INFLUENCE OF INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEMS ON FINANCIAL PERFORMANCE IN PUBLIC ORGANIZATIONS: A CASE OF WATER INFRASTRUCTURE PROJECTS IN BOMET COUNTY, KENYA

BY
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2016
DECLARATION

I declare that this research project report is my original work and has never been submitted to any other University for assessment or award of a degree.

Signature…………………………….. Date………………………………

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This research project report has been submitted with my authority as the university supervisor.

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Finally, to my dear wife and children, your love, patience, prayers and continued support and encouragement throughout this journey shall forever be cherished. May the almighty God bless you abundantly.
DEDICATION

I dedicate this work to my dear wife Edah Langat, my son Brian Langat, my daughters Prudence Langat and Zuhura Langat who gave me the reason and motivation to pursue further education and to their constant reminder that failure is not an option
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<tr>
<th>Abbreviation</th>
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<tr>
<td>ICT</td>
<td>-</td>
<td>Information and Communication Technology</td>
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<tr>
<td>IFMIS</td>
<td>-</td>
<td>Integrated Financial Management Information Systems</td>
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<td>MIS</td>
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<td>Management Information Systems</td>
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ABSTRACT
Integrated Financial Management Information System (IFMIS) is a government to government (G2G) or inter-agency relationship. It is the automation of the 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, agencies and other public sector operations (Rodin-Brown, 2008). The objectives of the study were to determine how plans and budget formulation using IFMIS influence performance of water infrastructure in Bomet County, to determine how procurement using IFMIS influence performance of water infrastructure projects in Bomet County, to determine how reporting using IFMIS influence performance of water infrastructure projects in Bomet County, and to determine how revenue collection using IFMIS influence performance of water infrastructure projects. The issues discussed on the literature review included concept of financial performance, influence of components of IFMIS on financial performance, theoretical review, empirical review and conceptual framework. Descriptive survey was used to collect both primary and secondary data. The target population of the study was employees of Bomet County Government. Questionnaires are the research instruments that were used. Secondary data included periodicals and administrative challenge decisions. Data was analyzed using SPSS version 21. Summaries of data findings together with their possible interpretations was presented by tables, mean, percentages, frequencies, variances, and standard deviation. The study found that IFMIS has positive effects in financial performance. IFMIS ensures the timely provision of quality information, promotes empowerment of employees and long term goals, intervention aimed at improving entrepreneurship and self-employment, IFMIS has modernize the system of financial management in the county. It has led to economic growth, the country government has become more accountable, and IFMIS eliminate waste and corruption in the use of public assets. The study concluded that IFMIS improved financial performance.
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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The Government of Kenya recognizes that the provision of Information and Communication Technology is significant for enabling economic and social development by improving communication and facilitating information flow. The use of Information Communication Technologies has considerably changed services, business models, and people’s expectations of the quality and efficiency of information sharing and service delivery (GoK, 2015). Through the automation of public financial processes, the Integrated Financial Management Information System (IFMIS) has provided an interlinked system of internal controls providing clear audit trails and identification of the originator of all transactions.

Although the growth of the ICT sector in Kenya has been significantly influenced by global trends, it can be evaluated in terms of number of fixed and mobile telephone lines; the number of computers and services; Internet Service Providers; the number of Internet users; broadcasting stations; and market share of each one of them (Kimaru, 2012). With the help of IT, governments are realizing that, by applying the same principles and technologies that are fueling e-business revolution, they can achieve similar transformation. The result is the emergency of IFMIS used to provide receivable management solutions to financial service institutions both in the government and in private sector. It aims to strengthen public financial management systems in a bid to
enhance transparency, accountability, and responsiveness to public expenditure policy priorities.

The aim of a Public Financial Management (PFM) system is to support the achievement of fiscal discipline, strategic and efficient allocation and use of funds, value for money and probity in the use of public funds. Some stages in public procurement, such as the invitation, submission and evaluation stages, require bespoke solutions. According to Agaba & Shipman (2012), the Organization for Economic Cooperation and Development (OECD) estimates the value of government procurement in the world to be over US$2,000 billion equivalent to 7% of world GDP and 30% of global merchandise trade. The submission, evaluation, and order stages are the most complex, requiring a common set of protocols and standards in order to organize the exchange of complex documents and the interaction between public purchasers and suppliers. Juma (2013) argues that in developing countries, the public procurement sector is often the largest domestic market

1.1.1 Integrated Financial Management Information System

According to Audenhove (2012), information infrastructures are expected to stimulate economic growth, increase productivity, create jobs, and improve the quality of life. The establishment of an IFMIS has become an important benchmark for the country’s budget reform agenda often regarded as a precondition for achieving effective management of budgetary resources (Diamond et al., 2005). Integrated Financial Management System (IFMIS) is an information system that tracks financial events and summarizes financial
IFMIS generally 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 the public financial management processes, from budget preparation and execution to accounting and reporting, with the help of an integrated system for financial management of line ministries, spending agencies and other public sector operations (Diamond et al., 2005). The system captures all the functional processes, and the relevant financial flows, within public expenditure management.

In the government realm, IFMIS more specifically refers 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 operation (Mutua, 2014). 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 like equipment, land and buildings, and liabilities. 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 processes across central government or even including local government and other public sector and quasi-governmental agencies and operations.

Globally, information systems development can be closely attributed to the process of globalization in which the ICT industry is becoming more and more globally interconnected. A number of scholars have argued that ICT is a critical factor in mediating the globalization process in a specific context and, in turn, has an impact on the complexity of globalization (Avgereu, 2013). In Kenya, IFMIS is used to provide receivable management solutions to financial service institutions both in the government and private sector.

1.1.2 Financial Performance

Financial performance is the degree to which financial objectives are being or have been accomplished. It is the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure firm's overall financial health over a given period of time and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Chung and Fung, 2013). According to Mutua (2014) financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. It is the general measure of a firm's overall financial health over a given period of time, and can be used to compare similar industries or sectors in
aggregation. Financial performance of companies can be measured using accounting information or stock market values in a financial management practices context. Changes in market value are observed when applying stock market values as a measure of performance. Firm performance is measured over time by using the average stock market change per year. This value is usually obtained by calculating the yearly change in stock price (McMahon, 2009).

1.1.3 Bomet County Government

The scope of the study was Bomet County Government. The promulgation of the Constitution of Kenya 2010 (CoK 2010) on 27 August 2010 paved way for realization of the system of governance. Devolved Government specifically provides for the setting up of the County Governments. Bomet County is one of the 47 Counties. It is located in the former Rift Valley Province of Kenya. The county has a population of 730,129 (2009 census) and an area of 1,997.9 km². The County has five (5) Constituencies and 25 wards. Bomet County is a multiracial, multi-ethnic nation with citizens of diverse socio-economic, religious, and cultural backgrounds co-existing together (Bomet County, 2015).

The county is densely populated, thus has a large labour force concentrated around its agricultural centres. The potential for this labour force is quite high since any efforts to direct its energy towards increased agricultural production would see the county contribute a substantial portion toward the country’s food requirements and consequently provide incomes for its people. Bomet County has managed to acquire the basic ICT
equipment, allocate funds for ICT utilities and some ICT human resource (Bomet County, 2015). The study took place between March and April 2015, for a period of five weeks.

1.2 Statement of the Problem

According to Bwisa (2013), government should embrace the application of MIS for effectiveness and efficiency of operations. In the last decade, Kenya has seen a lot of development in the application of ICT. Helsper (2014) suggested that a fully functioning IFMIS can improve governance by providing real-time financial information that managers can use to administer programs effectively, formulate budgets, and manage resources. Bomet County Government is charged with the responsibility of providing proper budgetary and expenditure management of government financial resources.

In this regard, the county has been continually striving to improve financial management systems through various reform programmes, aimed at increasing transparency, accountability, as well as responsiveness of County financial resources to enhance the quantity and quality of service delivery to meet its developing priorities. The Kenyan government implemented IFMIS to strengthen government finance and accounting functions. This study therefore sought to analyze how the IFMIS system has influenced the financial performance of Bomet County Government. It sought to find whether the system has a positive or negative impact on performance of water infrastructure project in Bomet County Government.
1.3 Purpose of the Study

This study sought to analyze how the IFMIS system has influenced the financial performance of water infrastructure projects in Bomet County Government. It sought to find whether the system has a positive or negative impact on financial performance.

1.4 Research Objectives

1. To determine how plans and budget formulation using IFMIS influence performance of water infrastructure in Bomet County
2. To determine how procurement using IFMIS influence performance of water infrastructure projects in Bomet County
3. To determine how reporting using IFMIS influence performance of water infrastructure projects in Bomet County
4. To determine how revenue collection using IFMIS influence performance of water infrastructure projects

1.5 Research Questions

1. How do plans and budget formulation using IFMIS influence performance of water infrastructure projects in Bomet County?
2. How do procurement using IFMIS influence performance of water infrastructure projects in Bomet County?
3. How do reporting using IFMIS influence performance of water infrastructure projects in Bomet County?
4. To what extent does revenue collection using IFMIS influence performance of water infrastructure in Bomet County?
1.6 Significance of the Study

The study will enable Bomet County to evaluate influence of IFMIS on performance of water infrastructure project and put in place appropriate measures for the system to improve effectiveness and efficiency. The government can use the information to come up with policies that would encourage more businesses and people IFMIS in management of water infrastructure projects. This study will form a basis of reference for what needs to be researched further and throw light to the need for future research in accounting information system.

1.7 Limitations of the Study

The major limitation in this study was shortage of time to collect the data and limited funds to carry out the research. Some of the respondents may not be ready to assist in providing the relevant information hence moral hazards.

1.8 Delimitations of the Study

The researcher overcame the limitation of respondents’ unwillingness to participate by assuring them of the confidentiality of information gathered.

1.9 Assumptions of the Study

The study assumed that respondents have adequate knowledge on the study subject to give meaningful response, and are ready to spare their time to participate in the study and give views without prejudice. The study also assumed that the departments targeted will participate voluntarily to enhance the success of the study. The research was to be
completed within the targeted timeline. The study lastly assumes that the authority within the areas of the targeted County would cooperate to facilitate access.

1.10 Organization of the Study

This study was divided into five chapters. Chapter one is the introduction part and contains information on the background of the study, statement of the problem, research questions, scope of the study, significant of the study and definition of terms. Chapter Two contains the literature review on what other researches have studies on the fields of IFMIS and financial performance, conceptual framework and summary of the study. Chapter three contains the research methodology. The study adopted descriptive research. Chapter four contains data analysis, presentation and interpretation. Chapter five contain summary, conclusion and recommendation.

1.11 Definition of Terms

**Government:** The New Oxford English dictionary (2001) defines government as the system by which a state or community is governed or the action or manner of controlling or regulating a state, organization, or people. In this study, government is the provision of services that benefit all people: national defense, environmental protection, police protection etc. It is the way we solve collective problems.

**Integrated Financial Management Information System:** IFMIS is an information system that tracks financial events and summarizes financial information.
Financial performance: Financial performance refers to the degree to which financial objectives are being or have been accomplished. It is the process of measuring the results of a firm’s policies and operations in monetary terms.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed the information from other researchers who had carried out research in the same field of study and other existing literature by scholars. Issues discussed included concept of financial performance, influence of components of IFMIS on financial performance, theoretical review, empirical review and conceptual framework.

2.2 The Concept of Financial Performance in the Public Organization

Financial Management involves planning directing, organizing, and controlling the financial activities such as procurement and utilization of funds of an organization. According to Tomecko and Dondo (2010), financial management is the process of managing resources, which entails accounting and financial reporting, budgeting, collecting accounts receivable, risk management, and insurance for a firm. Financial Performance is the measure of how well a firm can use assets generate revenues used. It is as a general measure of a firm's overall financial health over a given period, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Rodin-Brown, 2013).

Managing financial records is key to any organization. Amram (2005) claims that the main challenges in financial management resonate with record keeping, regulatory compliance. In addition, borrowing arrangements, financial analysis, financial reporting,
and operational funding contribute to the challenges in financial management. Appropriate management of financial activities is necessary to ensure accountability. The relationship between ICT investment, including e-procurement, and firm performance has been studied by several researchers over the years. Bitler (2010) investigated the relationship between information and communication technology investments and small firms’ performance. The researcher concluded that there was a significant performance difference between firms that adopt ICT and those that do not adopt the technology. In their study conducted to examine technological progress and its effects in the banking industry using relevant data, Berger et al., (2014) find that ICT investment leads to improvements in costs. The improvement was hinged on productivity increase in form of improved “back-office” technologies, which is in form of organization related benefits such as reduced costs of operation as well as improved customer care technologies, which is in form of benefits to customers such as improved quality and variety of services.

According to Bai and Henesey (2012), the current global financial crisis has attracted the attention of policy makers in their quest to find solutions aimed at averting such a future global crisis. Public finance strategists study the livability level problem (first order casual effects), and the sustainability level problem, the second order problem that is about fundamental structure and social subsystems relationships. System livability does not care about the effects of unregulated actions, whereas system sustainability tries to keep a system functioning within its environment by avoiding excessive behaviors.
Past empirical findings indicate that developing countries mainly in Africa have reported positive progress; either in the form of specific countries scoring better on assessments over time or in better performance across countries in the adoption of integrated financial management systems (Renzio and Dorotinsky, 2013). It is however worth noting that, while performance indicator scores have increased across developing countries, these reflect uneven improvements across processes and evidence of improvements in overall public performance management system quality and impact on the overall goals is elusive (Westcot, 2012).

The adoption of integrated financial management systems among state corporations in Kenya has been championed as the best strategy in mitigating the ensuing effects of financial misappropriations that have dogged the public sector since independency. The World Bank (1998) for example, outlines the three main objectives of public sector financial management as ensuring: aggregate fiscal discipline; allocation of resources in accordance with strategic priorities, and efficient and effective use of resources in the implementation of strategic priorities. Jobe (2014) states that integrating financial management systems enables state corporations: Increase ability to undertake control and monitoring of expenditure and receipts in Government Departments. It also increase ability to access information on financial and operational performance; increase ability to access information on Government’s cash position and Information on Economic performance; and increase ability to demonstrate accountability to donors and the public (Jobe, 2014).
2.3 Integrated Financial Management Information Systems

According to Priem & Butler, (2001), a well-designed IFMIS can provide a number of features that may help detect excessive payments, fraud and theft. By recording information in an integrated system that uses common values, IFMIS users can access the system and retrieve the specific information they require to carry out different functions and tasks. 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. Some systems have libraries consisting of hundreds of standard reports (Brennan, 2007). 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 International Monetary Fund (IMF).

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. According to Bartel (2013), 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.

2.4 Plans And Budget Formulation Using IFMIS

Plan to Budget component of IFMIS is aimed at providing structured framework for development and deployment of entirely functional automated planning and budgeting system, aimed at improving the accuracy and efficiency in the Government planning and budgeting process. P2B is an integrated process and system that links planning, policy objectives, and budget allocation (GoK, 2015).

IFMIS offer a budget preparation sub-system which may or may not be based on a Medium-Term Expenditure Framework (MTEF). Further to this it also provides for a budget execution and expenditure management sub-system to monitor and account for revenues and public expenditures. Important elements typically include an accounting system, a cash management system to monitor the cash flow within
government, a commitment control system to monitor commitments, an aid and debt management system to track external aid and debt, and a payroll system. To ensure consistency, the introduction of a uniform Chart of Accounts to capture receipts, expenditures, and commitments is required. Reporting and auditing sub-systems to ensure transparency, accountability, and compliance with the budget or with existing regulations that govern public expenditure management (Rezaian, 2014).

2.5 Influence of Revenue Collection Using IFMIS on Financial Performance

R2C component provides functionalities for collection, recording, classification, and reporting of Government revenue. It involves revenue cash management starting from generation, collection, recording of revenue and distribution of funds to the ministries. The focus is on full roll out and activation of the bank reconciliation process, the exchequer release process, cash forecasting and cash positioning process, and the debt management process, re-engineer the exchequer release process to accommodate for creation of the Single Treasury (GoK, 2015).

One of the major benefits of an IFMIS is the impact that it can have on corruption, by increasing the risk of detection. A well-designed IFMIS can provide a number of features that may help detect excessive payments, fraud and theft. These include, for example, automated identification of exceptions to normal operations, patterns of suspicious activities, automated cross-referencing of personal identification numbers for fraud, cross-referencing of asset inventories with equipment purchase to detect
theft, automated cash disbursement rules and identification of ghost workers (Chene, 2013).

2.6 Procurement Using IFMIS

The aim of P2P component is to create an end-to-end automated process that starts at development of procurement plans, to the actual procurement of goods and services, to payment of suppliers for goods or services delivered. The core procurement processes is automated. The process entails procurement planning, supplier management, requisition management, quotation management, purchase order (PO) management, goods receipt management, invoicing and payments management, inventory management, contract management and reconciliations and period end close; and implementation of a document management system, among other key initiatives (Mutua, 2014). The objectives of P2P include creating an efficient and streamlined procurement and payment system at all government levels that automates the procurement and payment process and increases control and visibility over the entire life cycle of a procurement transaction, from procurement planning to payment (PPOA, 2015)

According to Oz (2006), the goal of financial managers, including controllers and treasurers, is to manage an organization’s money as efficiently as possible. They achieve this goal by collecting payables as soon as possible, making payments at the latest time allowed by contract or law, ensuring that sufficient funds are available for day-to-day operations and taking advantage of opportunities to accrue the highest yield on funds not used for current activities. Simson et al. (2011) pointed out that in order to effectively
manage the government’s cashflow and prevent arrears from accumulating, it is important to monitor the pipeline of future payments. In addition, procurement is a common source of corruption and therefore procurement systems tend to include controls aimed to detect and deter corruption via IFMIS.

2.7 Influence of Reporting Using IFMIS on Financial Performance

Record to Report component of IFMIS involves all activities of updating and maintenance of the general ledger, the reconciliation of sub ledgers to the general ledger and closing of books. It also includes recording, control and reporting on fixed assets at both National and County level. It is a secure two-way interface with CBK for accurate, up-to-date information on the GOK financial position and the production of statutory reports real time (GoK, 2015).

An IFMIS allows users anywhere within the IFMIS network to access the system and extract the specific information they need. A variety of reports can be generated to address different budgeting, funding, treasury, cash flow, accounting, audit and day-today management concerns (Hendricks, 2012). Diamond and Khemani (2005) explain that IFMIS role is to connect, accumulate, process, and then provide information to all parties in the budget system on a continuous basis. All participants in the system, therefore, need to be able to access the system, and to derive the specific information they require to carry out their different functions. The converse is also true, if the FMIS does not provide the required information – that is, has not the right functionality – it will not be used, and will cease to fulfill its central function as a system.
IFMIS recording of information into an integrated system that uses common values enable users to access the system and extract the specific information they require to carry out different purposes and functions. Different reports can be generated from the system including 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. The systems have libraries containing hundreds of standard reports. Managers can use this information 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, and make necessary adjustments (Muehle & Ochieng, 2014).

ICT business value and service delivery include productivity enhancement, profitability improvement, improved work relations, competitive advantage and efficient use of resources at both intermediate level and organizational level (Prasad 2013). Information and Communication Technology is employed in organizations to improve operational efficiency by automating information-based processes to enable firms do things faster, cheaper, accurately and concisely (Yazici, 2013).

The integration of different functions and entities within a shared database provide managers with tools to plan, manage, and control public resources. Automation is an important IFMIS feature whose benefits include: improved transparency of public sector operations. It provides rapid expedition of many transactions at once
Technical solutions range from a stand-alone accounting system to a complex network based IT system. Experience indicates that the use of a standard IFMIS package is the most cost-effective solution. These IFMIS packages allow customization of specific user requirements formulated at the design stage. Modern integrated IFMIS systems have in particular two key features: a uniform classification of accounts (new Chart of Accounts) used for the budget and expenditure management data; and communication and data exchange capabilities across the system or across the Local Area Network (LAN) and Wide Area Network (WAN), regardless of technology platform used within the system (Helene, 2013).

2.9 Meta Theory Model

Research on accounting information systems has been tracked from various disciplines, computer science, cognitive psychology, and organizational theory. It has been declared that previous applications of information technology in accounting systems were mainly processes of transactions that would reciprocate the manual processes. This has led to the need of incorporating various accounting sub disciplines into more research on accounting information systems (Ruchala and Mauldin, 2007). With increased attention on the design of these systems, practicing professionals will add more value to the field.
and thus redefine the scope of accounting information system. The changing nature of the information systems has brought about the need for an organized way of doing things. Meta theory is the integration and the synthesis of technical orientations, cognitive as well as the overarching model into the research on Accounting Information Systems. Meta theory has helped in addressing the IT limitations addressed in previous researches such as the failure to recognize the task to which IT is being applied, the failure to recognize the adaptive nature of the artificial phenomena. Other limitations include the failure to account for the design science in the actual field research and the failure to direct the act of making or choosing the necessary decisions and treating all the transactions in an equal manner (Gorry and Scott-Morton, 2012).
2.10 Conceptual framework

Dependent Variable

Independent variables

- Plans and Budget Formulation
  - Forecasting and scheduling

- Procurement
  - Requisitioning, Tendering and Ordering

- Reporting
  - Reconciliations and Periodic reports

- Revenue Collection
  - Receiving and accounting for revenue

Financial Performance

- Enhanced performance
- Improved revenue collection
- Accountability of management
- Reduced corruption
- Profit maximization
- Enhanced communications

1. Personal characteristics
   a) Education
   b) Age
   c) Experience
   d) Gender
   e) ICT skills

2. Lack of resources

3. ICT skills

Intervening variable

Source: Researcher (2016)

2.11 Empirical literature

Integrated Financial Management Information System tracks financial events and summarizes financial information. It is the use of information and communication
technology in financial operations to support management and budget decisions, fiduciary responsibilities and the preparations of financial reports and statements (USAID, 2014). In the government realm, IFMIS refers more specifically to the computerizations of PFM process from budget preparation and execution to accounting and reporting with the help of an integrated system for financial management of public sector operations (Casals, 2013).

2.12 Gaps in Literature Review

The experience of the design, development, and pilot implementation of the IFMIS in Kenya has not been satisfying. In the design of IFMIS, the existing manual budget execution and accountability processes seem to have been automated to a large extent without consideration of whether there was a better and more efficient method of achieving the required results (Kinyeki, Mutai and Ngungu, 2013). The goal of financial management in government is to safeguard and use available funds and other scarce resources in the best interest of the people. The establishment of an IFMIS has become an important benchmark for the country’s budget reform agenda often regarded as a precondition for achieving effective management of budgetary resources (Diamond et al., 2005). From the literature review, it is evident that most researchers have dwelled on the implementation of IFMIS and little research has been done on the influence it has on the financial performance. The study therefore sought to find out if IFMIS has a positive or negative impact on financial performance in government organizations.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter presents the methodological framework that was used in the study. It involves research design, study population, sampling procedure and sample size, data collection procedures, validity and reliability of instruments, data analysis techniques and ethical issues of the research study.

3.2 Research Design
The study was based on descriptive research design. According to Cozby (2005), descriptive research is used to obtain information concerning the status of the phenomena to describe what exists with respect to variables in a situation, by asking individuals about their perceptions, attitudes, behavior, or values. This research data collection tool was questionnaire and observations as the sources of primary and secondary data respectively. Newman (2003) outlines that surveys are appropriate for research questions about self-reported behaviors, attitudes, self-classification, knowledge, expectations and characteristics, and are strongest when the answers people give to questions measure variables.

3.3 Target population
Mugenda (2003) defines population as entire group of individuals, events, or objects having common observable characteristic. The population of the study was employees of
Water infrastructure projects in Bomet County Government. The projects has 236 employees in the head office.

3.4 Sample size and sample selection

3.4.1 Sample size

The sampling size describes the list of all population units from which the sample is selected (Cooper and Schindler, 2008). It is a physical representation of the target population and comprises all the units that are potential members of a sample (Kothari, 2014). Mugenda and Mugenda (2003) explain that for any meaningful study, 10-30% of the target population would provide an adequate sample size. Gay (1992) suggests that at least 10% of the population is a good representation where the population is large and 30%, where the population is small. He observes that a researcher selects the sample due to various limitations that may not allow researching the whole population drawn. Stratified random sampling procedure was administered to select the subjects of study. Stratified sampling ensures a high degree of representativeness of all the strata or layers in the population (Iyoke et al., 2006). The study population was stratified into strata based on the level of management in the organization.
## Table 3.1 Sample Size

<table>
<thead>
<tr>
<th>Levels of Management</th>
<th>No of employees</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management</td>
<td>38</td>
<td>16.1</td>
</tr>
<tr>
<td>Middle Management</td>
<td>72</td>
<td>30.5</td>
</tr>
<tr>
<td>Lower Management</td>
<td>126</td>
<td>53.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>236</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

### 3.4.2 Sample selection

Cresswell (2003) asserts that the entire population may not be easy to study. A researcher, therefore, has to draw a sample from the study population. Stratified random sampling was used to select employees of water infrastructure projects in Bomet County government. Mugenda & Mugenda (2003), states that where a study is dealing with a heterogeneous population, a minimum target of 30% is required.

## Table 3.2 Sample Size

<table>
<thead>
<tr>
<th>Levels of Management</th>
<th>No of employees</th>
<th>percentage</th>
<th>No Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management</td>
<td>38</td>
<td>16.1</td>
<td>11</td>
</tr>
<tr>
<td>Middle Management</td>
<td>72</td>
<td>30.5</td>
<td>21</td>
</tr>
<tr>
<td>Lower Management</td>
<td>126</td>
<td>53.4</td>
<td>38</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>236</strong></td>
<td><strong>100</strong></td>
<td><strong>70</strong></td>
</tr>
</tbody>
</table>
3.5 Data collection instruments

The data collection instrument that was used in the study for primary sources is a questionnaire. According to Newman (2003), questionnaires provide data in the same form from all respondents. This ensured comparison of data, which made it easier for categorization. The content and organization of a questionnaire corresponds to researcher’s research objectives. Questionnaire was appropriate because it explored the implementation of IFMIS, considering all the challenges and impact on financial performance.

3.5.1 Instruments pretesting/piloting

Reliability was ensured by pre-testing the questionnaire with a selected sample from one of the department in the county, which were not included in the actual data collection. The pre-test was conducted by the researcher to ensure clarity of the questionnaires. Pilot study was done on randomly selected staff within the County Government. This was mainly to verify whether the items generated by the researcher displays stimulus homogeneity hence valid and reliable. Piloting was also done with the purpose of detecting any weakness and finding out if the questionnaires are clear to the respondents. The researcher administered research instrument to twelve randomly selected staff who were not selected for the actual study. The results of the pilot study were analyzed and used to modify and remove ambiguous items on the instruments used in the study.
3.5.2 Instrument validity and Reliability

As noted by (Jaeger et al., 1997) data validity refers to how well the result of a research can give the right answer to the research question. Information from related previous studies and different literatures that cover all the areas of the study were used to ensure validity. A pilot test was conducted to test validity of the research instruments with regard to IFMIS in Bomet County. The accuracy of the data being collected depend on the collection instrument (Mugenda & Mugenda, 2003).

3.6 Procedure of data collection

Data collection was done by the drop and pick method. The questionnaires were dropped at Bomet County Government and later collected. According to Leedy and Ormrod (2001), respondents are more truthful while responding to the questionnaires regarding controversial issues in particular due to the fact that their responses are anonymous.

3.7 Methods of data analysis

The data collected was analyzed using descriptive statistics. This method of analysis is most desirable as it enabled the researcher to have an insight on impact of IFMIS on financial performance in Bomet County. Once the data was collected, the questionnaires was edited for accuracy, consistency, and completeness. Data was analyzed through descriptive and inferential statistics where the Statistical Package for Social Sciences (SPSS), version 21, programme was used for quantitative data. The data was coded, assigned labels to variables categories and entered into the computer. Data was analysed into frequency distributions, percentages and Tables. Pearson’s Correlation Coefficient
were used to establish the significance of the correlation between IFMIS and Financial performance of water infrastructure projects in Bomet County Government. Qualitative data were organized into thematic areas for easier interpretation, common items were obtained in data collected and clustered according to research objectives to identify variables that depict general concepts of the study. Inferences were made from particular data under each theme and conclusion will then be drawn from the findings.

3.8 Operationalization of the study variables

The objective of the study included determining the extent of IFMIS adoption in Bomet County Government, to determine the impact of IFMIS on financial performance in Bomet County Government, and to determine the challenges faced in the implementation of IFMIS in Bomet County Government. To achieve these objectives questionnaires were used each with specific questions for each objective.

Table 3.3 Operationalization of Variables

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Variables</th>
<th>Indicators</th>
<th>Tool of Analysis</th>
<th>Types of tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>To determine the extent of IFMIS adoption in Bomet County Government</td>
<td><strong>Dependent</strong> IFMIS</td>
<td>Financial Human Resource Marketing Planning Budgeting Policies and procedures Documentation</td>
<td>Descriptive statistics Tables andPictures</td>
<td>Frequency distribution tables</td>
</tr>
<tr>
<td><strong>Independent</strong> Financial performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

29
To determine the impact of IFMIS on financial performance in Bomet County Government:

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFMIS</td>
<td>Financial performance</td>
</tr>
<tr>
<td></td>
<td>Enhance service delivery</td>
</tr>
<tr>
<td></td>
<td>Profit maximization</td>
</tr>
<tr>
<td></td>
<td>Enhanced payroll system</td>
</tr>
<tr>
<td></td>
<td>Improved budgeting</td>
</tr>
<tr>
<td></td>
<td>Enhanced communication</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To determine the challenges faced in the implementation of IFMIS in Bomet County Government:

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFMIS</td>
<td>Financial performance</td>
</tr>
<tr>
<td></td>
<td>Lack of enough financial resources</td>
</tr>
<tr>
<td></td>
<td>Employee resistance</td>
</tr>
<tr>
<td></td>
<td>Political interference</td>
</tr>
<tr>
<td></td>
<td>Lack of qualified staff</td>
</tr>
<tr>
<td></td>
<td>Lack of infrastructure</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.9 Ethical consideration

The researcher sought permission to carry out the research from UoN and the National Council of Science, Technology and Innovation (NACOSTI). The researcher obtained ethical clearance from the Bomet County Government to conduct the study. In order to uphold the ethical principles of confidentiality and anonymity, the respondents were asked not to indicate their names. The study was used for academic purposes only.
CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the analysis of the data collected from the respondent and discusses the research findings on effects of Integrated Financial Management Information Systems on financial performance in water infrastructure projects in Bomet County Government. All completed questionnaires were edited for accuracy, uniformity, consistency and completeness. The response rate of 70 respondents was achieved. This good response has been attributed to the fact that quite a good number of the respondents were knowledgeable to fill the questionnaires themselves. Summaries of data findings together with their possible interpretations have been presented by use of tables, mean, percentages, frequencies, variances, standard deviation and graphs.

4.2 Demographic Statistics

The study sought to know the gender, age and level of education of respondents. This was to understand their characteristics and experience in answering the questionnaire.

4.2.1 Gender of Respondents

Respondents were asked to indicate their gender and indicated as shown in Table 4.1:
Table 4.1: Gender of Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>38</td>
<td>54.3</td>
</tr>
<tr>
<td>Female</td>
<td>32</td>
<td>45.7</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From Table 4.1, 54.3% of the respondents were male while 45.7% were female. This indicates that majority of the respondents were male, although the difference is not significant enough to influence the results of the study towards any gender.

4.2.2 Age of Respondents

Respondents were asked to indicate their age and the findings are in Table 4.2;

Table 4.2 Age of respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 25</td>
<td>3</td>
<td>4.3</td>
</tr>
<tr>
<td>26-35</td>
<td>8</td>
<td>11.4</td>
</tr>
<tr>
<td>36-45</td>
<td>28</td>
<td>40.0</td>
</tr>
<tr>
<td>46-55</td>
<td>14</td>
<td>20.0</td>
</tr>
<tr>
<td>Above 56</td>
<td>17</td>
<td>24.3</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Majority of the respondents were between 36-45 years, 24.3% were above 56 years, 20% were 46-55 years, and 11.4% were between 26-35 years while 4.3% were below 25 years.
This shows that the respondents were spread across all ages and the study will not be influenced by any age group.

4.2.3 Level of Education

Respondents were asked to indicate their level of education and indicated as in Table 4.3;

**Table 4.3 Level of Education**

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters</td>
<td>9</td>
<td>12.8</td>
</tr>
<tr>
<td>Bachelors</td>
<td>26</td>
<td>37.1</td>
</tr>
<tr>
<td>Diploma</td>
<td>21</td>
<td>30</td>
</tr>
<tr>
<td>Certificate</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Major of the respondents had bachelors (37.1%), 30% of the respondents had diploma, 20% had certificates while 12.8% were masters holders. This indicates that majority of the respondents were knowledgeable to fill the questionnaires.

4.3 Descriptive Analysis

4.3.1 Extent of Adoption of IFMIS

The study sought to identify the extent of adoption of IFMIS in water infrastructure projects in Bomet County. Likert scale was used where: 5= Very high extent 4= High extent 3= moderate extent 2= low extent 1= Very low extent. They indicated as shown in table 4.4;
Table 4.4: Extent of Adoption of IFMIS

<table>
<thead>
<tr>
<th>Activity</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money transfers</td>
<td>70</td>
<td>4.59</td>
<td>.503</td>
</tr>
<tr>
<td>Typing, data entry</td>
<td>70</td>
<td>4.46</td>
<td>.582</td>
</tr>
<tr>
<td>Marketing and advertising</td>
<td>70</td>
<td>4.39</td>
<td>.579</td>
</tr>
<tr>
<td>Records to Report – GL</td>
<td>70</td>
<td>4.36</td>
<td>.581</td>
</tr>
<tr>
<td>Plan to Budget</td>
<td>70</td>
<td>4.34</td>
<td>.588</td>
</tr>
<tr>
<td>Procure to Pay</td>
<td>70</td>
<td>4.32</td>
<td>.593</td>
</tr>
<tr>
<td>Access to government services</td>
<td>70</td>
<td>4.31</td>
<td>.599</td>
</tr>
<tr>
<td>Revenue to Cash– CM</td>
<td>70</td>
<td>4.25</td>
<td>.612</td>
</tr>
<tr>
<td>Strong, Reliable and modern ICT infrastructure</td>
<td>70</td>
<td>4.14</td>
<td>.618</td>
</tr>
<tr>
<td>Computer training</td>
<td>70</td>
<td>4.12</td>
<td>.621</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Majority of the respondents indicated that IFMIS is used to a very high extent for money transfers (4.59). The respondents also indicated that IFMIS is used in the following ways to a high extent; typing and data entry (4.46), marketing and advertising (4.39), records to report (4.36), plan to budget (4.34), procure to Pay (4.32), access to government services (4.31), revenue to Cash– CM (4.25), strong, reliable and modern ICT infrastructure (4.14), and computer training (4.12). This shows that IFMIS system has been adopted to a high extent in the County.
4.3.2 Plans and Budget Formulation Using IFMIS and Organization Performance

The study sought to identify how plans and budget formulation using IFMIS influence performance of water infrastructure projects in Bomet County. The following scale was used: 5= strongly agree 4= agree 3= undecided 2= disagree 1= strongly disagree

Table 4.5: Influence of Plans and Budget Formulation on Organization Performance

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFMIS has ensured that the ministry budget is executed in accordance with rules to</td>
<td>70</td>
<td>4.10</td>
<td>.384</td>
</tr>
<tr>
<td>prevent overspending</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFMIS accurately discloses the financial position of the ministry</td>
<td>70</td>
<td>4.07</td>
<td>.489</td>
</tr>
<tr>
<td>IFMIS offers real-time financial information that enhances my decision making</td>
<td>70</td>
<td>4.02</td>
<td>.498</td>
</tr>
<tr>
<td>abilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With IFMIS, I have at my disposal information that can quickly provide year to year</td>
<td>70</td>
<td>3.71</td>
<td>.532</td>
</tr>
<tr>
<td>balances which can be used for analysis throughout the year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFMIS has led to significant reductions in wasteful expenses and irregular expenditure</td>
<td>70</td>
<td>3.26</td>
<td>.692</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As evident in Table 4.5, respondents agreed that IFMIS has ensured that the ministry budget is executed in accordance with rules to prevent overspending with a mean of 4.10 and that IFMIS accurately discloses the financial position of the ministry (mean of 4.07). The respondents also agreed that IFMIS offers real-time financial information that enhances my decision making abilities (4.02) and that IFMIS provides information that can quickly provide year to year balances which can be used for analysis throughout the
year (3.71). However, respondents were undecided whether IFMIS has led to significant reductions in wasteful expenses and irregular expenditure (3.26).

4.3.3 Procurement Using IFMIS and Organization Performance

Respondents were asked to indicate on the level they agree to statements on influence of procurement using IFMIS on organization performance. They indicated as shown in table 4.6;

Table 4.6 Procurement Using IFMIS and Organization Performance

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a high level of procurement accountability</td>
<td>70</td>
<td>4.44</td>
<td>.496</td>
</tr>
<tr>
<td>All ministry’s transactions – both receipts and payments – are processed through IFMIS</td>
<td>70</td>
<td>4.17</td>
<td>.717</td>
</tr>
<tr>
<td>The procurements conducted are efficient and effective</td>
<td>70</td>
<td>4.16</td>
<td>.951</td>
</tr>
<tr>
<td>The procurements are of increased quality</td>
<td>70</td>
<td>4.03</td>
<td>.964</td>
</tr>
<tr>
<td>The procurement processes are transparent and open</td>
<td>70</td>
<td>3.65</td>
<td>1.184</td>
</tr>
</tbody>
</table>

The respondents agreed that there is a high level of procurement accountability (4.44), the ministry’s transactions, both receipts and payments, are processed through IFMIS with a mean of (4.17), procurements conducted are efficient and effective (4.16), quality
of procurements are increased (4.03), and the procurement processes are transparent and open (3.65).

4.3.4 Reporting Using IFMIS and Organization Performance

Respondents were asked to indicate on the level they agree to statements on influence of reporting using IFMIS on performance of water infrastructure projects in Bomet County. They indicated as shown in table 4.7;

Table 4.7 Reporting Using IFMIS Influence Performance

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can access IFMIS to derive the specific information I require to carry out my work</td>
<td>70</td>
<td>3.94</td>
<td>.527</td>
</tr>
<tr>
<td>The IFMIS system enables me to generate custom reports for internal and external use</td>
<td>70</td>
<td>3.72</td>
<td>.639</td>
</tr>
<tr>
<td>Through IFMIS, I am able to reconcile transactions data in real-time</td>
<td>70</td>
<td>3.67</td>
<td>.752</td>
</tr>
<tr>
<td>There are built-in analytical tools within IFMIS that enables trend analysis of various elements of fiscal operations at the ministry</td>
<td>70</td>
<td>3.53</td>
<td>.794</td>
</tr>
<tr>
<td>IFMIS enables me to understand the true cost of service delivered by the ministry per activity</td>
<td>70</td>
<td>3.48</td>
<td>.875</td>
</tr>
<tr>
<td>I can easily extract and present data from IFMIS in ways that facilitate analysis</td>
<td>70</td>
<td>3.35</td>
<td>.984</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the findings in Table 4.7 above, respondents agrees that they can access IFMIS to derive the specific information they require to carry out my work with a mean of 3.94, IFMIS system enables users to generate custom reports for internal and external use
IFMIS enable users to reconcile transactions data in real-time (mean of 3.67) and that there are built-in analytical tools within IFMIS that enables trend analysis of various elements of fiscal operations at the ministry (mean of 3.53). However, respondents were undecided whether IFMIS enables them to understand the true cost of service delivered by the ministry per activity (mean of 3.48) and users can easily extract and present data from IFMIS in ways that facilitate analysis (mean of 3.35).

### 4.3.5 Revenue Collection Using IFMIS Influence Performance

Respondents were asked to indicate on the level they agree to statements on influence of revenue collection using IFMIS on organization performance. They indicated as shown in Table 4.8;

#### Table 4.8 Revenue Collection Using IFMIS Influence Performance

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFMIS ensures timely collection of revenue</td>
<td>70</td>
<td>4.44</td>
<td>.496</td>
</tr>
<tr>
<td>The county's revenue have been rising steadily</td>
<td>70</td>
<td>4.17</td>
<td>.717</td>
</tr>
<tr>
<td>IFMIS ensures that revenue is collected from all the water infrastructure projects</td>
<td>70</td>
<td>4.16</td>
<td>.951</td>
</tr>
<tr>
<td>The county is efficient in monetary allocation towards service delivery to the public</td>
<td>70</td>
<td>4.03</td>
<td>.964</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The respondents agreed that IFMIS ensures timely collection of revenue (mean of 4.44), the county’s revenue have been rising steadily (4.17), IFMIS ensures that revenue is collected from all the water infrastructure projects (mean of 4.16), and that the county is efficient in monetary allocation towards service delivery to the public (mean of 4.03).

4.4 Regression Analysis

Regression analysis was done to estimate the relationship between IFMIS and financial performance. The findings are shown in table 4.9 below;

**Table 4.9: Regression Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>df 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>df 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sig. F Change</td>
</tr>
<tr>
<td>1</td>
<td>.653a</td>
<td>.427</td>
<td>.248</td>
<td>.436</td>
<td>.427</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.383</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>73</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.085</td>
</tr>
</tbody>
</table>

Regression analysis revealed a positive relationship (R =0.427). The study also revealed that the use of IFMIS system contributed to 73% of financial performance. The F value (2.383) changes are significant which implies that the model is fit and robust.

4.4 Correlation Analysis

Correlation analysis was done to relationship between the IFMIS variable and financial performance. The findings are shown in Table 4.10 below;
Table 4.10 Relationship between IFMIS and Financial Performance

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>6.126</td>
<td>1.282</td>
<td>4.779</td>
<td>.000</td>
</tr>
<tr>
<td>Procure to Pay</td>
<td>-.158</td>
<td>.106</td>
<td>-.217</td>
<td>-1.497</td>
</tr>
<tr>
<td>Revenue to Cash</td>
<td>.119</td>
<td>.221</td>
<td>.099</td>
<td>.537</td>
</tr>
<tr>
<td>Plan to Budget</td>
<td>-.031</td>
<td>.294</td>
<td>-.016</td>
<td>-.107</td>
</tr>
<tr>
<td>Record to report</td>
<td>.126</td>
<td>.136</td>
<td>.272</td>
<td>.923</td>
</tr>
</tbody>
</table>

\[ Y = 6.126 - 0.158X_1 + 0.119X_2 - 0.031X_3 + 0.126X_4 + \varepsilon \]

Where \( Y \) is the level of customer satisfaction, and \( \varepsilon \) is the error term of the model.

\( X_1 = \) Procure to Pay  
\( X_2 = \) Revenue to Cash  
\( X_3 = \) Plan to Budget  
\( X_4 = \) Record to report

Positive effect was reported on Revenue to cash and record to report, while negative effects were reported on procure to pay and plan to budget.

ANOVA test was carried out to determine whether level of innovation and financial performance were significant across the network at 95% confident level. The results are indicated in Table 4.11
Table 4.11 Anova

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>12.028</td>
<td>7</td>
<td>1.718</td>
<td>6.256</td>
<td>.013(a)</td>
</tr>
<tr>
<td>Residual</td>
<td>26.009</td>
<td>8</td>
<td>3.251</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>38.037</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS Output, 2016

Analysis of Variance (ANOVA) consists of calculations that provide information about levels of variability within a regression model and form a basis for tests of significance. Correlation exist between the response and predictor variables if P-value < 0.05. As shown in table 4.9, P-Value = 0.013 < 0.05 indicated that there is enough evidence to support the alternative hypothesis, that there is a significant linear relationship between IFMIS and financial performance.

4.5 Interpretation of Findings and Discussions

From the findings of the study, majority of the respondents indicated that IFMIS is used to a very high extent for money transfers. The respondents also indicated that IFMIS is used in the following ways to a high extent; typing and data entry, marketing and advertising, records to report, plan to budget, procure to Pay, access to government services, revenue to Cash– CM, strong, reliable and modern ICT infrastructure, and computer training. This shows that IFMIS system has been adopted to a high extent in the County. IFMIS ensures the timely provision of quality information, promotes
empowerment of employees and long term goals, intervention aimed at improving entrepreneurship and self-employment, IFMIS has modernize the system of financial management in the county. It has led to economic growth, the country government has become more accountable, and IFMIS eliminate waste and corruption in the use of public assets. Corruption in use of public assets was indicated as the main challenge facing IFMIS system. The respondents also agreed that the following challenges affect IFMIS use; political interference, limited number of computers and equipment, shortage of skilled manpower, computer illiteracy, and channeling of the Funds.

Many related studies have been conducted and it seems evident that there exists a strong relationship between IFMS and the financial performance done in firms based in different industries. This agrees with the findings of the study for example Audenhove (2012), who concluded that implementation of IFMIS is expected to stimulate economic growth, increase productivity, create jobs, and improve the quality of life. The establishment of an IFMIS has become an important benchmark for the country’s budget reform agenda often regarded as a precondition for achieving effective management of budgetary resources (Diamond et al., 2005).

A number of scholars have argued that ICT, including IFMIS is a critical factor in mediating the globalization process in a specific context and, in turn, has an impact on the complexity of globalization (Avgereu, 2013). Helsper (2014) suggested that a fully functioning IFMIS can improve governance by providing real-time financial information that managers can use to administer programs effectively, formulate budgets,
and manage resources. Amram (2005) claims that the main challenges in financial management resonate with record keeping, regulatory compliance. In addition, borrowing arrangements, financial analysis, financial reporting, and operational funding contribute to the challenges in financial management. Jobe (2014) states that integrating financial management systems enables state corporations: Increase ability to undertake control and monitoring of expenditure and receipts in Government Departments. It also increase ability to access information on financial and operational performance; increase ability to access information on Government’s cash position and Information on Economic performance; and increase ability to demonstrate accountability to donors and the public.
CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This chapter summarizes the major findings of the study. This study sought to find out effects of IFMIS on financial performance of water infrastructure projects in Bomet County Government. In addition, this chapter provides a direction for further studies and gives some recommendations for policy making by the relevant authorities. Questionnaires were used to gather primary data. The questionnaires comprised of both closed and open-ended questions and were strictly administered by the researcher. Both primary and secondary information was used to determine the findings of the study.

5.2 Summary of Findings
The study inquired on the influence of IFMIS on financial performance. The respondents cited that IFMIS is used to a very high extent for money transfers. The respondents also indicated that IFMIS is used in the following ways to a high extent; typing and data entry, marketing and advertising, records to report, plan to budget, procure to Pay, access to government services, revenue to Cash–CM, strong, reliable and modern ICT infrastructure, and computer training. This shows that IFMIS system has been adopted to a high extent in the County.

Respondents agreed that IFMIS has ensured that the ministry budget is executed in accordance with rules to prevent overspending and that IFMIS accurately discloses the
financial position of the ministry. The respondents also agreed that IFMIS offers real-time financial information that enhances my decision making abilities and that IFMIS provides information that can quickly provide year to year balances which can be used for analysis throughout the year. However, respondents were undecided whether IFMIS has led to significant reductions in wasteful expenses and irregular expenditure. The respondents agreed that there is a high level of procurement accountability, the ministry’s transactions, both receipts and payments, are processed through IFMIS, procurements conducted are efficient and effective, quality of procurements are increased, and the procurement processes are transparent and open.

From the findings, users can access IFMIS to derive the specific information they require to carry out my work. IFMIS system enables users to generate custom reports for internal and external use. IFMIS enable users to reconcile transactions data in real-time and that there are built-in analytical tools within IFMIS that enables trend analysis of various elements of fiscal operations at the ministry. The respondents agreed that IFMIS ensures timely collection of revenue the county's revenue have been rising steadily, IFMIS ensures that revenue is collected from all the water infrastructure projects, and that the county is efficient in monetary allocation towards service delivery to the public.

Positive effect was reported on Revenue to cash and record to report, while negative effects were reported on procure to pay and plan to budget. Correlation indicated that there is enough evidence to support the alternative hypothesis, that there is a significant linear relationship between IFMIS and financial performance. Regression analysis
revealed a positive relationship (R =0.427). The study also revealed that a combination of Revenue to cash, record to report, procure to pay, and plan to budget contributed to 73% of financial performance. The F value (2.383) changes are significant which implies that the model is fit and robust.

5.3 Conclusion

The study concluded that IFMIS has positive effects on financial performance. As evident from this study, IFMIS ensures the timely provision of quality information, promotes empowerment of employees and long term goals, intervention aimed at improving entrepreneurship and self-employment, IFMIS has modernize the system of financial management in the county. It has led to economic growth, the country government has become more accountable, and IFMIS eliminate waste and corruption in the use of public asset.

In general, IFMIS influence financial performance of the water infrastructure projects positively. This is in agreement with the argument of several studies including: Avgereu, (2013), Helsper (2014). These in their findings indicate that IFMIS have positive impact on performance indicators. Their findings also support significance of the transformational effects of IFMIS on organization performance and operational efficiency. Results from the data collected discovered that IFMIS had a positive and significant effect on financial performance.
The findings confirm that an increase in the use of IFMIS results to increased financial performance. These findings agree with the findings of Audenhove (2012), who concluded that implementation of IFMIS is expected to stimulate economic growth, increase productivity, create jobs, and improve the quality of life. Helsper (2014) suggested that a fully functioning IFMIS can improve governance by providing real-time financial information that managers can use to administer programs effectively, formulate budgets, and manage resources.

5.4 Recommendations

From the findings, the study recommends that IFMIS system should be fully implemented as it increases financial performance. For County Government to realize growth, investment in technology should be made in order to enhance service delivery and transparency. The study also recommends that government should make the adoption of technology easy by reducing cost of acquiring new equipment and other innovations. Access to technologies depends largely on government policy and a strong will to implement those policies.

5.5 Limitations of the Study

The respondents were regularly very busy and therefore they required a lot of time in order to fill in the questionnaires. The challenge was overcome by giving the respondents the questionnaires early.
Getting accurate information from the respondents was one of the major challenges since some of the respondents were unwilling to give the information. The challenge was minimized by informing the respondents the importance of the study to the County Government in order to win their will to respond and offer accurate information.

The study considered water infrastructure projects in Bomet County Government only, hence cannot make a conclusion for the entire IFMIS implementation in the Country based on only one county.

5.6 Suggestions for Further Research

The research was carried out when IFMIS were relatively young and a lot might have been missed in the study due to the duration innovation practices had been in existence. Therefore, the study recommends that further study needs to be undertaken as IFMIS advances and new practices are adopted and incorporated in County.

The researcher suggests that this study could be a useful starting point for further academic research. IFMIS is a potential area for further research studies in developing countries of the world. Continued refinement of this study will be valuable to the Government as it improves service delivery and increases economic growth.

The study also suggest that further study be conducted to identify the effects of IFMIS on financial performance of other County Governments since the study only focused on water infrastructure projects in Bomet County.
REFERENCES


12.


Heeks, R., (2009). Building Transparency, Fighting Corruption with ICTs [Homepage of icontect online]


Appendix 1- Questionnaire

Information collected from this questionnaire will be handled with high confidentiality and will strictly be used for academic purposes by the researcher.

SECTION A: Demographic Information

What is your gender? Male [ ] Female [ ]

How old are you?

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Below 25</th>
<th>26-35</th>
<th>36-45</th>
<th>46-55</th>
<th>Above 56</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is your highest level of education?

Degree [ ] diploma [ ] certificate [ ] others Specify ………………

SECTION B: How plans and budget formulation using IFMIS influence performance

Use the following scale: 5= Very high level 4= High level 3= moderate level 2= low level 1= Very low level

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IFMIS accurately discloses the financial position of the ministry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>With IFMIS, I have at my disposal information that can quickly provide year to year balances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
which can be used for analysis throughout the year

3 IFMIS offers real-time financial information that enhances my decision making abilities

4 IFMIS has led to significant reductions in wasteful expenses and irregular expenditure

5 IFMIS has ensured that the ministry budget is executed in accordance with rules to prevent overspending

### SECTION C: How Procurement Using IFMIS Influence Performance

The following scale will be applicable: 5= strongly agree 4= agree 3= undecided 2= disagree 1= strongly disagree

<table>
<thead>
<tr>
<th>No.</th>
<th>Factors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All ministry’s transactions – both receipts and payments – are processed through IFMIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The procurement processes are transparent and open</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>There is a high level of procurement accountability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The procurements conducted are efficient and effective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The procurements are of increased Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION D: How Reporting Using IFMIS Influence Performance Of Water Infrastructure

Use the following scale: 5= Very high level 4= High level 3= moderate level 2= low level 1= Very low level

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IFMIS enables me to understand the true cost of service delivered by the ministry per activity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I can easily extract and present data from IFMIS in ways that facilitate analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I can access IFMIS to derive the specific information I require to carry out my work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>There are built-in analytical tools within IFMIS that enables trend analysis of various elements of fiscal operations at the ministry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Through IFMIS, I am able to reconcile transactions data in real-time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The IFMIS system enables me to generate custom reports for internal and external use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**SECTION E: Revenue Collection Using IFMIS Influence Performance**

Use the following scale: 5= Very high level 4= High level 3= moderate level 2= low level 1= Very low level

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The county is efficient in monetary allocation towards service delivery to the public</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The county's revenue have been rising steadily</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>IFMIS ensues that revenue is collected from all the water infrastructure projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>IFMIS ensures timely collection of revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>