

# EFFECTS OF INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEMS ON ACCOUNTABILITY IN TRANS-NZIOIA COUNTY, KENYA

Titus Kitele Mwendwa<sup>1\*</sup>, Dr. Calvin Otieno<sup>1,2</sup>, Dr. Elizabeth Nambuswa Makokha<sup>1,3</sup>

<sup>1</sup>School of Human Resource Development, Department of Entrepreneurship and Procurement, Leadership and management, Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000 - 00200, Nairobi Kenya.

<sup>2</sup>School of Human Resource Development, Department of Entrepreneurship and Procurement, Leadership and management, Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000 - 00200, Nairobi Kenya

<sup>3</sup>School of Human Resource Development, Department of Entrepreneurship and Procurement, Leadership and management, Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000 - 00200, Nairobi Kenya

---

**Abstract:** The Integrated Financial Management Information system (IFMIS) is a computerized budgeting, accounting and reporting system used by Kenyan Government to plan and use its financial resources more efficiently and effectively. The purpose of this study was to analyze the effects of Integrated Financial Management Information System (IFMIS) on Accountability in TransNzoia County Government. The study was guided by the objective as follows to determine the effect of technological skills on IFMIS accountability in TransNzoia county government. The objectives also form the themes in literature review. The research design was descriptive survey design; through a case study on Trans-Nzoia County. The study targeted officers from all key departments of the county. Data was collected from the respondents through the use of a questionnaire from the target population of employees in the Trans-Nzoia County. Validity, Reliability, where Cronbach alpha was used and pilot test was conducted in order to pre-test the accuracy of the data collection instruments in Bungoma County Government and West Pokot County Government. Data was analyzed by technique of multiple regressions which was used to test the hypotheses, to measure: effects, strength of relationship. Based on the findings the study concluded the following as follows; Technological skills ( $\beta = 1.113$ ) was found to be positively related to IFMIS accountability in Trans Nzoia County. From t-test analysis, the t -value was found to be 5.340 and the  $p$  -value 0.000. Statistically, this null hypothesis was rejected because  $p < 0.05$ . Thus, the study accepted the alternative hypothesis and it concluded that technological skills affect the IFMIS accountability in Trans Nzoia County. Based on the findings, the researcher recommended the following: IFMIS should be made stable networked with LAN at the County to supports management, accounts and procurement that secures provided information required for crucial decision making. Managers should coordinate and provide proper communication to Head of departments and other staff in their departments. The county government of Transnzoia should make sure that all Managers technical personnel and other staff at the County Treasury to run IFMIS are involved in the exercise. The technical staff should be trained to acquire knowledge enough to configure and customize IFMIS System, trouble shoot and maintain the IFMIS System. Technical staff offers trainings and orientation to other staffs in other departments within the County on IFMIS System application. The County government should hire technical team with technical knowledge for the operation of IFMIS system that offer protection of the system by updated firewalls and anti-virus. The top management and the staff should be willing and committed to change in the use of technology and strengthen the use of complex systems such as IFMIS and achieve their public sector objectives through technical assistance and urgent maintenance, frequent updates and reliable service. This study was to assist counties in developing the right models and strategies in the key aspects that can be used for developing and implementing financial aspects.

**Keywords:** Technological Skills, IFMIS Accountability.

## 1. INTRODUCTION

All financial information systems contain accountability relationships of different types, which function with varying degrees of success. Often it is the perception of failed or insufficient accountability that furnishes the impetus for reform. However, as a guide to what to do to improve financial systems, simply calling for more accountability is not helpful. The idea of checks and restraints on power and discretion seems straightforward, but for accountability to inform action, further conceptual, analytical, and operational work needs to be done. Several countries, such as New Zealand, Australia, and United Kingdom undertook significant public sector changes to break from the traditional bureaucratic model of public administration (Sigei, 2013) that involved the breaking of the larger units into smaller manageable otherwise equated to devolved units in Kenya today. In July 2005, the Government of Malawi signed a Contract with Soft -Tec Consultants to supply and assist in the implementation of IFMIS in Malawi (Republic of Kenya, 2012c). Countries have been classified by the United Nations according to their Computer Industry Development Potential (CIPD) as advanced or less developed (Asgarkhani, 2005). Advanced include, for example, the United States, Canada, West European countries and Japan; According to the World bank (2011) IFMIS Database Latin America and Caribbean region of the World Bank stands out with the largest number of completed (25) and active (4) IFMIS projects. The Africa region follows with 13 completed and 12 active IFMIS projects.

According to both Dorotinsky (2003) and Rozner (2008), an IFMIS is an information system that tracks financial events and summarises financial information. It supports adequate management reporting, policy decisions, fiduciary responsibilities and the preparation of auditable financial statements. 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 (Rodin-Brown 2008). Despite its popularity, accountability is often ill-defined. The essence of accountability is answerability; being accountable means having the obligation to answer questions regarding decisions and/or actions. Two types of questions can be asked: information provision and justification, what was done / spent and why? IFMIS provides governments with a tool that can support financial control, management and planning. By managing a core set of financial data and translating this into information for management, these three financial functions are supported. More narrowly defined, An IFMIS is a computer application that integrates key financial functions (e.g. accounts, budgets, etc) and promotes efficiency and security of data management and comprehensive financial reporting. An IFMIS is one way to address the problem of 'stove-piped' financial systems that do not talk to each other and do not produce a timely and comprehensive picture of a country's financial position.

In many countries and Kenya in particular, records' managers typically do not utilize IFMIS for managing financial records as it is generally assumed that financial records management is the responsibility of Accountants. However, accounting staff have been introduced to records management principles and practices, yet the role of financial management in government is to safeguard and use available funds and other scarce resources in the best interest of the County Government. They know what information they require and why, but seldom utilize the IFMIS correctly on how it should be operated. This problem often extends through all financial management functions. The situation has important consequences for the capacity of countries around the world to manage spending and to introduce measures to enhance Accountability and transparency (Mohammed, 2001).

In general terms, it refers to the automating of financial operations. In the sphere of government operations, IFMIS refers to the computerisation of public financial management processes, from budget preparation and execution to accounting and reporting, with the help of an integrated system for the purpose of financial management (Arnety & Wepukhulu, 2013). Defining accountability also relates to specifying accountability for what? Three general categories emerge: financial (the most commonly understood notion of accountability), performance and political/democratic accountability. Financial accountability concerns tracking and reporting on allocation, disbursement, and utilization of financial resources, using the tools of auditing, budgeting and accounting. Performance accountability refers to demonstrating and accounting for performance in light of agreed-upon performance targets. Its focus is on services, outputs, and results. Political/democratic accountability has to do with the institutions, procedures, and mechanisms that ensure that government delivers on electoral promises, fulfills the public trust, aggregates and represents citizens' interests, and responds to societal needs and concerns.

IFMIS is often viewed as the driver of financial reform in developing countries. Experience shows that these systems usually fail or underperform yet research to date has not adequately explained their poor performance. Truman

popularized Accountability in the (USA) in management of government affairs in 1945 (Dallek, 2008). This study considers Kenya as a country to emulate and adopt a Truman approach with strong legal and regulatory frameworks as well as competent and productive civil services that are the cornerstones of an efficient Public Financial Management (PFM) regime. This study argues that a strong (PFM) system is a catalyst for economic growth and development, therefore, it is only workable if an IFMIS considers achievement of hardware, boost of level of its infrastructure, information quality, and service quality. Trans Nzoia County Government will benefit from an improved system performance. Study done by Asselin&Srivastava, (2009), insists that (PFM) reforms are identified as the drivers to efficient public service delivery and creation of wealth and employment. In the last decade, the Government of Kenya has undertaken a number of PFM reforms aimed at enhancing Accountability and transparency (GoK, 2011). The reforms target PFM systems of budget formulation and execution, public procurement, revenue collection, internal and external audit, parliamentary oversight, payroll and pensions, public debt and guarantees, accounting and reporting, the macro-fiscal framework and cash management.

The advent of IFMIS is pegged on the realization that GoK can effectively leverage existing and emerging technologies to enhance Accountability to pace the reforms and management of cash (GOK, 2011), however, the quality of financial statements remains poor given the persistent high low of IT Infrastructure, technical operation under staffed among institutions connected to the IFMIS. When the delivery of services is constrained or becomes ineffective, it affects the quality of life of the people and nation's development process (Kobia, 2006). Many developing countries, however, continue to suffer from unsatisfactory and often dysfunctional governance systems that include inappropriate allocation of resources, inefficient revenue systems, and weak delivery of vital public services (Kragbe, 2012). The National Treasury created IFMIS as a department within it to support the automation of budgetary and financial transactions. In accordance with the new constitution (Article 26) and the Public Finance Management (PFM) Act, the Ministry has connected Ministries, Agencies and Departments (MDAs) and all the 47 county governments to IFMIS which is designed to improve systems for financial data recording, tracking and information management (Office of the Deputy Prime Minister and Ministry of Finance, 2011). This is in response to increasing demands for greater transparency and accountability in the management of public finances.

The IFMIS in Kenya was developed by the National Treasury in 1998 while deployment of the system to line ministries started taking place in 2003. The system was Enterprise Resource Planning (ERP) software based on Oracle. Enterprise Resource Planning software is an organization-wide application that integrates its operations through a centralized database which is accessed using a secure network. However, various changes were made to fit the system to the government processes. The National Treasury implemented an Integrated Financial Management Information System (IFMIS) as part of its Public Financial Management (PFM) reforms. This was to ensure the government managed public resources in the most efficient, effective and transparent manner. A fully functioning IFMIS can lead to improved governance by providing real-time financial information that managers can use to administer programs effectively, formulate budgets and manage resources (Muigai, 2012) Al-Zoubi, Sam & Eam (Al-Zoubi, Sam, & Eam, 2011) in their study indicated that the following factors as have been found to be significant determinants of businesses adoption of e-government and include independent variables such as relative advantage, IT Infrastructure, organization adaptability and mission, organization involvement and consistency, financial resources, competition, and government support.

### **IFMIS use in Ministries, Departments and Agencies in Kenya**

In government operations, IFMIS refers to the computerization of public financial management processes, from budget preparation and execution to accounting and reporting, with the help of an integrated system for the purpose of financial management (Lianzuala & Khawlhiring 2008). According to Diamond and Khemani (2006) and Chene (2009), a well-designed Integrated Financial Management Information System (IFMIS) is a management tool that provides a wide range of non-financial and financial information. Bhatia (2003) defines IFMIS as an information system that integrates budget preparation, budget execution, accounting, financial management and reporting activities for effective financial management. Integrated financial system involves computerization of public expenditure management processes including budget formulation, budget execution and accounting with the help of a fully integrated system for financial management of the line ministries (LMs) and other spending agencies (DFID, 2003). Such system puts in place effective controls that ensure transparency and Accountability. The system also provides real-time financial information that end users can use to formulate budgets, manage resources and oversee projects and programs effectively. According to the

USAID practical guide (2008), sound IFMIS systems coupled with the adoption of centralized treasury operations help developing country governments gain effective control over their finances, and enhance transparency and Accountability, reduce political discretion and act as a deterrent to corruption and fraud.

IFMIS provides a critical financial management solution for countries whose administrative and economic infrastructure is obsolete, or has been destroyed through war and years of conflict. There is broad agreement that a fully functioning IFMIS can improve governance by providing real-time financial information that financial and other managers can use to administer programs effectively, formulate budgets, and manage resources. Kenya has been implementing a broad-based public reform program partly founded on an e-government vision which was officially articulated in 2004 with the adoption of the E-Government Strategy. Muigai (2012) in his study of Government ministries in Kenya found that IFMIS has significantly contributed to improvement in financial management in Kenya. This improvement from using the system can only be realized if the implementation process is successful. Factors such as effective training of technical staff and end users; minimal resistance to change as a result of staff being sensitized on the need for the new system; a core team appointed to oversee the IFMIS implementation process, fully committed senior management, availability of funding by treasury, a standard chart of accounts, availability of ICT infrastructure and a legal and regulatory framework were factors that contributed to successful implementation (Mugambi, 2011). However, there are challenges that came with the implementation and use of the system. Lack of top management support, training and hurried implementation were some of the challenges faced in the implementation and use of the IFMIS in Government ministries (Kimwele, 2011). The re-engineering process focused on overcoming these challenges and added more modules to the system which would be sufficiently interlinked to make the system more reliable and useful.

Generally the use of ICT in the government has been increasing with most ministries and departments having websites where information on activities is available. One area where there is a lot of activity is in the financial management sector where there are initiatives such as Integrated Financial Management Information System (IFMIS), the Local Authority Integrated Financial Operations Management Systems (LAIFOMS) and the Integrated Personnel and Pensions Database (IPPD) to standardize the processes and provide up to date record keeping. The IFMIS is designed to improve systems for financial data recording, tracking and information management (Office of the Deputy Prime Minister and Ministry of Finance, 2011). This is in response to increasing demands for greater transparency and Accountability in the management of public finances. From 1984 to 2010, the World Bank financed 87 IFMIS projects in 51 countries, totaling over US \$2.2 billion with various country governments co-financing it to the value of 25% (Dener et al., 2011). Despite its introduction, IFMIS did not achieve its key objectives within the set timelines leading to its re-engineering in 2011 (Karanja and Ng'ang'a, 2014). According to Rodin-Brown (2008), challenges can devastatingly affect the achievement of the execution and administration of IFMIS and ought not to be thought little of. Achieving accountability purposes faces numerous challenges. First, County Governments are characterized by strong asymmetries among service providers, users, and oversight bodies in terms of information, expertise, and access. Second, public and private interests and incentives often diverge, which can limit efforts to increase accountability. Third, institutional capacity gaps often undermine efforts to enhance accountability for all three purposes. In Kenya the National Treasury introduced the Integrated Financial Management Information system as a PFM reform initiative aimed at automating and streamlining Governments financial management processes and procedures (Njenga, 2013). The continued efforts of proper management of public funds have led to the need for the introduction of an IFMIS system in the county governments in the country (World Bank, 2014). The first and most fundamental is to control the misuse and abuse of public resources and/or authority. This relates directly to financial accountability.

The PFM reform considers the IFMIS system as a significant contributing factor towards the improvement of financial management in the broader Trans Nzoia County Government and hence, it improves Accountability (South Africa National, 2004). Although there have been a number of studies to investigate the impact of IFMIS on Accountability; Tang et al., (2000), but the same is still limited, research shows that hardware components are still limited. The PFM has not fully achieved Accountability, in the public or private sector, even with the use of IFMIS, According to Mburu (2008), there is a high failure rate of ERP systems implementations in organizations and therefore the focus and awareness should be on what factors will be critical for successful implementation of such systems. Muigai (2012) in his study of Government ministries in Kenya found that IFMIS has significantly contributed to improvement in financial management in Kenya. This improvement from using the system can only be realized if the implementation process is successful. Factors such as effective training of technical staff and end users; minimal resistance to change as a result of staff being

sensitized on the need for the new system; a core team appointed to oversee the IFMIS implementation process, fully committed senior management, availability of funding by treasury, a standard chart of accounts, availability of ICT infrastructure and a legal and regulatory framework were factors that contributed to successful implementation (Mugambi, 2011). However, there are challenges that came with the implementation and use of the system. Lack of top management support, training and hurried implementation were some of the challenges faced in the implementation and use of the IFMIS in Government ministries (Kimwele, 2011).

In the Trans Nzoia County Government, it has not been easy to provide accurate complete and transparent accounts of their financial statements as such, research show that security component are wanting, such has been witnessed by rampant IFMIS hacking within ministries in Kenyan public sector. Study by Diamond and Khemani (2005) argues that customized is a strong contribution to a system, yet such has not been fulfilled in Kenyan public sector and particularly in County Governments, such has hindered Accountability in the County. The study intends to establish the effect of IFMIS on Accountability in Trans-Nzoia County, Kenya. The specific objectives of the study examine the effect of technological skills on IFMIS Accountability in Trans-Nzoia County .

## 2. TECHNOLOGICAL SKILLS

Technological factors are defined as the basic system functionality that includes both the software and the hardware of the IFMIS (Bonventure, 2015; Sussi, 2012; Hendriks, 2012; Cain, 2012; Chêne, 2010). Pleslak and Boyle, (2010) defines, Technical Operation skills as the introductory skills that you will need to develop in order to become comfortable with accessing and using computer programs. IT professionals must address the reality and in some cases, the hangover of perception regarding their soft skills, which must be at least equal to those demonstrated by professional leaders across all sectors and organizations. Adam T., (2011) content that each type of technical specialist possesses a range of required skills that depends on the business field and job description. This study considers a technical skilled person to have information and high technology era, good technical skills and knowledge are a must for all level of management and job positions. Typical use scenarios in technical operation include application design, customization, configuration, installations, development, testing and deployment (Velte, 2010). The technical team and provision of resources are required to build ERP system use and services (software development environment) to a customer by an outsourcing provider. The effort and cooperation of technical team and operation experts, as well as end-users, is necessary for the success in the use of IFMIS at the public sector. Therefore, involving people with both institution and technical knowledge into the IFMIS system use is essential for success (Shanks, 2000; Velte, 2010). Proeller (2013) points out that complexity of a system makes it more likely to be positively appreciated as compared to very simple systems, Chêne (2010) also argues that making the right and simple technical choice for automation is so critical to the successful adoption and implementation of MIS

The author attests that it's essential for an IT technical skilled person to be able to work effectively with a wide range of computer software programs, applications, hardware, and devices. Typical use scenarios in technical operation include application design, customization, configuration, installations, development, testing and deployment. This study argues that the effort and cooperation of technical team and operation experts, as well as end-users, is necessary for the success of an IFMIS use. Therefore, involving people with both institution and technical knowledge into the IFMIS system implementation is essential for success. Kotze (2012) contend that the use of the IFMIS affects existing knowledge and expertise that was created over a lengthy period and has become irrelevant. Unskilled officials are uncertain regarding functional processes that may delay the implementation process and they make mistakes. Gour, (2012) assembled support that, the fear of making mistakes also leads to resistance towards IFMIS, which may impact negatively on its successful system implementation. The technical challenges that impede the accomplishment of IFMIS key objectives are numerous. Some of the challenges include: lack of IT capacity that works with the system, resistance due to complexity and technical challenges of the software (Hendriks, 2012). Hendricks points out that one of the major factors impending successful implementation of IFMIS especially in the public sector is lack of capacity with IT knowledge.

According to Dener et al. (2011), IFMIS is a complex and risky system that requires motivation to change so as to be implemented effectively. This requires both the top management and the staff to be willing and committed to change in the use of technology. Ifinedo (2006) showed in a study of seven cases of companies in Finland and Estonia that users obtain the best benefits from their system when they are assisted by consultants or suppliers who have communication skills and provide quality training programmes. Wang and Chen (2006) and Ifinedo (2008) also confirmed that the quality

of external expertise influences the quality of the ERP system. Moreover, Ismail (2009) demonstrated that external experts contribute to the greater technical quality of the system. The technical operation is an important factor in the establishment and maintenance of a system (Wang et al., 2008). The support comes mainly from the insurance of technical assistance and urgent maintenance, frequent updates and reliable service (Zhang et al., 2005; Ramayah et al., 2007). The system operator is an important factor in the establishment and maintenance of a quality system (Wang et al., 2008). The support comes mainly from the insurance of technical assistance and urgent maintenance, frequent updates and reliable service (Ramayah et al., 2007). Thus, good technical expertise would enable companies to strengthen the use of complex systems such as IFMIS and achieve their public sector objectives (Sedera et al, 2003; Ko et al., 2005).

Technical Operation skills as the introductory skills that you will need to develop in order to become comfortable with accessing and using IFMIS. IT professionals must address the reality and in some cases the hangover of perception regarding their soft skills which must be at least equal to those demonstrated by professional leaders across all sectors and organizations. Each type of technical specialist possesses a range of required skills that depends on the business field and job description hence this will enable such a technique to operate the IFMIS Accountability as a dependent variable. This study considers a technical skilled person to have information and high technology era; good technical skills and knowledge are a must for all level of management and job positions. The author attests that it's essential for an IT technical skilled person to be able to work effectively with a wide range of computer software programs, applications, hardware and devices. This study argues that the use of the IFMIS still has insufficient capacity at user departments to take on full modules, for example, inadequate ICT infrastructure, budgets and staff with sufficient functional capabilities. It is important that the technical team, who carry technical operations, should be employees in the public sector involved in the project on a full-time basis. The technical operations' team must be empowered to make quick decisions, understand deeply the system infrastructure and performance tied to operation. Robey, (2002) opines that the project team should be balanced, cross functional, and have representatives of the internal as well as consultants.

The sharing of information, especially with vendors and consultants, is very important and requires partnership trust (Robey, 2002). Hove and Wynne (2010) assert that IFMIS assists management uphold accountability for use of public resources and improve the effectiveness and efficiency of public expenditure programmes. By tracking financial events through an automated financial system, management can control expenditure therefore improving in the budget cycle as a whole. Diamond and Khemani (2006) attest further that, as a management tool, IFMIS should support the management of change. As such, it should be viewed as part of the broader financial reforms of government, such as budget reforms. Good enough, Rogers (2003) erected strong support for a factor called Technological Innovativeness; it describes the extent to which a person is willing to try a new information technology (Agarwal & Prasad, 1999). In this study IFMIS system is considered new information technology.

A good IT manager is to understand IT success based upon a blend of skills that mixes IT craft, ability and knowledge with a true understanding of what the organization or public sector is trying to achieve in terms of IFMIS Accountability. This study opines that technical ability and knowledge represent sound bedrock for an IT leader, who also portrays a picture of a skilled manager; however this is not enough in a modern world where information and technology can revolutionize business models, social norms, perceived wisdom and even nation states. The author in this study appraises that the availability of skilled IT manager and their participation in the project is valuable to good Management Skills for a public sector. He erects strong support for Management skills to be linked to Users' skills since the quality of end users and their general IT skills are considered as one of the critical factors necessary for system success.

According to Salvator and Moore (2010) and Weibenberger and Angelkort (2011) there are two major types of accounting : Management accounting and financial accounting, the information provided by management accounting is for use within the firm, management of a firm uses this information to monitor the performance and control the firm. Financial accounting information is used for justification to the external stakeholders. This information displays the firm's financial situation and performance. Viswesvaran (2006), refer to financial accountability as the requirement to provide information to parties both inside and outside the organization. It is the process of identifying, measuring and communicating economic information to permit informed and rational decisions to be made. Accountability refers to the final responsibility for the success or failures of an organization. This final responsibility is usually with the governing body, which delegates this function to the Chief Executive. Accountability is a key requirement of good governance. Not only governmental institutions but also the private sector and civil society organizations must be accountable to the public

and to their institutional stakeholders. An organization or an institution is accountable to those who will be affected by its decisions or actions. Since NGOs get most of their funding from donors, accountability for NGOs is usually to the donors, the beneficiaries, the employees and other stakeholders (Wells, 2003).

Public accountability is both an instrument and a goal. What started as an instrument to enhance the effectiveness and efficiency of public governance, has gradually become a goal in itself. Nowadays, accountability has become a Good Thing, of which it seems we cannot have enough (Pollit 2003, 89). As a concept, however, 'accountability' is rather elusive. It has become a hurrah word, like 'learning', 'responsibility', or 'solidarity', to which no one can object. It is one of those evocative political words that can be used to patch up a rambling argument, to evoke an image of trustworthiness, fidelity, and justice, or to hold critics at bay. Past research on cloud computing accountability has produced various definitions, embodying different spheres of accountability research. There is a wide variety of views of accountability among academics and practitioners. Accountability in computer science has been referred to as a limited and imprecise requirement met by reporting and auditing mechanisms (Cederquist et al. 2005; Pearson 2011). Yao et al. (2010) considered accountability the way of making the system accountable and trustworthy via the combination of mechanisms. Muppala, Shukla and Patil (2012) defined accountability as accepting ownership and responsibility towards all actions in a standardized manner, regulated by an acknowledged organisation such as the Organisation for Economic Cooperation and Development (OECD) which published privacy guidelines in 1980. In addition, Rush (2010) defined accountability as the reporting and auditing mechanisms that obligate an organisation to be answerable for its actions.

Harrison et al., (2011) states that financial accounting is financial responsibility or operational transparency that requires demonstrating how donations to your organization have been used and how effective your organization is in achieving its goals. Koh and Woo (2008) contend that financial accountability is the fiscal or financial honesty and avoidance of fraud that makes sure that money is spent and recorded as agreed and according to appropriate rules and that accurate reports are given to stake holders in a timely manner. Accountability is always related to good governance that implies public organizations which conduct public matters, manage public funds and guarantee the realization of human rights in a way fundamentally free from abuse and corruption, as well as obeying the rule of law (Bhuiyan & Amagoh, 2011; Morrell, 2009; United Nation Human Rights, 2012). In this day accountability and governance appear to be coexisted between each other. Collier (2008) stated that accountability entails governance and a stakeholder accountability perspective is the only available option for organizations like public sector. This notion also shared by O'Dwyer & Unerman (2007) which stated that in the quasi-public sector where accountability mechanisms have tended to focus on upward accountability to funders rather than downward to the recipients of services.

The term of public sector accountability usually. The term of accountability is referred as relationship based on commitments of some people to demonstrate, review, and take responsibility for performance, both the results achieved in light of agreed expectations and the means used. It is not just a formal other but it includes moral, rights and obligations. Rutkowski & Steelman (2005) define accountability as compliant and meeting personal responsibilities, feeling obligated to another individual and having to justify an action to others. Normally when leaders are accountable for the feedback they will feel obligated to use

it to improve performance (Allen & Dennis, 2010; Hall et al., 2004; McCall, 2012).

In contemporary political and scholarly discourse 'accountability' often serves as a conceptual umbrella that covers various other distinct concepts. It is used as a synonym for many loosely defined political desiderata, such as transparency, equity, democracy, efficiency, responsiveness, responsibility, and integrity (Mulgan 2000b, 555; Behn 2001, 3-6; Dubnick 2002). The term 'has come to stand as a general term for any mechanism that makes powerful institutions responsive to their particular publics' (Mulgan 2003).

### 3. METHOD

This study employed a research design of descriptive survey design with a target population of 900 respondents and a sample size of 269. Data Collection Instruments was a structured questionnaire which was dropped to the respondents and picked for analysis. Piloting was done to test the validity and reliability of the data collection instrument. Data was coded and entered into a Statistical Package for Social Sciences (SPSS) version 20 for data syntheses and analyses. Both descriptive and inferential statistics were employed in the study. Inferential statistic such as Pearson correlation coefficients and multiple regression models was used. The correlation and regression model was employed to compute the relationship between the independent and dependent variables at a confidence level of 95% (Hair et al., 2005).

#### 4. DISCUSSION

Technological factors also defined as the basic system functionality that includes both the software and the hardware of the IFMIS are very important (Bonventure, 2015; Sussi, 2012; Hendriks, 2012; Cain, 2012; Chêne, 2010). Peslak and Boyle, (2010) states that technical Operation skills as the introductory skills that you will need to develop in order to become comfortable with accessing and using computer programs. IT professionals must address the reality and in some cases, the hangover of perception regarding their soft skills, which must be at least equal to those demonstrated by professional leaders across all sectors and organizations. Adam T., (2011) content that each type of technical specialist possesses a range of required skills that depends on the business field and job description. This study considers a technical skilled person to have information and high technology era, good technical skills and knowledge are a must for all level of management and job positions. The study sought to analyze the effect of technological skills on IFMIS Accountability in Trans-Nzoia County. The findings are presented in a five point Likert scale where SA=strongly agree, A=agree, N=neutral, D=disagree, SD=strongly disagree and T=total.

From table 4.1 below, the respondents were asked whether technical Operation skills as the introductory skills are required to develop in order to become comfortable with accessing and using computer programs. The distribution of findings showed that 30.0 percent of the respondents strongly agreed, 37.0 percent of them agreed, 18.0 percent of the respondents were neutral, 10.0 percent disagreed while 5.0 percent of them strongly disagreed. These findings implied that technical Operation skills as the introductory skills are required to develop in order to become comfortable with accessing and using computer programs.

The respondents were also asked whether the technical team and provision of resources are required to build ERP system use and services (software development environment) to a customer by an outsourcing provider. The distribution of the responses indicated that 32.0 percent of the respondents strongly agreed to the statement, 16.0 percent of them agreed, 29.0 percent of them were neutral, 16.0 percent of them disagreed while 8.0 percent of them strongly disagreed to the statement. These findings implied that the technical team and provision of resources are required to build ERP system use and services (software development environment) to a customer by an outsourcing provider.

The respondents were also asked whether the effort and cooperation of technical team and operation experts, as well as end-users, is necessary for the success in the use of IFMIS at the public sector. The distribution of the responses indicated that 20.0 percent of the respondents strongly agreed to the statement, 42.0 percent of them agreed, 34.0 percent of them were neutral, 4.0 percent of them disagreed while 0 percent of them strongly disagreed to the statement. These findings implied that the effort and cooperation of technical team and operation experts, as well as end-users, is necessary for the success in the use of IFMIS at the public sector.

The respondents were further asked whether lack of capacity with IT knowledge impedes successful implementation of IFMIS especially in the public sectors. The distribution of the responses indicated that 5.0 percent of the respondents strongly agreed to the statement, 52.0 percent of them agreed, 28.0 percent of them were neutral while 8.0 percent and 7.0 percent of them disagreed strongly and disagreed to the statement respectively. These findings implied that lack of capacity with IT knowledge impedes successful implementation of IFMIS especially in the public sectors.

Finally, the respondents were asked whether both the top management and the staff should be willing and committed to change in the use of technology. The distribution of the responses indicated that 26.0 percent of the respondents strongly agreed to the statement, 53.0 percent of them agreed and 21.0 percent of them were neutral. None of the respondents disagreed or strongly disagreed to the statement respectively. These findings implied that both the top management and the staff should be willing and committed to change in the use of technology.

Further, when respondents were asked whether good technical expertise enables companies to strengthen the use of complex systems such as IFMIS and achieve their public sector objectives through technical assistance and urgent maintenance, frequent updates and reliable service, 20.0 percent of the respondents strongly agreed, 41.0 percent of the respondents agreed on the statement, 10.0 percent of the respondents were neutral while 20.0 percent disagreed, 20.0 percent strongly disagreed. This implied that majority agreed that good technical expertise enables companies to strengthen the use of complex systems such as IFMIS and achieve their public sector objectives through technical assistance and urgent maintenance, frequent updates and reliable service.



Table 4.1: Effect of technological skills on IFMIS accountability in Trans-Nzoia County

Statements	SA	A	N	D	SD
Technical Operation skills as the introductory skills are required to develop in order to become comfortable with accessing and using computer programs	% 30.0	37.0	18.0	10.0	5.0
The technical team and provision of resources are required to build ERP system use and services (software development environment) to a customer by an outsourcing provider	% 32.0	16.0	29.0	16.0	8.0
The effort and cooperation of technical team and operation experts, as well as end-users, is necessary for the success in the use of IFMIS at the public sector	% 20.0	42.0	34.0	4.0	0
Lack of capacity with IT knowledge impedes successful implementation of IFMIS especially in the public sectors	% 5.0	52.0	28.0	7.0	8.0
both the top management and the staff should be willing and committed to change in the use of technology	% 26.0	53.0	21.0	0	0
Good technical expertise enables companies to strengthen the use of complex systems such as IFMIS and achieve their public sector objectives through technical assistance and urgent maintenance, frequent updates and reliable service	20	41.0	10.0	20.0	20.0

#### 4.1 Inferential Statistics

##### 4.1.1 Pearson Correlation

The study sought to establish the strength of the relationship between independent and dependent variables of the study. Pearson correlation coefficient was computed at 95 percent confidence interval (error margin of 0.05). Table 4.2 illustrates the findings of the study.

Table 4.2: Correlation Matrix

		IFMIS Accountability
<b>Technological skills</b>	Pearson Correlation	.762**
	Sig. (2-tailed)	.000
	N	240

As shown on table 4.2 above, the p-value for technological skills was found to be 0.000 which is less than the significant level of 0.05, ( $p < 0.05$ ). The result indicated that Pearson Correlation coefficient (r-value) of 0.762, which represented a strong, positive relationship between technological skills and IFMIS accountability in Trans-Nzoia County

#### 4.1.2 Multiple Linear Regression

Multiple linear regressions were computed at 95 percent confidence interval (0.05 margin error) to show the multiple linear relationships between the independent and dependent variables of the study.

##### 4.1.2.1 Coefficient of Determination ( $R^2$ )

Table 4.3 shows that the coefficient of correlation (R) is positive 0.629. This means that there is a positive correlation between Integrated Financial Management Information Systems and accountability in Trans Nzoia County. The coefficient of determination (R Square) indicates that 38.3% of accountability in Trans Nzoia County is influenced by Integrated Financial Management Information Systems. The adjusted  $R^2$  however, indicates that 36.5% of accountability in Trans Nzoia County in Kenya is influenced by Integrated Financial Management Information Systems leaving 63.5% to be influenced by other factors that were not captured in this study.

**Table 4.3: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.623 <sup>a</sup>	.385	.353	7.0162

a. Predictors: (Constant), technological skills

##### 4.1.2.2 Analysis of Variance

Table 4.4 shows the Analysis of Variance (ANOVA). The p-value is 0.000 which is < 0.05 indicates that the model is statistically significant in predicting how Integrated Financial Management Information Systems affects accountability in Trans Nzoia County. The results also indicate that the independent variables are predictors of the dependent variable.

**Table 4.4: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	694.733	4	103.605	33.127	.000 <sup>b</sup>
	Residual	1668.131	200	19.661		
	Total	2362.863	240			

##### 4.1.2.3 Regression Coefficients

From the Coefficients table (Table 4.5) the regression model can be derived as follows:

$$Y = 36.432 + 1.113X_1$$

The results in table 4.5 indicate that all the independent variables have a significant positive effect on IFMIS accountability in Trans Nzoia County. The most influential variable is repayment technological skills with a regression coefficient of 1.113 (p-value = 0.000). According to this model when all the independent variables values are zero, accountability in Trans Nzoia County will have a score of 36.432.

**Table 4.5: Regression Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	36.432	3.112		48.433	.000
	Technological skills	1.113	.142	.722	5.340	.000

**H<sub>01</sub>:** Technological skills do not have a significant effect on IFMIS accountability in Trans Nzoia County.

From Table 4.5 above, technological skills ( $\beta = 1.113$ ) was found to be positively related to IFMIS accountability in Trans Nzoia County. From t-test analysis, the t-value was found to be 5.340 and the  $\rho$ -value 0.000. Statistically, this null hypothesis was rejected because  $\rho < 0.05$ . Thus, the study accepted the alternative hypothesis and it concluded that technological skills affect the IFMIS accountability in Trans Nzoia County.

## 5. CONCLUSION AND RECOMMENDATIONS

The study sought to determine the effect of security component on IFMIS accountability in Trans-Nzoia County. Based on the findings the study concluded the following as follows; Technological skills ( $\beta = 1.113$ ) was found to be positively related to IFMIS accountability in Trans Nzoia County. From t-test analysis, the t -value was found to be 5.340 and the  $\rho$  - value 0.000. Statistically, this null hypothesis was rejected because  $\rho < 0.05$ . Thus, the study accepted the alternative hypothesis and it concluded that technological skills affect the IFMIS accountability in Trans Nzoia County. Based on the findings, the researcher recommended the following: IFMIS should be made stable networked with LAN at the County to supports management, accounts and procurement that secures provided information required for crucial decision making. Managers should coordinate and provide proper communication to Head of departments and other staff in their departments. The county government of Transnzoia should make sure that all Managers technical personnel and other staff at the County Treasury to run IFMIS are involved in the exercise. The technical staff should be trained to acquire knowledge enough to configure and customize IFMIS System, trouble shoot and maintain the IFMIS System. Technical staff offers trainings and orientation to other staffs in other departments within the County on IFMIS System application. The County government should hire technical team with technical knowledge for the operation of IFMIS system that offer protection of the system by updated firewalls and anti-virus. The top management and the staff should be willing and committed to change in the use of technology and strengthen the use of complex systems such as IFMIS and achieve their public sector objectives through technical assistance and urgent maintenance, frequent updates and reliable service.

## REFERENCES

- [1] Ameen, A. A., & Ahmad, K. (2011, November).The role of Finance Information Systems in anti-financial corruptions: A theoretical review. In Research and Innovation in Information Systems (ICRIIS), *2011 International Conference on* (pp. 1-6). IEEE.
- [2] Arnety, N. M., Ujunju, M. O., &Wepukhulu, R. (2013).Effects of Business Process Re-engineering on Implementation of Financial Management Systems: A Case of MasindeMuliro University of Science and Technology. *Research Journal of Finance and Accounting*,4(12), 90-96.
- [3] Asselin, L., and Srivastava, (2009).“Integrated Financial Management Systems: Experiences in Latin America”, World Bank (mimeo), Washington DC.E-government Services”.*Journal of Software*, Vol. 4, NO. 6, AUGUST 2009
- [4] Baker, D. L. (2009).Advancing E-Government performance in the United States through enhanced usability benchmarks.*Government Information Quarterly*, 26(1), 82-88.
- [5] Bardhan, P. (1997). The Role of Governance in Economic Development.A Political Economy Approach. Paris,OECD.
- [6] Bednar, M. K. (2012). Watchdog or Lapdog? A behaviuorial view of the media as a corporate governancemechanisms. *Academy of Management Journal*, 55(1), 131-150
- [7] Bovens, Mark. 1998. *The Quest for Responsibility. Accountability and Citizenship in Complex Organisations*. Cambridge: Cambridge University Press.
- [8] Bovens, M., P. 't Hart, S. Dekker and G. Verheuvél. 1999. The Politics of Blame Avoidance. Defensive Tactics in a Dutch Crime-fighting Fiasco. In *When things go wrong. Organizationalfailures and breakdowns*, edited by H.K. Anheier. Thousand Oaks: Sage.
- [9] Bovens, M.A.P. 2005.Public Accountability.In *The Oxford Handbook of PublicManagement*,edited by E. Ferlie, L. Lynne and C. Pollitt. Oxford: Oxford University Press.
- [10] Bartel., M.,(2009).Integrated Financial Management Systems: A Guideto Implementation Based on the Experience in Latin America. Washington, DC: Institute for Democratic Strategies, *LATPS Occasional Paper Series*.
- [11] Brinkerhoff, D.W. (2001). Taking account of accountability: A conceptual overview and strategicoptions. Washington, DC: U.S. Agency for International Development, *Center for Democracy andGovernance*.

- [12] Cornwall, Andrea, Henry, L., & Kath, P., eds. (2000). Accountability through participation: developing workable partnership models in the health sector. *IDS Bulletin* 31(1).
- [13] Cheung, A., B., L., (1997). Understanding Public-Sector Reforms: Global Trends and Diverse Agendas. *International Review of Administrative Sciences* 63(4): 435-57.
- [14] Cheung, A., B., L. and Scott, I., (2003). *Governance and Public Sector Reform in Asia*. Routledge, London.
- [15] Davenport, T., H., (2000). *Mission Critical: Realizing the Promise of Enterprise Systems*, Harvard Business School Press, Boston, MA.
- [16] Davis, F., D., Bagozzi, R., P., & Warshaw, P., R., (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982-1003. <http://dx.doi.org/10.1287/mnsc.35.8.982>
- [17] DeLone, W., H., & McLean, E., R., (1992). Information Systems Success: The Quest For The Dependent Variable. *Information Systems Research*, 3 (1): 60 – 95.
- [18] DeLone, W., H., & McLean, E., R., (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, 19(4), 9-30.
- [19] Gilani N., S., (2012). *Vision of information technology*, Kadoos publisher.
- [20] Haque, M. Shamsul. (2000). Significance of accountability under the new approach to public governance. *International Review of Administrative Sciences* 66(1): 599-617.
- [21] Humphreys, E. (2009). Implementing the ISO/IEC 27001—Information Security Management System Standard. *ISACA Journal*, 4.
- [22] Kessler, K., Hettich, N., Parsons, C., Richardson, C., & Triana, A. (2011). A Framework for Assessing Privacy Readiness of e-Government. *iGovernment*, 21.
- [23] Kothari, C., R., (2004). *Research Methodology: Methods and Techniques*. New Delhi, India: New Age International Publishers.
- [24] Laudon, K., C., & Laudon, J., P., (2006). *Management Information Systems (10th ed.)*. (Pearson, Ed.) Upper Saddle River, NJ, USA: Prentice Hall.
- [25] Laudon, K., C., Laudon, J., P., (2009). *Management Information Systems: Managing the digital Firm*. (11 ed.). Prentice Hall/CourseSmart. p.164
- [26] Lucas, H., C., (2007). "Research Methods in Information Technology." Lecture in BMGT 808B, University of Maryland, Spring (2007).
- [27] Makatiani, W. (2012). *Information Intelligence and Analytics*. Retrieved June 14, 2012,
- [28] Mohammed A., (2001). The Impact of Integrated Financial Management System on Economic Development: The Case of Ghana. *M. A. Graduate School of International Studies*, Korea University
- [29] Millar, Michelle & David McKeivitt. (2000). Accountability and performance measurement: An assessment of the Irish health care system. *International Review of Administrative Sciences* 66(1): 285-296.
- [30] Rasht. Re-Engineering, From Modular, to Full Cycle End-To-End Processes, Strategic Plan 2011-2013 *Kenya Gazette Supplement Acts*, 2012
- [31] Schedler, Andreas. (1999). Conceptualizing accountability. In A. Schedler, L. Diamond, & M.F. Plattner, eds. *The Self-Restraining State: Power and Accountability in New Democracies*. Boulder, CO: Lynne Rienner Publishers, 13-29.
- [32] Vian, Taryn. (2002). Corruption, accountability and decentralized health systems: Keeping the public's trust. Philadelphia: *Paper presented at the American Public Health Association, Annual Meeting, November*.
- [33] Yilmaz, S., Beris, Y. and Serrano-Berthet, R. (2008). Local Government Discretion and Accountability: A diagnostic Framework for Local Governance. Local Governance Accountability Series, Paper No. 113