity on the effectiveness of implementing integrated financial management information system in the public sector financial reporting in Kenya.

To determine the effect of change management on the effectiveness of implementing integrated financial management information system in the public sector financial reporting in Kenya.

To determine the effect of organizational culture on the effectiveness of implementing integrated financial management information system in the public sector financial reporting in Kenya.

1.4 Research Questions

The study sought to answer the following questions;

i. To what effect does capacity affect the effectiveness of implementing integrated financial management information system in the public sector financial reporting in Kenya?

ii. To what effect does technical complexity affect the effectiveness of implementing integrated financial management information system in the public sector financial reporting in Kenya?
iii. To what effect does change management affect the effectiveness of implementing integrated financial management information system in the public sector financial reporting in Kenya?

iv. To what effect does organizational culture affect the effectiveness of implementing integrated financial management information system in the public sector financial reporting in Kenya?

1.5 Significance of the Study

1.5.1 Public Sector

This study would be of significance to the various institutions in the public sector as well as individuals. To the government who are the policy makers, the findings of the study will be of greater use and application by addressing the many bottlenecks affecting the implementation of IFMIS in public sector in Kenya.

1.5.2 Researchers and Academics

The Study will be of value to researchers and academics as a basis for future empirical and conceptual research, which will be helpful in refining and validating findings especially on public financial management reforms in Kenya. In addition, the study would give more information on factors affecting the effective implementation of IFMIS in Kenya public sector.

1.6 Scope of the Study

The purpose of this study was to assess the effectiveness of Integrated Financial Management Information System in public sector financial reporting in Kenya. The scope of the study
covered the ministries in the public sector and the sample size was five selected ministries with large budget allocations.

1.7 Limitation

As with any pursuit for information, the researcher expected there to be shortfalls that may hinder access to information. The following were some of the challenges during the investigation period.

The respondents might be unwilling to give the correct information either because they don’t want to give the true picture of the challenges facing IFMIS or they might fear being victimized by their seniors. Collected data may not have equal representation of all other departments in the Ministries. The research will rely on data collected from departmental heads in the Finance and IT departments who may not be willing to give the expected information. The funds available to the researcher may limit her to do an extensive study. The researcher may have insufficient funds to conduct research as planned which may result to limited information for analysis and as a result some objectives may not be fully achieved.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents the literature review on the effectiveness of integrated financial management system (IFMIS) in the public sector financial reporting in Kenya. It summarizes the information from other researchers who have carried out their research in the same field of study. This study is informed by a comprehensive review of both theoretical and empirical review of the existing literature. The theoretical review will help in building an in-depth understanding of the current body of knowledge on the research topic. The empirical literature review will help in understanding what other related studies have found out and suggested in their recommendations. Both reviews will be synthesised to develop a theoretical framework and a conceptual framework.

2.1 Theoretical Review

There were two main pressures driving public financial management reforms in developed countries starting in the 1970s and 1980s: first to cut spending and reduce fiscal deficits, and second to facilitate performance improvement through greater efficiency, effectiveness, and quality of public services. The dual imperatives of controlling spending and deficits while improving performance are recurring themes in these countries (Hoover Commission 1949), brought out this time in response to factors such as the increasing portion of budgets earmarked for transfer payments and debt repayment.

Public expenditure cuts were part of the loan agreement between the Government of the UK and the International Monetary Fund (IMF) in 1976, and spread to most Organisation for Economic Co-operation and Development (OECD) countries, along with a corresponding
concern for getting greater value for money. These challenges may have been exacerbated by a crisis in legitimacy, with declining public trust in the ability of government to effectively manage public affairs and solve socio-economic problems.

Countries responded to these pressures by moving beyond past practices of approving, tracking and accounting for annual spending on inputs, to more systemic and integrated approaches of strategic allocation, operational management, and performance measurement. These reforms built on theories of public choice (Buchanan 1986), institutions (North 1990), and principal-agent (Eisenhardt 1989), along with initiatives first adopted in the private sector such as "total quality management" (Deming 1986) and "managing for results" (Drucker 1954, 2001), exhortations like "What gets measured, gets done" (Peters 1986), and adaptations to the public sector including "new public management" (Hood 1991) and related formulations (Osborne and Gabler 1992, Mintzberg 1996, Hatry 1999, Moynihan and Ingraham 2003, and Foltin 2005).

Among the wide-ranging public financial management reforms pursued by OECD countries over the last 25 years, eight broad components are noteworthy (OECD 1995, OECD/World Bank 2003, Pollitt and Bouckaert 2004, Diamond and Khemani 2006, Brumby 1999, Rubin and Kelly 2005, World Bank 2000a: Annex 3): Achieving budget savings through more robust central controls, or by providing greater flexibility to managers and organizations in reallocating funds within budget line items to reflect changing conditions and priorities; Restructuring budgets to include expenditures for all government activities, global budgetary targets, hard budget constraints and program allocations to facilitate results monitoring and evaluation; A multi-year budget linked to a clear fiscal policy and realistic revenue estimates; Regular use of performance information in monitoring against targets to facilitate accountability and to better manage performance; Shifting from cost accounting towards
accrual accounting; Shifting from compliance auditing towards performance auditing; Computerized information systems providing timely financial and related information to all parties in the budget process; and Greater use of devolved budget management, and market mechanisms such as user and capital charges, market testing, outsourcing, and performance agreements.

There is ongoing debate on the benefits and costs of these reforms. For example, reforms in OECD countries have pursued two broad approaches to budget savings. The first is a top-down approach, where central finance ministries decide on how much of which programs to cut. Success with this approach has depended inversely on the degree of political opposition mobilized to oppose the cuts in sensitive areas. The biggest challenge has been the trade-off with performance improvement, since operational managers may lose planned funds despite good performance, creating an unpredictable and demotivating environment.

The second route to savings has been frame or block-budgeting, where the central finance ministry sets broad ceilings, and leaves the spending ministry to determine allocation. Although potentially more performance friendly than the first approach, it can lead to complaints from spending units that they are given tasks without adequate funding. This approach requires at least two phases of budgeting: first a discussion between the central finance ministry and spending ministries on appropriate ceilings, and then a discussion within spending ministries on allocation. This broader responsibility and accountability for budgeting also means that middle managers, including some front-line service providers such as teachers, need greater depth of PFM knowledge (Pollitt and Bouckaert 2004: 67-69).

2.3.1 Structuration Theory

Structuration theory was advanced by Giddens and is based on the premise that the classic actor/structure dualism has to be re-conceptualized as a duality -- the duality of structure
The structural properties of social systems exist only in so far as forms of social conduct are reproduced chronically across time and space. Behavior and structure are intertwined; people go through a socialization process and become dependent of the existing social structures, but at the same time social structures are being altered by their activities. Put in different words, this means that social structures are the medium of human activities as well as the result of those activities. Social structures not only restrict behavior but also create possibilities for human behavior.

According to Giddens, this theory draws together the two principal strands of social thinking. Structuration theory attempts to recast structure and agency as a mutually dependent duality (Rose, 1999). Giddens (1984) describes structuration as a social process that involves mutual interaction of human actors and structural features of the organization. When people act in organizations, they recursively create dimensions of social interaction. In this discussion, we are particularly concerned with meaning, norms and power (following Giddens, 1979). Actors draw upon interpretive schemes that mediate communication, resulting in the dialectical production and reproduction of structures of signification which constitute meanings. Interpretive schemes represent the organizational rules that inform and define interaction and are also reinforced or changed through social interaction (Orlikowski, 1992). While norms consist of rights and duties expected of actors in interaction, actors draw upon structures of domination and sanctions when exercising power.

Structuration theory is a general theory of the social sciences; in its original formulation, ST pays little attention to technology (Jones 1997). However, given the pervasiveness of technology in organizations' everyday operations, and especially the role of information technology in the process of enactment and reality construction in contemporary organizations, some attempts have been made to extend Giddens's ideas by including an
explicit IT dimension in social analysis (Walsham 1993, 2002). As a result of such attempts, structurationist analyses have helped to increase our understanding of important IT-based contemporary phenomena. Some recent examples are studies on electronic trading and work transformation in the London insurance market (Barrett and Walsham 1999); globalization issues and IT deployment in India and Britain (Nicholson and Sahay 2001; Walsham and Sahay 1999); the dynamics of groupware application (Ngwenyama 1998); communication and collaboration using IT (Olesen and Myers 1999); global virtual team dynamics and effectiveness (Maznevski and Chudoba 2000); and crosscultural software production and use (Walsham 2002).

Other significant efforts have been indicated of the application of this theory in the IS and Information Technology (IT) field as well; see for example, Orlikowski (1992) on analyzing IT as a form of structuration, Orlikowski (2000), on studying technologies in organizations, Lyytinen and Ngwenyama (1992) in analyzing Computer-Supported Cooperative Work (CSCW) applications as structures, Walsham (1993) on interpreting information systems in organizations, and Bratteteig and Gregory (1999) in their discussion of social theory for understanding the use of IT. The focus in this paper is on how Structuration Theory may offer a way of looking at the role and influence of organization culture in information systems development and implementation.

The selection of Structuration Theory is based on the fact that Structuration Theory provides an understanding of human work as social interaction within a culture, mediated by artifacts such as tools, language, rules and procedures, and open to change. Thus Structuration Theory offers a broad understanding of the organizational culture in which the IFMIS development and implementation process is taking place. The theory of structuration recognizes that human actions are enabled and constrained by social structures, which are the result of
previous human actions, which Giddens (1984) describes as the duality of structure. 
‘Structures’ consist of norms, rules and resources that human actors recursively employ in
their everyday interactions. These rules and resources mediate human action and at the same
time delimit the same action. Consequently, the key conceptual approach of Structuration
Theory provides the link between human actions in the FIS, in this case, the actions of
officers involved in financial management, and the social structures, the public financial
management organizational structure within which the FIS is situated. People act within
structures that they change through their actions, which gives them the ability to change their
environment (Bratteteig and Gregory, 1999). This study is fully based on this theory of
structuration.

2.2 Empirical Review

2.2.1 Public Financial Management

Currently on public financial management as governments across the world increasingly
struggle with achieving fiscal sustainability and managing fiscal risk. New and more
sophisticated models and tools will be required to help governments deal with fiscal
management. Also, there will be more than ever a focus on achieving effective resource
allocation, particularly, in resource constrained environments. Governments will have to
become smarter to ensure budgets are effectively linked to policy objectives and value for
money is secured. As well as the increasingly complex financial management landscape, the
problems of the lack of strong leadership and political support, staff shortages, training and
retention, poor reward systems and the lack of a public financial management infrastructure
mean that the issues are more acutely felt in developing countries and emerging economies.
For example, China is reported to have about 130,000 qualified accountants in the public and
private sectors, fewer than half the estimated 300,000 it needs to support improvements in
financial reporting and corporate governance and increase the rate of growth in China (ACCA, 2010).

According to the Swedish Country Strategy for Kenya, democracy and human rights is a priority for the social and economic development of a country. One important objective of support to Kenya is thus the strengthening of democratic, transparent and accountable governmental institutions. IFMIS strives to achieve this objective by strengthening Kenya’s public financial management. Kenya has been in a steady social and economic decline for the past decade. A number of internal and external factors have been attributed to this decline. However, neighboring countries operating within almost identical environment have achieved high and relatively stable growth in the same period. Poor governance in the public sector including weak internal controls that enable corruption to thrive has been identified as the single most important cause of economic stagnation and resultant poverty. The Kenyan Auditor-General and other independent observers have reported numerous cases of mismanagement and corruption. Resources intended for poverty reduction activities, such as services provision and infrastructure development, have been diverted to other uses. A combination of factors—including poor systems, mismanagement, corruption and economic stagnation—have therefore reinforced each other and resulted in slow economic growth, reduced investment flows, poor donor support and increased poverty (SIDA, 2006).

2.2.1.1 IFMIS Application in Public Finance

The introduction of IFMIS involves more than the “simple” automation of public finance tasks and processes. IFMIS imply both efficiency reforms and reforms that change existing procedures. They should therefore be seen as an organizational reform which deeply affects work processes and institutional arrangements governing the management of public finance. Failure to undertake parallel reforms required by IFMIS is one of the reasons that often
impede successful implementation (Murphy, 2002). A USAID practical guide on IFMIS implementation published in 2008 identifies a series of issues that commonly accompany IFMIS reforms. One of this is the legal framework – IFMIS must be underpinned by a coherent legal framework governing the overall public finance system. Secondly, there is the business processes – IFMIS generally imply fundamental changes in operating procedures and should be preceded by a detailed functional analysis of processes, procedures, user profiles and requirement that the system will support. The USAID practical guide also implies that IFMIS reforms must accompany Budget and account structure – Implementing IFMIS requires that many government structures start working with common tools. For the information to be coherent, all administrative units at national, regional and local level need to adopt a common language in the form of unified budget classifications and charts of account. This can be a very lengthy and cumbersome process, which for example took more than five years in Vietnam. Lastly, implementation reforms must accompany Centralized treasury operations – IFMIS reform is often accompanied by the consolidation of all government financial resources in a single treasury account or a set of linked accounts (Bartel, Margaret, 1996).

The aim of an IFMIS should not be to computerize the present processes but to improve work practices thereby enhancing accountability. The reform of business practices should be a top priority, but too often there exists a blind belief that computers will solve all problems. At a minimum, reform requires substantial groundwork to standardize manual procedures, including documentation used and processing rules across all users, redesigning and strengthening internal controls, and redesigning reports and other analytical outputs. However, more substantial reforms will take more time. For example, a new IFMIS is likely to be most productive when it incorporates major upgrades in accounting. Accordingly, it
may be important to review government accounting standards well in advance, and perhaps to consult national accounting bodies regarding the consistency of public and private sector standards in regard to the accounting system (USAID, 2008).

2.2.1.2 Experience from Other Developing Countries

There is plenty of evidence of past failure. At the same time, in developing countries the IT is usually introduced by expatriates, so there is room for distrust, even hostility. Second, decision makers must be convinced it is needed, i.e., that there is a problem that exists and, therefore, needs to be addressed. Basing a reform on conditions imposed by donors, as has sometimes been the case in Africa, does not increase success. Third, decision makers should recognize the urgency of the reform or the need for prompt implementation—often this perception is lacking at the top. Fourth, managers may steer away from difficult personnel issues. Almost inevitably, moving from manual systems to an IFMIS allows government to fulfill the same function with fewer staff. To operate the new system will also typically require different types of skill. However, in most DCs managers in government cannot reduce staff and are severely limited in their capacity to change them. In such situations IT is not necessarily seen as a benefit to management, if anything from human resource viewpoint it could make their task greater and more complex ((Murphy, 2002).

Public expenditure management in developing countries is often segmented institutionally on vertical rather than horizontal lines. For example, even when the Ministry Of Finance has been given clear leadership, in Anglophone Africa it is not immediately clear who should be in charge of an IFMIS project—the MOF proper, in charge of budget management, or the Accountant General’s Department, typically institutionally separated, in charge of government accounting. Both bodies could be considered as sharing a central role in the development and running of the new IFMIS. The Auditor General has significant regulatory
and control functions, while the Budget Department has the dominant role in resource allocation. Although, it could be recommended that these two bodies be nominated as joint owners of the new IFMIS to ensure balanced requirements for the system, at the same time joint ownership may involve a loss in accountability and real ownership of the system. To counter this it is important to get support for and commitment to the project at the highest level, say the minister of finance or his deputy. This is important not only to resolve the identified “ownership” problems, but in developing countries to signal authority to push through government-wide reforms in the face of strong ministries that may feel threatened by the level of transparency that IFMIS imposes on them (Bartel, Margaret, 1996).

IT reforms are perceived as complex, risky, resource intensive and requiring major procedural changes, often involving high-level officials lacking incentives for reform. Decision makers must be sold the idea that benefits exceed risks, while the incentive structure that may undermine political will for reform has to be adequately assessed from the early stage of the project. Similarly, at the agency level, it is of crucial importance for successful implementation that agencies recognize the need for a new system. Change management is therefore a critical and often neglected aspect of IFMIS reform for overcoming resistance to change from those, who benefited from the “old” way of doing business, all the way to end users, whose work might be profoundly altered by the new system. It is important to “sell” the reform through communication, education and training, using various channels such as the media, workshops, seminars, conferences, etc.

Many IFMIS projects have also failed due to the lack of clarity in ownership of the system and unclear authority to implement. Due to the institutional segmentation of public expenditure management, it is not always immediately clear who, from the Ministry of
Finance or Accountant General Department, should be in charge of an IFMIS project. Joint ownership may result in a loss of accountability and real ownership of the project.

2.2.2 IFMIS Re-Engineering To Revitalize Public Financial Management

The realization by the Government of the need to reform the public financial management system goes back to the 1990s. The matter, however, became more pronounced in 2003 (Government of Kenya, 1997. The Government has hence continued to improve public financial management so as to increase transparency, accountability, responsiveness to public policy priorities and more importantly enhance the effectiveness of public finances. To further bolster efficiency and effectiveness of public financial management, the Ministry of Finance has recently scaled up the reengineering work of the Integrated Financial Management Information System (IFMIS), originally launched in 1998 (Government of Kenya, 1999, 2000, 2006).

In 2011, the Kenyan Government commenced a major reform initiative to re-engineer and fully automate the Integrated Financial Management Information System (IFMIS). The Treasury has so far established the IFMIS Department in the Ministry of Finance, charged with the overall mandate of coordinating, implementing and overseeing the re-engineering and full automation of IFMIS. Comprehensive and holistic implementation of IFMIS Re-engineering in the broad spheres of Planning, Budgeting, Cash-Management, Asset-Management, Debt-Management, Auditing, Electronic-Funds-Transfers and financial reporting will increase transparency, accountability, effectiveness and efficiency of public service performance and service delivery to Kenyans. The IFMIS Department, has the following mandates: i) Build on existing framework to develop and implement sound IFMIS strategy; ii) Coordinate and oversee the implementation of IFMIS system including construction of the necessary ICT infrastructure; iii) Establish functional and associated
institutional structures, systems and procedures, including process re-engineering required for effective re-engineering of IFMIS; iv) Facilitate the development of organizational and legal framework necessary for implementing IFMIS Re-engineering; v) Build the necessary capacity in the public service to successfully ensure smooth implementation of a fully automated and integrated IFMIS, through continuous training, capacity building and change management. IFMIS Re-engineering will provide lasting solutions to the Government’s Systemic, Business-Processes, Human-Capital, Resource-Management and Strategic Resource Management challenges.

The process of implementing IFMIS has faced a number of challenges. Various reviews undertaken by independent experts have not only showed that infrastructural support was weak but have also noted that the system’s institutional framework has largely contributed to the slow uptake of IFMIS across ministries (Government of Kenya, 2000, 2006). To mitigate these challenges, the ministry has established an IFMIS department with the overall mandate of coordinating, implementing, and, overseeing the re-engineering of the System. Similarly, the Ministry has revitalized the technical team to ensure all government financial transactions are not only electronic but integrated. The re-engineered IFMIS strategic plan has identified and recommended interventions within seven key components including ‘Re-engineering for Business Results; Plan to Budget; Procure to Pay; Revenue to Cash; Record to Report; ICT to Support; and Communicate to Change’.

The proposals made within these components will result in the transformation of IFMIS from its current data capture function into a functional financial management system. Some of the interventions proposed include the automation of workflow processes to facilitate online based approval, control and execution function so as to eliminate the need for manual processes, development of a single chart of accounts through a process of code definition,
development of electronic bank statement updates and linkages, establishment of service level agreements with support agencies both within and without government and the creation of an IFMIS Academy to enhance the capacity needs of end users.

The interventions above are but a few of the many exciting ideas planned within the re-engineering IFMIS plan, to transform the public financial management sector into an optimally efficient support system for the greater development of our country. The IFMIS Strategic Plan will strategically position the Government in good stead to actualize optimal financial management, eliminate waste of public financial resources and accelerate our economic growth.

2.2.3 Organization Capacity and Financial Reporting

The most critical resource for an IFMIS project is human resources. The best application solution implemented on a state of the art infrastructure is useless if it cannot be appropriately operated and maintained. The ability to configure, operate and maintain a system is a critical success factor and this depends on people. It is important to have a good understanding of available competency and the extent to which they can be built up. This assessment assists in adapting an appropriate solution as opposed to one that is technologically most advanced (which is common in many tender situations) (Bartel, Margaret, 1996).

The experience of advanced countries is that managing complex IFMIS projects requires considerable management skill. However, this is typically in short supply in developing countries (DCs). Senior managers in DCs rarely delegate responsibility and frequently are overloaded with work. Moreover, top managers may not be computer literate. The consequence is that often the binding constraint when introducing IFMIS is not the technical capacity to create them but the capacity to manage them. Nor is it clear that there is always a good alignment in the incentive structure facing managers. Bugler and Bretschneider (1993),
from the experience of IT reforms in state and local governments in the United States, concluded that the reforms were most likely to succeed if they have the following features: they are easy to use by the manager; they address an external reporting requirement by the manager; and they are confined to the manager’s area of concern. These requirements are hard to attain in an DC, where top managers lack experience in computerized accounting and are therefore unable to grasp its possibilities for financial management. In DCs in the absence of computer literacy there is a tendency to leave the system development to the computer supplier, with minimal user involvement. In such an environment there is likelihood that systems will not be user friendly, will not match the needs of the managers, and will not have a required level of management ownership (Rodin-Brown, 2008).

IFMIS implementation involves considerable human resources requirements and capacity building needs throughout the entire government. The low level of computer literacy in developing countries must first be adequately addressed before such projects can be truly viable.

The lack of staff with required IT-knowledge cannot be easily remedied by training and hiring. The current salary structure and terms of employment in the public sector are usually not attractive enough to compete with private sector employment conditions and to incentivize candidates with required IT-skills. There is also a risk that trained staff leaves for better job opportunities (Rodin-Brown, 2008).

Effective implementation, operation and maintenance of the application solution and infrastructure require knowledge and skills. While some personnel in the government might have some of the required skills, a majority do not and building up this capacity constitutes the third major component of an IFMIS project. Capacity building essentially consists of recruiting suitably qualified personnel, training, skills development and retention of trained
personnel. In many projects it is common to find consultants being employed by governments to assist with a number of project tasks due to lack of adequate capacity. The consultants are assigned counterparts to work with and the overall objective is to train counterpart staff and ensure transfer of skills. The success (or lack of it) of this approach is debatable. The primary objectives of capacity building should be: to employ suitably qualified personnel; promote suitably qualified from within; encourage personnel to pursue on-going education; provide training to suitably qualified personnel as part of various projects and lastly provide terms and conditions that promote growth and retention; An IFMIS project design should consider all the above objectives to ensure long term sustainability. On an IFMIS project, training is essential for a number of personnel who can be broadly grouped as: Support teams; managers and end users (Bartel, Margaret, 1996).

2.2.4. Technical Complexity of IFMIS and Financial Reporting

As a tool of management, an IFMIS must be carefully designed to meet agencies’ needs, or functional requirements. Often this original design phase is the most difficult part of an IFMIS project, and does not receive the attention it merits. The functional requirements document serves as the blueprint for later phases of the IFMIS project. It describes the accounting and financial management tasks the system must perform, the agency’s information requirements, the operating environment, and a plan for developing any necessary programming. Inevitably, the disruption of well-established operating procedures can feel threatening to individuals who operate them, and hence it should not be surprising that such innovation is resisted. In development countries this resistance is compounded by the lack of experience with computers. The tendency to leave system development to the computer supplier often means that these organizational issues are downplayed, and technical considerations dominate in the design and implementation of the project (SIDA 2006).
Many IFMIS projects have also failed because the basic system functionality had not been clearly specified from the onset of the intervention. IFMIS must be carefully designed to meet agency’s needs and functional requirements, including the accounting and financial management tasks the system should perform. In some cases, interfaces with existing IT systems have to be circumstances. As documents on the functional requirements – which will often serve as a blueprint for later phases of the system – are difficult to rectify at a later stage, it is of crucial importance to spend enough time on the design phase of the project (World Bank, 2003).

As IFMIS core systems need to be adapted to the local context and environment, a key issue to consider is whether to use Off-The-Shelf (OTS) systems and customize them to fit the local conditions or whether to invest in an own “custom-build” system, with major costs and resource implications. IFMIS operation also involves major hardware requirements. In Malawi for example, IFMIS requires 50 servers, one central server and a local IFMIS sever in each line ministry. Power shortage and interruptions mean that in some countries, generators and power supply units are needed as well.

2.2.5 Change Management and Financial Reporting

The change management process is the sequence of steps or activities that a change management team or project leader would follow to apply change management to a project or change. Based on Prosci’s research of the most effective and commonly applied change, most change management processes contain the following three phases, phase one is preparing for change which entails preparation, assessment and strategy development. Phases two is managing change which includes detailed planning and change management implementation and lastly phase three which is reinforcing change and includes data gathering, corrective action and recognition (Chapman, 2006).
Effective change management that makes all employees participate is essential in our world of turbulence and of shorter cycles of innovation. Changes may affect every industry and every organizational function. In every organization, management knows about the external environment and the vision of the organization. This knowledge is the basis for developing appropriate strategies. Although challenging, this is the easier part. Nevertheless, management will only be able to successfully implement a new strategic direction, if they manage to gain the commitment of everyone within the organization. The point is to develop processes that enable all employees to learn about change and that to develop a culture of dialogue between management and workforce (Oliver, 2001).

When developing an IFMIS it is important that it cater to management needs—not just those of the central agencies, but also line agencies. Moreover, as a management tool it should support the management of change. It must be viewed as an integral part of budget system reform—hence not be designed just to meet present requirements, but also to support those needs that are likely to arise as parallel budget reforms are implemented.

Under change management, the objective is to establish consequences of such changes and to manage them effectively in a manner that will cause least amount of disruption, reduce probability of resistance & sabotage, foster greater ownership and ensure long term sustainability. Managing change in a conventional business environment is difficult and to do the same in bureaucratic organization like government is even more difficult. It requires strong political and administrative will.

2.2.6 Organization Culture and Financial Reporting

Working practices that surround the collection, storage, analysis and remission of routine financial data throughout the administrative hierarchy, are often in tension with situational,
individual and organization factors of work, which together make up an organization culture.

There is need for understanding how a particular organization culture facilitates or limits application process of information system (Wanyama and Zheng, 2010): Organizational culture can support linkages between technology usage and organizational growth (Chatman and John, 1994). This can be a critical success factor in the implementation and application of information systems. It is of great importance therefore to understand how a particular organization culture facilitates or limits implementation process of an information system. Studies carried out by Wanyama & Zheng (2010), aimed at understanding the phenomenon of IFMIS implementation with the organizational, national and cultural context where it occurs.

Wanyama & Zheng (2010) concluded that organization culture has a strong influence on financial information systems development and implementation. The identification and understanding of meanings, norms and power in organization was an important consideration during the implementation stage of IFMIS. This study wishes to establish whether culture is still an issue at an implementation stage. An evaluation of norms, rules pertinent to organization and power as expressed within the public service daily activities, between the different, same levels lower levels and higher level of government and time, are some of the variables that defines organizational culture in this study.

In spite of their complexity and operational challenges, IFMIS have become a core component and driver of public finance reform in many developing countries. In spite of challenges involved and many failed operation attempts across the world, there are a number of countries where IFMIS operation is viewed as having been a relatively smooth and successful process (USAID 2008).

Case studies of more successful countries such as Kosovo, the Slovak Republic, Tanzania and Ethiopia indicate that factors supporting successful operation of IFMIS include a clear
commitment of the relevant authorities to financial reform objectives, ICT-readiness, a sound project design, a phased approach to operation, a project management capability, as well as adequate resources and human resource capacity allocated to the project.

The Slovak Republic is often cited for the rapid success of its IFMIS operation. The project was backed by a strong political will, while the parliament’s commitment to a new system played a driving force in the time of government change. The political backing of the initiative was rooted in the willingness of the country to make the required changes to comply with EU accession conditions.

A well designed implementation strategy based on a clear understanding of the needs of the users and tools that were to be used further contributed to the relatively smooth reform process. A detailed needs assessment was conducted as a first step, establishing the core functions of the IFMIS and basic requirements for the new system. After careful evaluation of software packages and their comparative advantage in meeting these requirements, three basic “off-the-shelf” (as opposed to “custom”) softwares were identified as appropriate for the country. A firm was then identified through a turbulent tendering process to integrate the system. The integration team established a steering committee to oversee the entire process, while basic system architecture was developed to link all the information the system needed into one structure USAID (2008).

The system was launched in 2004 and has been gradually moving forward ever since, becoming what some consider being one of the most effective IFMIS in the European Union.

Kosovo offers another example of successful operation in a very different and specific post conflict context. As the country didn’t have central government institutions, there was no budget process or treasury system to manage the huge inflows of foreign assistance flowing into the country for reconstruction. IFMIS operation was largely donor driven, jointly
undertaken by CIDA, SIDA and USAID, and included a Canadian E-government software system, which can run on notebooks as well as on a large scale network, as a result of which a pilot system could be run within 26 days. A further advantage of this system was that each installation could run independently and still enable data to be collected into a central unit. The IFMIS operation team then set out to install and configure the basic system architecture that would work for the entire future administrative structure, based on an assessment process identifying available human resources and system requirements. Since many Kosovar had worked under the old Yugoslav system, it was decided to prioritize procedures and practices in line with the old system.

The roll-out programme for Kosovo included system demonstration to present the functionality to future users, training workshops for senior administrators, managers and general staff and change management workshops. The system was gradually expanded as the different municipalities were brought in line. The project faced major political challenges when addressing three municipalities that are in majority Serb. A non-partisan approach was adopted by configuring and disseminating all document and information in Albanian, Serbian and English. The core system was operational and running in all three languages in 2003 and has been expanded ever since.

According to the above mentioned 2005 IMF working paper, the IFMIS in Tanzania appears to be the most successfully operated system in an Anglophone African country. Within the framework of an ambitious public finance management reform initiated in 1994, Tanzania decided to introduce IFMIS in 10 ministries, departments and agencies in 1998. The IT-solution selected was a medium-sized management and accounting package, significantly less complex than the ones used in other countries like Ghana. The roll-out plan was based on an
incremental approach and focused initially on the Accountant General’s Department and 10 pilot ministries.

After a consolidation phase, the system was rolled out to all ministries and departments in the capital, then progressively to the entire central government and progressively introduced at the local level. The implementation was distinguished by: An initial review of the public expenditure management processes affecting budget execution and the introduction of an improved expenditure control framework and chart of accounts; Embedding the reform process in the Ministry of Finance with an emphasis on capacity building; Revising and developing an enabling legislation, accounting principles, systems and necessary organizational arrangements; Selecting a midrange commercial software package supported by a high quality local consultancy company; Availability of adequate donor resources; A solid political backing which trickled down to the management level. Both the authorities and the international community perceive the IFMIS as a critical tool for achieving public sector accountability (IMF, 2005).

A 2006 paper by the Kennedy School of Government presents a case study of Ethiopia as an illustration of a successful and to some extent unconventional approach to automating public financial systems. This case study is especially interesting as it challenges the traditional wisdom usually associated with such schemes.

In Ethiopia, the automation process faced major challenges of resource, capacity, infrastructure, changes in government and dependency on foreign aid policies. Therefore, the reform strategy prioritized a pragmatic sequential approach based on the logic to ensure that the “basics” are in place before moving to more complex systems. A strategic choice was made to drive the automation process from the procedural requirements which were defined by the users, through an incremental and iterative approach, with government staff
extensively being involved. The reform process first focused on bringing existing system up
to date through simplification, elimination of backlogs and sequential procedural change
before introducing new systems. Constant consideration was given to limit the burden
imposed on scarce staff throughout the whole process. This strategy was justified by low
level of skills, evolving fiscal decentralization and the general degradation of the financial
system that had taken place over the previous years.

The information systems were developed in a phased approach based on user demand and
resource availability. This approach necessitated an iterative customized approach to
automation instead of a more comprehensive and standardized “off-the-shelf” approach that
would have exceeded the local capacity to absorb it. This prudent and pragmatic approach to
automation ensured that information systems were successfully and promptly delivered at
relatively low cost, then gradually upgraded to evolve into technically robust and
sophisticated systems meeting international standards (SIDA, 2006).

The Ethiopian case demonstrates the following: one; the role of automation as a support but
not a driver of public financial reform. Ethiopia prioritized a process change approach driven
by procedural reform and information technology instead of viewing IT requirements as a
driver of procedural reforms. Secondly it demonstrates the fact that OTS solutions are not
necessarily always the most appropriate and cost effective solution to automation. It also
demonstrates that the value of an incremental strategy of frequent operational upgrade of
information systems; lastly the Ethiopian case demonstrates that the lack of high level
political will does not necessarily hamper successful implementation.
2.3 Conceptual Framework

The study's independent variables were various factors affecting the operation of IFMIS. These included: technical complexity of information system, lack of institutional capacity, institutional resistance due to organizational culture. The study dependent variables were the Effectiveness in the implementation of IFMIS in the public sector. The study conceptual model was as below:
Capacity Building
- Training of personnel
- Availability of Skills

Technical Complexity
- Availability of equipments
- Infrastructure

Change management
- Adaptation to new system
- Management processes
- Employees participation
- Commitment

Organizational Culture
- Norms
- Rules pertinent to organization
- Daily activities

Financial Reporting
- Timeliness
- Traceability
- Quantity
- Accountability & Transparency

Intervening Variables
- Political will
- Financial support/ Funds

Independent Variable

Dependent variable

Figure 2.1: Conceptual Framework
3.0 Introduction

This chapter deals with methodology for data gathering and analyzing. It is the overall strategy used in collection and analyzing of data. It is organized along the following sub sections: research design, target population, sample size and sampling procedures, research instruments, data collection procedure’s data analysis and ethical issues that were considered in the study.

3.1 Research Design

The research design used in this study was descriptive. Descriptive design is a scientific method of investigation which involves collection and analyzing of both quantitative and qualitative data. Descriptive survey is a method, which enables the researcher to summarize and organize data in an effective and meaningful way. It allows for an in-depth investigation, and places more emphasis on a full contextual analysis of fewer events or conditions and their interrelations (Saunders, Lewis and Thornhill, 2003).

3.2 Target Population

Target population represents all cases of people, organization or institution which posses certain characteristics of population involved in the study. The population of the study consisted of all the 42 government ministries.

The researcher purposively selected five (5) Ministries; namely the Ministry of Finance, Ministry of Education, Ministry of Trade, Ministry of Agriculture, Ministry of Co-operatives Development. The ministry of Finance was purposely selected because it is the driver of the IFMIS and it has the responsibility to ensure its implementation across the public service.
The other ministries such as Ministry of Education, Ministry of Trade, Ministry of Agriculture, and Ministry of Co-operatives Development were selected since their budgets are large and hence they need efficient financial systems. There were approximately 343 staffs in the IT, Accounting, Finance and Procurement departments in the five (5) target ministries. The researcher purposively targeted Accounting, Finance and IT Departments because they had a firsthand experience with IFMIS system and hence they would understand about its implementation and the challenges thereof. For the IT heads they were able to analyze any technical complexity of the system while the Finance heads were in a position to tell whether IFMIS had achieved in ensuring effective financial reporting. The target population was distributed as in table 3.1 below.

<table>
<thead>
<tr>
<th>Category of staff</th>
<th>Target Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT officers</td>
<td>72</td>
</tr>
<tr>
<td>Accountants</td>
<td>107</td>
</tr>
<tr>
<td>Finance officers</td>
<td>98</td>
</tr>
<tr>
<td>Procurement officers</td>
<td>66</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>343</strong></td>
</tr>
</tbody>
</table>

Source: Author (2012)

3.3 Sampling Technique

The sample of the study was drawn from IT officers, Accountants, finance officers and procurement officers in the Ministries. The study used stratified sampling. Stratified sampling is a method that involves dividing the population into homogeneous subgroups and then taking a simple random sample in each subgroup (Cooper and Schindler, 2003). The population was divided into sub-groups (Strata); that is, IT officers, accountants, finance officers and procurement officers and an equal sample was randomly picked from each
stratum. This therefore made all the respondents in the target population have an equal and unbiased chance of participating in the study. The study targeted 103 respondents as shown in figure 3.2 below.

Table 3.2 Sample Size

<table>
<thead>
<tr>
<th>Category of staff</th>
<th>Target Population</th>
<th>Sampling (%)</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT officers</td>
<td>72</td>
<td>0.3</td>
<td>22</td>
</tr>
<tr>
<td>Accountants</td>
<td>107</td>
<td>0.3</td>
<td>32</td>
</tr>
<tr>
<td>Finance officers</td>
<td>98</td>
<td>0.3</td>
<td>29</td>
</tr>
<tr>
<td>Procurement officers</td>
<td>66</td>
<td>0.3</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>343</strong></td>
<td></td>
<td><strong>103</strong></td>
</tr>
</tbody>
</table>

Source: Author (2012)

3.5 Data Collection Instruments

This study collected the primary data. Data was collected using a self-administered questionnaire. Where it proved difficult for the respondents to complete the questionnaire on the spot, the researcher used drop and pick later method. The reason for choosing questionnaire as the data collection instrument was primarily due to its practicability, applicability to the research problem and the size of the population. It was also cost effective and gave adequate time to the respondent to fill in and surrender ((Mugenda & Mugenda, 2003). The questionnaire were open ended questions to allow the respondents give their opinion and suggestions.

The questionnaires were designed by the researcher based on the research questions which were pre-tested to ascertain the suitability of the tool before the actual administration. Pre-testing was done by administering the questionnaire to ten respondents who were selected randomly from the sample size. This enabled the researcher to fine tune the questionnaire for objectivity and efficiency of the process. The questionnaire were estimated to take fifteen to
thirty minutes to complete. A research assistant, who was trained on communication and interviewing of respondents using the questionnaire, was engaged to administer the refined questionnaire and in data entry.

3.6 The Pilot Study

Before the actual data collection, the researcher pre-tested the reliability of the instrument (questionnaire) and the validity of the results. The researcher carried out a pilot study to pretest and validate the questionnaire. The researcher selected a pilot group of ten (10) individuals from the target population to test the reliability of the research instrument. This was achieved by first stratifying the individuals according to their departments. The researcher also put in consideration the gender equity and geographical background of individuals.

The pilot data was included in the actual study. The pilot study allowed for pre-testing of the research instrument. The clarity of the instrument items to the respondents was established so as to enhance the instrument’s validity and reliability. The pilot study enabled the researcher to be familiar with research and its administration procedure as well as identifying items that required modification. The result would help the researcher to correct inconsistencies arising from the instruments, which would ensure that they measured what was intended.
3.7 Data Analysis

The complete, duly filled in questionnaires containing the primary data was cleaned, coded and arranged serially to make it easy to identify. Quantitative data was analysed by descriptive statistics which included measures of central tendency - the mean, measures of variability - standard deviation and measures of relative frequencies among others. Qualitative data was analysed through content analysis. The Likert scale question was used to analyze the mean score and standard deviation. Statistical package for social and scientific (SPSS) studies was used in the analysis.

3.8 Research Ethics

The researcher explained to the administration of specific Ministries that the research study to be undertaken was specifically for academic purpose only. In order to ensure that the respondents gave information freely, the researcher started by assuring them of confidentiality of any information given and their protection. Throughout the research, the researcher upheld the norms and values of respect, responsibility and honesty.
CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter entails the findings of the study based on the data collected from the field. The study sought to assess the effectiveness of integrated financial management system in public sector financial reporting in Kenya. A sample size of 103 staff from the government institutions was used and the information presented in form of pie charts, bar graphs and tables.

4.1 Response Rate

The data for the study was collected by way of structured questionnaires. A total of 103 questionnaires were sent out to the respondents. Of these 86 questionnaires were completed and returned. This represented 83.5%. The high response rate was attributed to the researcher personal involvement in administering the questionnaires.

4.2 Demographic Information

In order to capture the general information of the respondents issues such as gender, age, education and years of service were captured in the first section of the questionnaire.
4.2.1 Gender of Respondents

The study showed that majority of the respondents 65% were male while 35% were female.

4.2.2 Age of Respondents

The study established that majority 30% were in the age bracket of 36-40 years while 25% were between the ages of 31-35 years. On the other hand 18% were between the age bracket
of 26-30 years while 12% were between 20-25 years. Only 10% were between the ages of 41-50 while 5% were 51 years and above.

4.2.3 Education

According to the findings, 45% of the respondents revealed that they had university education while 30% said that they had college education. On the other hand 15% had tertiary education while 10% had secondary education.

Figure 4.3 Education

The study revealed that education level played an important role in the ability of women to protect themselves. The most significant finding was that 30% of women without any education were victims of violence compared to 15% of those with secondary education and 10% of those with college education.
4.2.4 Years of Service

Figure 4.4 Years of Service

Figure 4.4 shows that 40% indicated that they had served the institution for 5-10 years while 35% had been in the service for a period of 10-15 years. Meanwhile 20% had served their institutions for 0-5 years while 5% had served the institution for 15 years and above.

4.3 Organization Capacity and Financial Reporting

This section of the study shows the organization capacity and financial reporting that was used in the various institutions.

4.3.1 Most important Resources for an IFMIS

Table 4.1 Most important Resources for an IFMIS

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th></th>
<th>NO</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Human resources</td>
<td>54</td>
<td>62.8</td>
<td>32</td>
<td>37</td>
</tr>
<tr>
<td>Internet</td>
<td>45</td>
<td>52.3</td>
<td>41</td>
<td>47.7</td>
</tr>
<tr>
<td>Software</td>
<td>25</td>
<td>29.1</td>
<td>61</td>
<td>70.9</td>
</tr>
</tbody>
</table>

The study established that majority of the respondents 62.8% indicated that human resources was the most important resource for an IFMIS while a marginal of 52.3% confirmed that
internet was the most important resource for an IFMIS. Only 29.1% agreed that software was the most important resource for an IFMIS.

4.3.2 Respondents Responses on the following Statements

Table 4.2 Respondents Responses on the following Statements

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Somehow agree</th>
<th>Disagree</th>
<th>Totally disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>The ability to configure, operate &amp; maintain a system is a critical success factor and this depends on people.</td>
<td>45</td>
<td>52</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>The effectiveness of IFMIS depends on the people operating it.</td>
<td>-</td>
<td>-</td>
<td>50</td>
<td>58</td>
</tr>
<tr>
<td>There has to be a reliable internet connection for IFMIS projects.</td>
<td>60</td>
<td>70</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td>An IFMIS project requires considerable management skill.</td>
<td>50</td>
<td>58</td>
<td>35</td>
<td>41</td>
</tr>
<tr>
<td>There are binding constraint when introducing IFMIS e.g., technical constraints.</td>
<td>48</td>
<td>56</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>There is always a good alignment in the incentive structure facing managers.</td>
<td>2</td>
<td>2</td>
<td>54</td>
<td>63</td>
</tr>
</tbody>
</table>

According to the study, 52% of the respondents agreed that the ability to configure, operate & maintain a system was a critical success factor and this depends on people. A marginal of 58% somehow agreed that the effectiveness of IFMIS depends on the people operating it while 70% agreed that there has to be a reliable internet connection for IFMIS projects. On the other hand 58% agreed that an IFMIS project requires considerable management skill while 56% agreed that there are binding constraints when introducing IFMIS e.g. technical constraints. However 63% disagreed that there was always a good alignment in the incentive structure facing managers.
4.3.4 Current salary attractive to attract experienced staffs to deal with IFMIS

Figure 4.5 Current salary attractive to attract experienced staffs to deal with IFMIS

The study established that 65% of the respondents disagreed that the current salary was attractive to attract experienced staffs to deal with IFMIS. On the other hand 23% agreed that the package was attractive to attract staffs to deal with IFMIS.

4.3.5 Primary Objectives of Capacity building

Table 4.3 Primary Objectives of Capacity building

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Somehow agree</th>
<th>Disagree</th>
<th>Totally disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>To employ suitably qualified personnel</td>
<td>50</td>
<td>20</td>
<td>26</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Promote suitably qualified from within</td>
<td>62</td>
<td>15</td>
<td>9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Encourage personnel to pursue on-going education</td>
<td>-</td>
<td>45</td>
<td>20</td>
<td>21</td>
<td>-</td>
</tr>
<tr>
<td>Provide training to suitably qualified personnel</td>
<td>-</td>
<td>-</td>
<td>54</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Provide terms &amp; conditions to promote growth &amp; retention</td>
<td>62</td>
<td>20</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>To provide opportunities for professional development</td>
<td>58</td>
<td>20</td>
<td>8</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 4.3 shows that 58% agreed that to employ suitably qualified personnel was a primary objective of capacity building while 72% to agreed that Promote suitably qualified from
within was also a primary objective of capacity building. On the other hand 52% somehow agreed that Encouraging personnel to pursue on-going education was a primary objective of capacity building while 63% disagreed that providing training to suitably qualified personnel was a primary objective of capacity building. Nevertheless 72% agreed that providing terms & conditions to promote growth & retention was a primary objective of capacity building while 67% agreed that to provide opportunities for professional development was a primary objective of capacity building.

4.4 Technical complexity IFMIS and Financial Reporting

The study further sought to establish the technical complexity IFMIS and the financial reporting that the institutions used.

4.4.1 Issues designed to meet agencies needs, or functional requirements

![Image of pie chart]

**Figure 4.6 Issues designed to meet agencies needs, or functional requirements**

According to the findings, 65% indicated that IFMIS must be carefully designed to meet agencies’ needs or functional requirements while a few 35% said that the organization structure must be carefully designed to meet agencies’ needs, or functional requirements.
4.4.2 IFMIS had been able to ensure Financial Management in the public sector

![Bar chart showing responses to whether IFMIS had ensured financial management.](image)

**Figure 4.7 IFMIS had been able to ensure Financial Management in the public sector**

Majority of the respondents 55% disagreed that IFMIS had been able to ensure financial management in the public sector while a marginal of 45% agreed that the IFMIS had been able to ensure financial management in the public sector.

4.4.3 Projects that IFMIS perform

**Table 4.4 Projects that IFMIS perform**

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Agree</th>
<th>Somehow Agree</th>
<th>Disagree</th>
<th>Totally Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide links to the internet</td>
<td>40</td>
<td>47</td>
<td>26</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td>Describe the accounting and financial tasks</td>
<td>56</td>
<td>65</td>
<td>30</td>
<td>34</td>
<td>-</td>
</tr>
<tr>
<td>The Information requirements</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>The operating environment</td>
<td>46</td>
<td>53</td>
<td>30</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>Provides a plan for developing any necessary programming</td>
<td>59</td>
<td>69</td>
<td>20</td>
<td>23</td>
<td>-</td>
</tr>
<tr>
<td>Provide operating procedures</td>
<td>42</td>
<td>49</td>
<td>40</td>
<td>47</td>
<td>-</td>
</tr>
<tr>
<td>Integrates various MIS's</td>
<td>56</td>
<td>65</td>
<td>30</td>
<td>35</td>
<td>-</td>
</tr>
</tbody>
</table>
According to the findings, 47% of the respondents agreed that IFMIS Provide links to the internet while 65% agreed that IFMIS describe the accounting and financial management tasks. Further 70% disagreed that IFMIS provides the information requirements while 53% agreed that IFMIS provides the operating environment. On the other hand 69% agreed that IFMIS provides a plan for developing any necessary programming while 49% agreed that IFMIS provides operating procedures. Lastly 65% agreed that IFMIS integrates various MIS's.

4.4.4 Failure of IFMIS projects because the basic system functionality has not been clearly specified

![Figure 4.8 Failure of IFMIS projects because the basic system functionality has not been clearly specified](image)

The figure above shows that the 75% of the respondents agreed that IFMIS projects had failed because the basic system functionality had not been clearly specified from the onset of the intervention.
4.5 Change Management and Financial Reporting

This section of the study shows the change management and financial reporting practiced by the institutions.

4.5.1 Change Management structure to look at the IFMIS challenges

![Bar chart showing 65% agreement and 35% disagreement on the change management structure to look at the IFMIS challenges.]

The study established that 65% agreed that the institutions had a change management structure to look at the IFMIS challenges while 35% disagreed that the organizations had change management structure to look at the IFMIS challenges.

4.5.2 Change Management had been effective in solving the challenges impeding successful implementation of IFMIS in Kenya

The respondents indicated that to some extent the management had involved all employees in change management. They were however made to the external environment and the vision of the organization. This knowledge was the basis for developing appropriate strategies.
4.5.3 Change Management Processes contains the following

<table>
<thead>
<tr>
<th>Agree</th>
<th>Somehow agree</th>
<th>Disagree</th>
<th>Totally disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparing for change which entails preparation</td>
<td>F: 58, %: 67</td>
<td>F: 20, %: 23</td>
<td>F: 8, %: 9</td>
</tr>
<tr>
<td>Assessment</td>
<td>F: 46, %: 53</td>
<td>F: 40, %: 47</td>
<td>-</td>
</tr>
<tr>
<td>Strategy formulation</td>
<td>F: 50, %: 58</td>
<td>F: 30, %: 35</td>
<td>F: 6, %: 7</td>
</tr>
<tr>
<td>Effective organizational structure</td>
<td>F: 40, %: 47</td>
<td>F: 35, %: 41</td>
<td>F: 11, %: 13</td>
</tr>
<tr>
<td>A general Information System</td>
<td>F: 48, %: 56</td>
<td>F: 20, %: 23</td>
<td>F: 18, %: 21</td>
</tr>
<tr>
<td>All the systems must be integrated</td>
<td>F: 60, %: 70</td>
<td>F: 20, %: 23</td>
<td>F: 6, %: 7</td>
</tr>
</tbody>
</table>

According to the findings, 67% agreed that change management processes contain preparing for change which entails preparation while 53% indicated that change management contains assessment. On the other hand 58% said that change management entails strategy formulation while 47% agreed that it contained effective organizational structure. Further 56% stated that change management contained a general information system while 70% said that change management contained all the systems which must be integrated.

4.5.4 Change Management ensured employees participation in IFMIS implementation

![Figure 4.10 Change Management ensured employees participation in IFMIS implementation](image)
The study established that 78% of the respondents indicated that change management did not ensure participation in IFMIS implementation while a few 22% agreed that change management ensured participation in IFMIS implementation.

4.6 Organizational Culture and Financial Reporting
This section shows the organizational culture and financial reporting applied by the institutions.

4.6.1 Working practices in IFMIS

Table 4.6 Working practices in IFMIS

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Somehow agree</th>
<th>Disagree</th>
<th>Totally disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Remission of financial data</td>
<td>47</td>
<td>55</td>
<td>35</td>
<td>41</td>
</tr>
<tr>
<td>Collection of financial data</td>
<td>50</td>
<td>58</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>Storage of financial data</td>
<td>-</td>
<td>-</td>
<td>48</td>
<td>56</td>
</tr>
<tr>
<td>Analysis of financial data</td>
<td>45</td>
<td>52</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>Handling of IFMIS is by IT professionals</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>All the personnel involved make up the organization’s culture</td>
<td>-</td>
<td>-</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>The application and implementation of IFMIS is critical to any organization</td>
<td>59</td>
<td>69</td>
<td>24</td>
<td>28</td>
</tr>
</tbody>
</table>

The study found out that 55% of the respondents agreed that working practices in IFMIS contained remission of financial data while 58% agreed that IMFIS contained collection of financial data. On the other hand 56% somehow agreed that IFMIS contained storage of financial data while 52% agreed that working practices of IFMIS contained analysis of financial data. Further it was evident that 62% disagreed that working practices of IMFIS entailed handling of IFMIS by IT professionals. Fifty six percent totally disagreed that all the personnel involved make up of the organization’s culture while 69% agreed that the application and implementation of IFMIS was critical to any organization.
4.6.2 Organization culture been a challenge in implementation of IFMIS

![Graph showing 80% agreement and 20% disagreement on organization culture being a challenge in IFMIS implementation.]

**Figure 4.11 Organization culture been a challenge in implementation of IFMIS**

According to the findings, majority of the respondents 80% agreed that organization culture was a challenge in implementation of IFMIS while 20% disagreed that organization culture was a challenge in implementation of IFMIS.

4.6.3 IFMIS a core component and driver of public finance reform in Kenya

![Pie chart showing 75% agreement and 25% disagreement on IFMIS being a core component and driver of public finance reform in Kenya.]

**Figure 4.12 IFMIS a core component and driver of public finance reform in Kenya**
Majority of the respondents 75% agreed that IFMIS was a core component and driver of public finance reform in Kenya while a few 25% disagreed that IFMIS was a core component and driver of public finance reform in Kenya.

4.6.4 Other Challenges public sector encounter when implementing IFMIS

Because governments are not driven by profit but rather by measures of accountability, financial management information systems for government must be designed with the latest technology to ensure compliance with budget laws, other public finance rules and restrictions, and an entirely different set of accounting rules and reporting requirements. Moreover, they must also be designed to support a multitude of distinctly public sector-oriented functions and organizational arrangements.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter provides a summary of the findings; the conclusion and the recommendations of the study on assessing the effectiveness of integrated financial management system in public sector financial reporting in Kenya. The purpose of the study was to investigate the effectiveness of IFMIS in public sector financial reporting.

5.2 Summary of the Findings
The following were the summary of the research findings upon which the conclusion and recommendations of the study were made. The summary was discusses according to the research questions as shown below.

5.2.1 Organization Capacity and Financial Reporting
The study established that majority of the respondents indicated that human resources was the most important resource for an IFMIS while a marginal confirmed that internet was the most important resource for an IFMIS. Only a few agreed that software was the most important resource for an IFMIS. According to the study the respondents agreed that the ability to configure, operate & maintain a system was a critical success factor and this depends on people. A marginal somehow agreed that the effectiveness of IFMIS depends on the people operating it while a few agreed that there has to be a reliable internet connection for IFMIS projects. On the other hand a good number agreed that an IFMIS project required considerable management skills while majority agreed that there were binding constraints when introducing IFMIS e.g. technical constraints. However the respondents disagreed that there was always a good alignment in the incentive structure facing managers. It was also evident majority agreed that to employ suitably qualified personnel was a primary objective
of capacity building while a good number agreed that to promote suitably qualified from within was also a primary objective of capacity building. On the other hand the respondents somehow agreed that encouraging personnel to pursue on-going education was a primary objective of capacity building while majority disagreed that providing training to suitably qualified personnel was a primary objective of capacity building. Majority agreed that providing terms & conditions to promote growth & retention was a primary objective of capacity building while a good number agreed that to provide opportunities for professional development was a primary objective of capacity building.

5.2.2 Technical complexity IFMIS and Financial Reporting

Majority of the respondents disagreed that IFMIS had been able to ensure financial management in the public sector. It was evident that the respondents agreed that IFMIS provide links to the internet while majority agreed that IFMIS describe the accounting and financial management tasks. Further a good number disagreed that IFMIS provided the information requirements while a few agreed that IFMIS provided the operating environment. On the other hand majority agreed that IFMIS provides a plan for developing any necessary programming while most of the respondents agreed that IFMIS provided operating procedures. Lastly a majority agreed that IFMIS integrated various MIS. The study further gathered that the IFMIS projects had failed because the basic system functionality had not been clearly specified from the onset of the intervention.

5.2.3 Change Management and Financial Reporting

It was evident that majority agreed that the institutions had a change management structure to look at the IFMIS challenges. According to the findings, majority agreed that change management processes contains preparing for change which entails preparation while a good number indicated that change management contains assessment. On the other hand the
respondents said that change management entails strategy formulation while a few agreed that it contained effective organizational structure. Further majority stated that change management contained a general information system while a good number said that change management contained all the systems which must be integrated.

5.2.4 Organizational Culture and Financial Reporting

The study found out that majority of the respondents agreed that working practices in IFMIS contained remission of financial data while a good number agreed that IFMIS contained collection of financial data. On the other hand a majority somehow agreed that IFMIS contained storage of financial data while the respondents agreed that working practices of IFMIS contained analysis of financial data. Further it was evident that a majority disagreed that working practices of IFMIS entailed handling of IFMIS by IT professionals. Fifty six percent totally disagreed that all the personnel involved make up of the organization’s culture while a good number agreed that the application and implementation of IFMIS was critical to any organization. In addition majority of the respondents agreed that IFMIS was a core component and driver of public finance reform in Kenya.

5.3 Conclusions

The study concluded that on organizational capacity and financial reporting, binding constraint when introducing IFMIS e.g. technical constraints were prevalent in the organization. The organizations failed to provide training to suitably qualified personnel. This in alignment with the literature revealed that top managers may not be computer literate. The consequence is that often the binding constraint when introducing IFMISs is not the technical capacity to create them but the capacity to manage them. Nor is it clear that there is always a good alignment in the incentive structure facing managers.
On technical complexity on IFMIS and financial reporting, IFMIS has not been able to ensure financial management in the public sector. IFMIS projects have failed because the basic system functionality had not been clearly specified from the onset of the intervention. According to the literature review many IFMIS projects have also failed because the basic system functionality had not been clearly specified from the onset of the intervention. IFMIS must be carefully designed to meet agency’s needs and functional requirements, including the accounting and financial management tasks the system should perform. In some cases, interfaces with existing IT systems have to be circumstantial. As documents on the functional requirements – which will often serve as a blueprint for later phases of the system – are difficult to rectify at a later stage, it is of crucial importance to spend enough time on the design phase of the project (World Bank, 2003).

On change management and financial reporting, change management lacked an effective organizational structure thus delaying the effectiveness and use of IFMIS in the organization. The effective change management that makes all employees participate is essential in our world of turbulence and of shorter cycles of innovation. Changes may affect every industry and every organizational function. In every organization, management knows about the external environment and the vision of the organization. This knowledge is the basis for developing appropriate strategies when developing an IFMIS. Moreover, as a management tool it should support the management of change.

On organizational culture and financial reporting, it was evident that working practices of IFMIS in the public sector were not handled by IT professionals. On the other hand IFMIS failed because not all the personnel embraced made up in the organizational culture. According to the literature review Wanyama & Zheng (2010) argue that organization culture can be a critical success factor in the implementation and application of information systems.
It is of great importance therefore to understand how a particular organization culture facilitates or limits implementation process of an information system studies.

5.4 Recommendations

The most critical resource for an IFMIS project is human resources. Thus for public sectors to manage complex IFMIS projects requires considerable management skills. The IFMIS projects reforms should be easy to use by the managers, secondly they should address an external reporting requirement by the manager and confined to the manager’s area of concern. Effective IFMIS require knowledge and skills. Thus personnel in public sector should be engaged in capacity building to develop their skills and ensure effective use of IFMIS in the government institutions.

The public sector should ensure improved technical efficiency in managing and utilizing resources through improved information flows more relevant to decision responsibilities of managers. Thus the management in the various institutions must carefully design IFMIS to meet agency’s needs and functional requirements, including the accounting and financial management tasks the system should perform.

Changes may affect every industry and every organizational function. Thus the public institutions should develop an IFMIS that caters—not just those of the central agencies, but also line agencies. Moreover, as a management tool it should support the management and also needs that are likely to arise as parallel budget reforms are implemented.

Organization culture has a strong influence on financial information systems development and implementation. Therefore the management in public sector should identify and understand meanings, norms and power during the implementation stage of IFMIS to avoid resistance and sabotage by the employees.
5.5. Suggestions for further Studies

The study suggests that further research could be conducted on:

- The benefits and challenges achieved through the use of Integrated Financial Management Information System in private and public sector, this is because the scope of this study did not cover the benefits and challenges.

- Further research can be carried by involving the respondents on discussions so as to generate workable solutions to effectiveness of integrated financial management system in public sector financial reporting in Kenya.

- This study mainly covered the public sector. A similar study could be done in the private sector, local government, state corporations to confirm the findings.


Consultant Report prepared by KPMG Nairobi


Marie Chêne, U4 Helpdesk, Transparency International, mchene@transparency.org Reviewed by: Robin Hodess Ph.D., Transparency International, rhodess@transparency.org, 8 April 2009


World Bank, 2000a. Indonesia Public Spending in a Time of Change


   Comprehensive Project Memorandum

   Project Quarterly Progress Report
Appendix I: Questionnaire

Section A: Bio-data

1. Gender

   Male [ ]    Female [ ]

2. Age (Years)

   20-25 [ ]   26-30 [ ]   31-35 [ ]   36-40 [ ]   41-50 [ ]
   51 years and above [ ]

3. Education

   Secondary [ ]   Tertiary college [ ]   University [ ]   Other Specify …………………

4. Years of service

   0-5 [ ]   5-10 [ ]   10-15 [ ]   15+ [ ]

Section B: Organization Capacity and Financial Reporting

5. In implementation of IFMIS, the most important resources for an IFMIS project are?

   Human resources [ ]   Internet [ ]   Software [ ]

6. On a scale of 1-4, do you agree with the following statements? Where 1=agree,
   2=somehow agree, 3=disagree, 4=totally disagree
The ability to configure, operate & maintain a system is a critical success factor and this depends on people.

The effectiveness of IFMIS depends on the people operating it.

There has to be a reliable internet connection for IFMIS projects

An IFMIS project requires considerable management skill.

There're binding constraint when introducing IFMIS's, e.g., technical constraints

There is always a good alignment in the incentive structure facing managers.

7. Is the current salary structure and terms of employment in the public sector attractive to attract experienced staffs to deal with IFMIS?

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

8. What are the primary objectives of capacity building? (Tick as appropriate), where 1=agree, 2=somehow agree, 3=disagree, 4=totally disagree.

To employ suitably qualified personnel

Promote suitably qualified from within

Encourage personnel to pursue on-going education
Provide training to suitably qualified personnel

Provide terms & conditions to promote growth & retention

To provide opportunities for professional development

Section C: Technical complexity IFMIS and Financial Reporting

9. What must be carefully designed to meet agencies' needs, or functional requirements?

   IFMIS [ ]    Organizational Structure [ ]    other,

   specify...................

10. Has IFMIS been able to ensure financial management in the public sector?

    Yes [ ]    No [ ]

11. On a scale of 1-4, what does an IFMIS project perform? Where 1=agree, 2=somehow agree, 3=disagree, 4=totally disagree

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<thead>
<tr>
<th>Provide links to the internet</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>Describe the accounting and financial management tasks</td>
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<td>The Information requirements</td>
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<td>The operating environment</td>
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<td>Provides a plan for developing any necessary programming</td>
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12. Have IFMIS projects failed because the basic system functionality has not been clearly specified from the onset of the intervention?

Yes [ ] No [ ] other, specify..............................

Section D: Change Management and Financial Reporting

13. Is there a change management structure to look at the IFMIS challenges?

Yes [ ] No [ ]

b) If yes, has change management been effective in solving the challenges impeding successful implementation of IFMIS in Kenya?.............................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................

14. On a scale of 1-4; where 1=agree, 2=somehow agree, 3=disagree, 4=totally disagree, most change management processes contain the following:
preparing for change which entails preparation

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<tr>
<th>Assessment</th>
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<tr>
<td>Strategy formulation</td>
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<tr>
<td>Effective organizational structure</td>
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<tr>
<td>A general Information System</td>
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<tr>
<td>All the systems must be integrated</td>
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</table>

15. Has Change Management ensured employees participation in IFMIS implementation?

Yes [ ]  No [ ]

**Section E: Organizational Culture and Financial Reporting**

16. Do you agree that working practices in IFMIS involve the following? Where 1=agree, 2=somehow agree, 3=disagree, 4=totally disagree.

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<td>Remission of financial data</td>
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<td>Collection of financial data</td>
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<td>Storage of financial data</td>
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<td>Analysis of financial data</td>
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<td>Handling of IFMIS is by IT professionals</td>
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<td>All the personnel involved make up the organization's culture</td>
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<tr>
<td>The application and implementation of IFMIS is critical to any organization</td>
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</table>
17. Has Organization culture been a challenge in implementation of IFMIS?

Yes [ ]     No [ ]

18. In spite of their complexity and operational challenges, has IFMIS become a core component and driver of public finance reform in Kenya?

Yes [ ]     No [ ]

19. What other challenges public sector encounter when implementing IFMIS? ....

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THANK YOU FOR YOUR PARTICIPATION