

# **FACTORS AFFECTING EFFECTIVE IMPLEMENTATION OF INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEMS BY THE COUNTY GOVERNMENTS OF KENYA**

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## **Abstract**

*Sound integrated financial management information systems (IFMIS) can not only help developing country governments gain effective control over their finances, but also enhance transparency and accountability, reducing political discretion and acting as a deterrent to corruption and fraud. The county governments of Kenya have been required by the Public Financial Management (PFM) Act, 2012 to implement IFMIS since 2013 when they became operational, but the implementation process has so far been ineffective. This study therefore aimed at examining how change management, technological infrastructure, human capital development and top management commitment affect the effective implementation of IFMIS by the county governments. The scope of the study was five counties namely: Bomet, Kericho, Narok, Nyamira and Kisii. The theoretical framework for this study was built on the New Public Management Model, Technology Acceptance Model and Theory of Change. The study employed a descriptive research design. The target population was users of IFMIS in the county governments. A census of the 180 county employees who use IFMIS in the five counties was done. Data was collected by means of a questionnaire and was analyzed using descriptive statistics. The findings of this study revealed that most counties did not manage change to IFMIS effectively; the technological infrastructure for the roll out to the sub counties has not been availed; some aspects of human capital development have not been addressed; the*

*political class is not supportive of IFMIS and the counties have not allocated enough resources towards of IFMIS. This study recommends that for IFMIS implementation to be effective in the counties: change management should be handled better; the National Treasury and counties should organize regular skills upgrading courses on IFMIS; the technological infrastructure required to roll out IFMIS to the sub counties availed; and the counties should allocate more resources towards IFMIS.*

*Keywords: Technological Infrastructure, Change Management, Human Capital Development, Top Management Commitment, Kenya*

## **INTRODUCTION**

Innovations in ICT offer rich opportunities for governments to significantly improve the delivery of their services and to interact more openly with their constituents. High-quality experiences with responsive, integrated private sector information systems have led citizens to expect the same kinds of experience from public bodies and agencies (Hazlett and Hill, 2003).

In the sphere of 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 and Khawlhiring, 2008). The purpose of using an IFMIS is to improve budget planning and execution by providing timely and accurate data for budget management and decision-making (Chêne, 2009). The scope and functionality of an IFMIS can vary from a basic general ledger accounting application to a comprehensive system covering budgeting, accounts receivable or payable, cash management, commitment control, debt, assets and liability management, procurement and purchasing, revenue management, human resource management and payroll (Rozner, 2008).

While ICT can be used to transform the way in which governments offer their services, it should be acknowledged that a detailed business case for implementing the technology must be undertaken with emphasis on cultural change, greater degree of commitment, organizational structure and business processes (Liu and Hwang, 2003). This argument is supported by Strejcek and Theil (2002) who claim that many ICT projects initiated by governments fail because they are poorly coordinated and because agencies act too independently. Political will is crucial to this process. Once the decision has been made to implement an IFMIS, the battle is half won. Garnering support from those who will use the new system, and overcoming resistance from those who stand to lose from its implementation, can be an equally daunting challenge. Change management is therefore an important part of any IFMIS project.

The IFMIS in Tanzania appears to be the most successfully implemented system in Anglophone African countries. Its implementation was distinguished by selecting a mid range commercial software package, supported by a high quality local consultancy company that provided a strong support to the implementation process including training; Availability of adequate donors' resources, combined with very experienced international and local consultants; and a solid backing at the political level, which trickled down to the management level, with both political and management commitment being strong throughout the entire reform process (Rodin-Brown, 2008).

### **IFMIS in Kenya**

The government of Kenya has for a long time been very much concerned over the persistent poor performance in financial management due to lack of reliable and timely information for decision making. The IFMIS in Kenya was developed by the Ministry of Finance 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 Ministry of Finance implemented an Integrated Financial Management Information System (IFMIS) as part of its Public Financial Management (PFM) reforms. This was to ensure that the government managed public resources in the most efficient, effective and transparent manner (Muigai, 2012).

According to the IFMIS Strategic plan 2011-2013, the re-engineering process focused on automation of three high-level processes: the budget process, the exchequer process and the payment process. Budget planning was not fully integrated with IFMIS in the initial implementation phase. Therefore the re-engineering aimed to provide a real-time linkage between the budget planning application and IFMIS. The exchequer process involves the function of distributing available funds to ministries in accordance with their budget plans and cash-flow forecasts. With the initial IFMIS implementation, no tools were available to manage release of funds and manual upload of individual figures had to be done by the IFMIS department. The re-engineering module introduced the cash management module which provided the exchequer unit with key functionalities and information which would assist in managing exchequer releases and ensure better management of ministry accounts. The payment process represents the government's expenditure approval process.

The IFMIS Academy has been setup to undertake continuous training for all users of the IFMIS platform including suppliers and public servants, and to address any emerging issues.

With the introduction of county governments by the Constitution of Kenya 2010, the National Treasury also rolled out the implementation of IFMIS in 2013 to all the forty seven counties.

### **County Governments of Kenya**

The Constitution of Kenya, 2010 in article 6 (1), created devolved units of government known as counties, divided into 47 counties as specified in the First Schedule. These counties are funded by the national government through the exchequer so as to carry out various functions and achieve various objectives as specified in the Constitution, among them is to promote social and economic development and the provision of proximate, easily accessible services throughout Kenya.

The roll out of the IFMIS to the 47 counties began in 2013 (The National Treasury, 2014). Njoroge (2014) notes that with the devolution of huge amounts of financial resources to the 47 counties, the adoption of IFMIS is now more critical than any other time in our history. Providing a solution to financial management at the county level will forestall corruption at the lower tiers of government and ensure that development will trickle down to the grassroots.

### **Statement of the Problem**

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 (Rodin-Brown, 2008).

Despite the mandatory requirement for the county governments to fully implement IFMIS, the Controller of Budget's quarterly reports on the counties' budget implementation review have consistently highlighted the failure of these counties to fully implement IFMIS in their operations. The report notes that operations of county assemblies have largely remained manual contrary to section 12 (I) (e) of the PFM Act, 2012. It further adds that this failure to adopt IFMIS will limit transparency in financial management and standard financial reporting as contemplated by article 226 of the constitution of Kenya (OCOB, 2014).

Kimwele (2011), in a study on Factors affecting effective implementation of IFMIS in the Government ministries of Kenya, analyzed how staff resistance, top management commitment, system complexity and staff capacity affected the implementation process. However, his research did not show how technological infrastructure and change management affect this process. Sigei (2013) in a study on the Critical Success Factors in the Implementation of the re-engineered IFMIS in the Government Ministries focused on: User involvement in the implementation process, clear goal setting, top level management support, appropriate infrastructure and support. The study did not however consider the effect of human capital

development. It is against this background therefore, that this research study sought to assess the factors that have affected the effective implementation of IFMIS at the counties.

## **Objective of the Study**

### ***General Objective***

To assess the factors that affect effective implementation of IFMIS by the county governments of Kenya.

### ***Specific Objectives***

1. To discuss how change management affects effective implementation of IFMIS in the county governments of Kenya.
2. To examine how technological infrastructure affects effective implementation of IFMIS in the county governments of Kenya.
3. To evaluate how human capital development affects effective implementation of IFMIS in the county governments of Kenya.
4. To determine how top management commitment affects effective implementation of IFMIS in the county governments of Kenya.

## **LITERATURE REVIEW**

### **Theoretical Review of Literature**

The following theories and models constitute the theoretical framework on which this research study is built on.

### ***New Public Management (NPM) Model***

NPM model introduced not just a different way of managing public services, but also the need for different financial management tools and techniques. Introduced initially in response to widespread public criticism of the public service, the overall ethos of the reforms is greater public sector efficiency (Pretorius and Pretorius, 2008). Manning (2001) explains that the model has two key tenets: allowing managers to manage and making managers accountable. Common objectives of NPM include: a management culture and orientation that is customer and results focused; structural or organizational alternatives that promote decentralized authority and control; and the separation of policy making from service delivery. There are also implicit expectations of greater operational efficiency and bureaucratic responsiveness to political principals.

The financial management measures associated with the introduction of the NPM model are often referred to as New Public Financial Model (NPFM) model. Olson et al(1998), describe it as a reforming spirit aimed at increasing financial awareness in public sector decision- making and therefore an integral part of the broader public service reforms. Guthrie et al. (2005), identify five key dimensions to NPFM. These are: changes to financial reporting systems; devolution of budgets; market based costing and pricing systems; a performance measurement approach and performance based auditing.

What is clear from available literature on NPFM reforms in OECD countries is that social, political and organizational issues affect public sector accounting and management, and influence the direction and speed of reforms (Pretorius and Pretorius, 2008). Newberry and Pallot (2005) conclude that while there has clearly been progress, initial expectations have not been met and some concerns have been raised about the increasing complexity of the financial management systems, actually reducing rather than enhancing political accountability and control. This model will help in understanding the importance of implementing IFMIS as a public financial management tool and the expectations from the reform process.

### ***Technology Acceptance Model (TAM)***

This study is guided by the Technology Acceptance Model (TAM). This model is an information systems theory that models how users come to accept and use a technology. According to TAM, one's actual use of a technology system is influenced directly or indirectly by the user's behavioural intentions, attitude, perceived usefulness of the system, and perceived ease of use of the system. Perceived usefulness and perceived ease of use have positive associations with technology acceptance (Bagozzi and Warshaw, 1989). They defined perceived usefulness as the degree to which a person believes that using the system will enhance his or her performance and ease of use as the degree to which a person believes that using the system will be free of mental effort.

TAM has evolved overtime to TAM2 and extended the original model to explain perceived usefulness and usage intentions including social influence, cognitive instrumental processes and experience (Venkatesh and Bagozzi, 2000). It demonstrates how the information system is determined by the behavioral pattern intention and the behavioral pattern determined by the person's attitude towards using the system. According to Bagozzi, the attitude of an individual is not only the factor that determines his use of a system but is also based on the impact on the performance. The study of this model will help us understand the factors that determine the acceptance and use of IFMIS by public servants in the county governments.

## **Empirical Review of Literature**

### ***Change Management***

Rodin-Brown (2008), in a study discussing the Best Practices for Designing and Implementing IFMIS and how to implement them in developing and transitional countries, came to the conclusion that change management must be addressed early in the needs assessment phase of IFMIS implementation. If human needs are not addressed, the project will constantly be faced with resistance and obstacles from executive staff and elected officials, all the way down to civil service personnel who use the system regularly. Introducing modern financial management systems demands a commitment to change: change in technology, in processes and procedures, in skills, responsibilities and behaviors.

Muriuki (2009) studied Challenges Facing the Ministry of Finance in The Adoption of Automated Financial System. The objective of the study was to determine the challenges facing the ministry of finance in managing change from legacy accounting systems to IFMIS. The study concluded that the major challenge was resistance to change brought about by fear of the unknown, not enough training, fear of redundancy and the fact that IFMIS ensured transparency leading to detection of fraud thus challenging the existing corrupt systems. It further recommended that ICT equipment and training be increased to boost employee awareness and that senior government officials show more support and commitment to the implementation of IFMIS.

### ***Technological Infrastructure***

Rodin-Brown (2008) discussed the Best Practices for Designing and Implementing IFMIS and how to put them into place in Developing and Transitional countries. The study aimed at identifying the most appropriate strategies with respect to IFMIS project design, management, monitoring and evaluation around the world. The study concluded that IFMIS systems were complicated, expensive, difficult to manage and maintain. It was also common to discover only after procurement of new systems that those systems do not meet the specific conditions and needs of the project leading to costly delays and unplanned outlays. It further recommended that the technology chosen by a country should be flexible to adapt to evolving conditions so that the system can be rolled out to other parts of the government gradually. A variety of experts should also be called to test, monitor and guide the implementation process

Miheso (2013) examined the Adoption of IFMIS by the National Government in Kenya. The specific objectives were: to establish the extent of IFMIS adoption by national government; identify the challenges faced in adoption of IFMIS; and the determinants of its successful implementation. The study concluded that the implementation of IFMIS is affected by complex

factors among them; top management support, human technical capacity and training, change management, phased implementation and reliable and modern ICT infrastructure. The study recommended that the requisite infrastructure be put in place in outlying areas out of Nairobi to ensure IFMIS is not implemented only in Nairobi but as a country wide project.

ICPAK (2014) conducted a baseline survey on Devolution in Kenya with Respect to Public Financial Management Systems-One Year On. The study focused on county public financial management systems in support of the implementation of devolution in Kenya; performance of county human resources; roles and interrelations between county and national government; and evaluation the participation of the citizens and the private sector in county governance. The conclusion from the study was that most counties experienced connectivity challenges when the national IFMIS server is down leaving the rest of the country grounded. It further recommended that the national treasury should roll out county connectivity through a more reliable medium such as fiber optic cable as opposed to modems, or counties could consider clusters in which they make collective investments in laying connectivity infrastructure to compliment the efforts of the national government.

### ***Human Capital Development***

Leiderer et al (2007) examined Public Financial Management for PRSP Implementation in Malawi: Formal and Informal PFM Institutions in a Decentralizing System. The study aimed at examining the implications of decentralizing public financial management system for PRSP implementation. The study found that one of the major shortcomings undermining sound PFM in Malawi was lack of adequate human and technical capacity in key PFM positions, combined with insufficient financial, organizational and human resources management. The study recommended that the introduction of new PFM tools should always be accompanied by systematic long term and timely capacity development. This involves establishing mechanisms to disseminate specific knowledge acquired by individuals to all relevant stakeholders in order to preserve the gained knowledge and capacity for the institution.

ICPAK(2014), in its baseline survey report on Devolution in Kenya with Respect to Public Financial Management Systems found that though most counties rated their interaction with IFMIS as proficient or good, there were some challenges noted. These include system user challenges due to limited practical training on some of the key modules installed. The study further recommended that regular training of county treasuries should be undertaken to enhance their technical skills in IFMIS.



### ***Top Management Commitment***

Diamond and Khemani (2005) in their IMF working paper on Introducing Financial Management Information Systems in Developing Countries, sought to investigate the reasons for the almost universal failure to implement and sustain IFMIS in developing countries. They found that senior managers in DCs rarely delegate responsibility and lack experience in computerized accounting, and are therefore unable to grasp its possibilities for financial management. In this environment, there is likelihood that systems will not be user friendly, will not match the needs of the managers and will not have the required level of management ownership. They recommended that IFMIS implementation should have a solid backing at the political level which will then trickle down to management level, citing this as the reason Tanzania's IFMIS implementation was the most successful in all Anglophone countries.

Kimwele (2011) analyzed the Factors Affecting Effective Implementation of IFMIS in Government Ministries in Kenya. The study aimed at determining the effectiveness of IFMIS implementation in the Kenyan government ministries and the factors that influenced the successful implementation of IFMIS. The study concluded that the laxity of top management to support the use of the IFMIS system had affected its effective use by government employees. They failed to inspire and had little understanding of the use of IFMIS, further the study recommended that this problem could be addressed by providing more training to top management and other users of the system.

Mwakio (2015) investigated the Challenges Facing County Governments in the Implementation of IFMIS in Taita Taveta County. The study aimed at finding out why there was still poor management of devolved funds to the counties despite the use of IFMIS at the counties. The study concluded that previous training on IFMIS had not involved senior county officers who were often too busy attending to other matters and thereby sending their junior staff for the training instead. The study recommended that the national treasury deal more decisively on matters devolution and specifically in the implementation of IFMIS to avoid letting partisan politics interfere with management of devolved funds.

### ***Implementation of IFMIS***

Diamond and Khemani (2005) studied the Introduction of Financial Management and Information Systems in Developing Countries. The aim of the study was to investigate the reasons for the almost universal failure to implement and sustain IFMIS in developing countries. The study concluded that though most developing countries had experienced limited success in the use of FMIS, there were a few success examples like Tanzania which had benefited extensively from the use of IFMIS. Examples of these benefits include: restoration of

expenditure control, improved levels of transparency and accountability, elimination of over spending, reduction in the number of government accounts reduced to treasury single accounts, automatic reconciliation of banking data and fully reconciled fiscal data and reports are available on a continuous basis. The challenges identified included: lack of clarity in ownership of the system and unclear authority to implement, failure to clearly specify the basic functionality, failure to spend enough time on the design phase, failure to reengineer procedures, failure to undertake parallel reforms required by IFMIS in effective change management and lack of incentive for reforms. The study further recommended that for successful IFMIS implementation, developing Countries should regard the introduction of IFMIS as a component of a wider reform process and should be accompanied by strong commitment, sufficient manpower and financial resources, internal support and an agenda for effective change management.

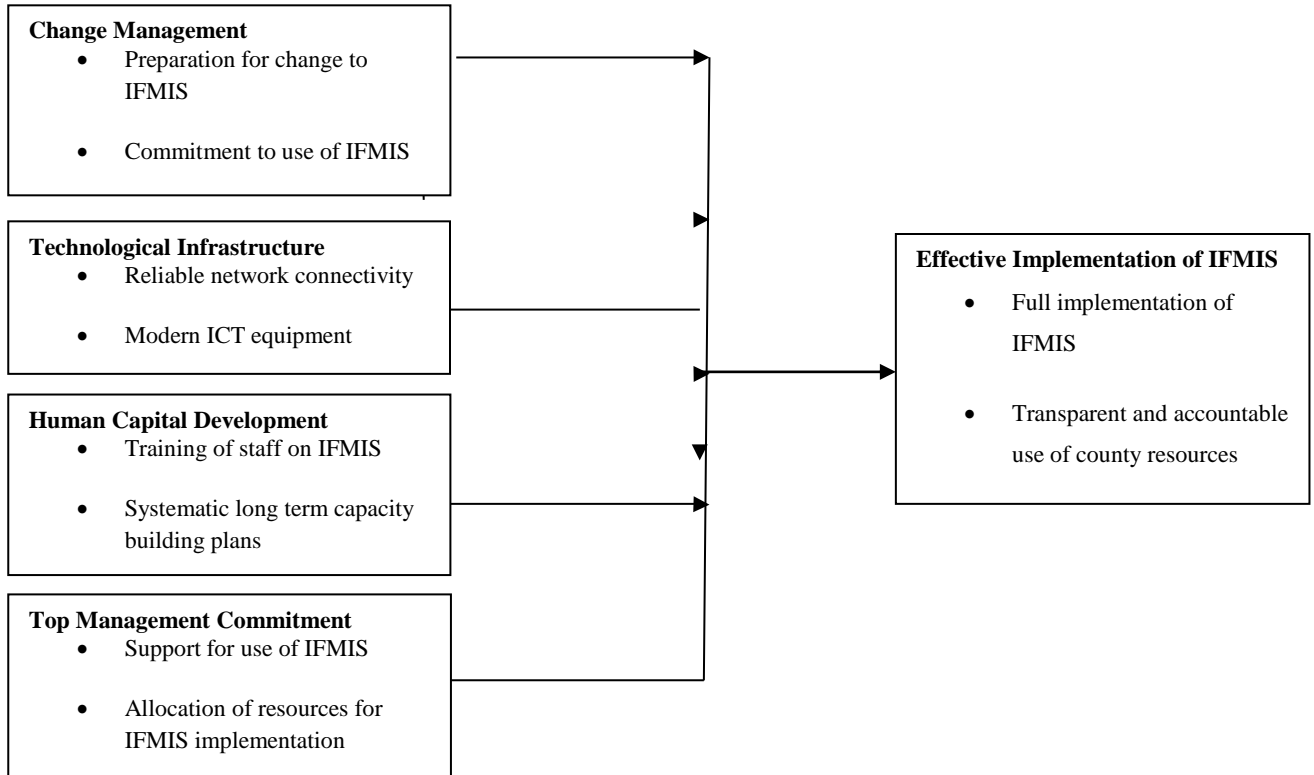
Njonde and Kimanzi (2014) examined the Effects of IFMIS on Performance of the Public Sector in the county government of Nairobi. The purpose of the study was to determine the effect that IFMIS had had on the performance of the public sector in Kenya. The specific objectives were to: analyze the effectiveness of IFMIS on performance in public finance; to verify the effects of IFMIS on budgeting of public finance; to assess how IFMIS affected internal controls in public finance and; to establish how IFMIS affected performance of government projects in Public finance. The study concluded that a relationship existed between IFMIS and public finance in financial reporting, budgeting, internal controls and management of government projects. There were however some challenges with internal controls, such as posting of ambiguous figures by the systems. Further, the study recommended that the internal controls module on IFMIS should be improved as this module controls all other modules of the system.

Mutui (2014) analyzed the Effects of IFMIS on Procurement Performance of the Public Sector in Kenya. The study aimed at determining the extent at which IFMIS implementation had impacted on procurement performance in the public sector in Kenya. The objectives of the study were: to determine the extent to which government ministries in Kenya have implemented IFMIS in procurement; to establish the factors affecting implementation of IFMIS on procurement performance; and to assess the effect of IFMIS on procurement performance in the government ministries in Kenya. The study concluded that the implementation of IFMIS affects the overall procurement performance in the government ministries to a great extent and that the level of implementation of IFMIS was moderate. In addition, the benefits of IFMIS realized in procurement included: effective control over public finances, enhancement of transparency and accountability and serves as a deterrent to corruption and fraud. However some challenges experienced included: lack of capacity, a lack of commitment, and institutional and technical

challenges. Further, the study recommended that the government review prohibitive legislations relating to public procurement and information management. A strong policy and legal framework supporting IFMIS should also be put in place and also the requisite infrastructure.

### Conceptual Framework

Figure 1: Conceptual Framework



## RESEARCH METHODOLOGY

### Research Design

The study adopted a descriptive design. Descriptive design according to Kothari (2011) is concerned with describing, recording, analyzing and interpreting conditions that either exist or existed, using balanced panel research design. The study employed a quantitative research approach using primary data.

### Target Population

According to Mugenda and Mugenda (2003), the target population should fit a certain specification which the researcher is studying. For the purpose of this study, the target

population was 180 county government employees who use IFMIS in the five counties purposively selected by the researcher. These are employees who are involved in the day to day implementation of IFMIS in the public financial management functions of procurement, finance and accounting officers, who are therefore able to provide answers to the research questions. The five counties selected for this research are: Bomet, Kericho, Narok, Nyamira and Kisii, based on their proximity to the researcher and represent 10% of the county governments of Kenya. Each of the five counties has two arms of government, that is, the county executive and the county assembly

Table 1: Target Population

NO	DEPARTMENT	No. of counties	No. of staff	Total
1	County Executive Accountants	5	11	55
2	County Executive Procurement Officers	5	11	55
3	County Executive Accounting Officers	5	11	55
4	County Assembly Accountants	5	1	5
5	County Assembly Procurement Officers	5	1	5
6	County Assembly Clerks	5	1	5
7	TOTAL	5	36	180

### Sampling Design and Sample Size

The study sampled 60 respondents representing 30% of the target population for the purpose of this study. This is because the greater the sample size, the smaller the sampling error and the more representative the sample becomes (Mugenda & Mugenda, 2003) a sample of 30% is representative.

### Data Collection Method

This research study used primary data. Primary data was collected by use of closed and open ended self administered questionnaires. According to Sekeran (2009) a questionnaire is a pre-formulated written set of questions to which respondents record their answers, usually within closely defined alternatives. The questionnaires were administered using a drop and pick later approach so that the respondents had ample time to answer the questions at their own convenient time.

### Data Validity

To establish the validity of the research instrument, the researcher conducted a pilot study on county government employees in Kisumu County. The respondents and experts in IFMIS

advised the researcher on the validity of the questionnaire to obtain answers to the research questions.

### Data Analysis and Presentation

The collected data was thoroughly examined and checked for completeness and comprehensibility. Data collected was validated, edited and coded then analysed using descriptive statistics such as percentages and frequencies. Data was analysed using descriptive statistics.

## EMPIRICAL RESULTS AND DISCUSSION

Descriptive statistics was used to discuss the findings of the study. The study targeted a sample size of 180 respondents from which 122 respondents filled and returned the questionnaires making a response rate of 67.78. This response rate was satisfactory to make conclusions for the study as Cooper and Schneider (2003), states that a response rate of between 30 to 80 % of the total sample size can be used to represent the opinion of the entire population.

### Change Management

Table 2: Change Management Assessment Factors

<b>Change management assessment factors</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Adequate communication from management	freq	0	41	2	62	15
	%	0	34.17	1.67	51.67	12.5
Goals and objectives of IFMIS communicated	freq	14	52	10	32	12
	%	11.67	43.33	8.33	26.67	10
IFMIS implementation gradual and consultative	freq	30	57	14	14	5
	%	25	47.5	11.67	11.67	4.17
Management involvement and support of IFMIS	freq	12	54	10	37	7
	%	10	45	8.33	30.83	5.83
Regular consultative forums on IFMIS implementation	freq	38	82	0	0	0
	%	31.67	68.33	0.00	0.00	0.00

This section sought to assess how factors of change management were handled when the counties were changing over from manual to IFMIS systems. From table 2 above, a majority of the respondents were notified by management about the changes from using manual systems to IFMIS. This is shown by 12.5% who strongly agree and 51.67 % who agree, though a substantial number at 34.17% do not agree and 1.67% is indifferent. It is clear that most county staff received adequate communication from management about the changeover to using IFMIS.

This implies that IFMIS implementation was done like just another government directive, without considering the importance of the change management required contrary to the Miheso (2013) who found that having the users informed on how IFMIS will affect their current work is important in ensuring the success in the implementation as this will reduce resistance by the users and enhance acceptance of the new system.

A majority of respondents are of the opinion that the implementation of IFMIS at the counties has not been gradual and consultative. 25% strongly disagree and 47.5% disagree, while only 4.17% strongly agree and 11.67% agree, with 11.67% indifferent. This implies that very few counties approached the implementation of IFMIS gradually while consulting the relevant stakeholders. According to Dorotinsky and Matsuda (2001) change management techniques such as how the project is planned and implemented and end-user involvement in design and the findings of this study indicate that there are no regular consultative forums held for all stakeholders involved in the IFMIS implementation process. 68.33% of the respondents disagree, while the rest at 31.67% strongly disagree, meaning 100% disagreement that regular consultative forums are held. This implies that once the county governments rolled out the use of IFMIS, no effort has been made to collect feedback on the benefits and challenges of using the system, or upgrade skills of those using the system. ICPAK (2014) found that though most counties rated their interaction with IFMIS as proficient or good, there were some challenges noted. These include system user challenges due to limited practical training on some of the key modules installed. The study further recommended that regular training of county treasuries should be undertaken to enhance their technical skills in IFMIS.

## Technological Infrastructure

Table 3: Technological Infrastructure Assessment Factors

<b>Technological infrastructure assessment factors</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Reliable network	Freq	0	18	18	70	14
	%	0	15.00	15.00	58.33	11.67
Enough computers connected to IFMIS	Freq	104	16	-	-	-
	%	86.67	13.33	-	-	-
Regular service and maintenance	Freq	20	38	4	41	17
	%	16.67	31.67	3.33	34.17	14.17
Technological infrastructure for IFMIS at sub-counties	Freq	0	120	-	-	-
	%	0.00	100.00	-	-	-

This section sought to assess how the county governments were handling factors of technological infrastructure. From table 3 above, most of the respondents are of the opinion that

the internet connection method they currently use is generally reliable. 11.67% say it's very reliable, 58.33% agree it's reliable, while only 15% say it is unreliable. The other 15% are indifferent. Based on the previous analysis of internet connection, it can be implied that WLAN is a reliable internet connection method.

None of the counties has availed the technological infrastructure required for rolling out the IFMIS systems to their sub counties. This can be deduced from the data above in table 3 above where 100% of the respondents answered no to this question. This means that IFMIS operations are still performed centrally at the respective county headquarters only.

### Human Capital Development

This section sought to determine what effect human capital development factors had on the effectiveness of the IFMIS implementation process. The findings are presented in table 4 below.

Table 4 Human Capital Development Assessment Factors

Human capital development assessment factors	Column1	1	2	3	4	5
<b>Adequate training of staff</b>	Freq	1	49	8	62	0
	%	0.83	40.83	6.67	51.67	0.00
<b>Regularly planned skills upgrading courses</b>	Freq	59	61	0	0	0
	%	49.17	50.83	0.00	0.00	0.00
<b>Internal expertise was developed</b>	Freq	3	4	1	91	21
	%	2.50	3.33	0.83	75.83	17.50
<b>Enough motivation to retain skilled IFMIS personnel</b>	Freq	37	61	4	12	6
	%	30.83	50.83	3.33	10.00	5.00

As to whether the counties undertook adequate training on the use of IFMIS for their staff, 51.67% agree, while 41% disagree, and a further 6.67% are indifferent. This implies that some counties put more effort than others in training their staff on the use of IFMIS. According to Rodin-Brown (2008), capacity building and training need to be scoped out during the needs assessment process. Training programs need to address various audiences, from senior members of the bureaucracy down to mid- and entry-level civil servants.

The counties do not have regularly planned skills upgrading courses for their staff. We can deduce this from the findings above which indicate that all the respondents disagree with that statement, with 49.17% strongly disagreeing, and 50.83% disagreeing. This is contrary to Rodin-Brown's (2008), assessment that given the nature of institutions and organizations, capacity building is a never-ending process that needs to be ongoing and permanent.

From table 4 above, it is clear that the counties do not offer enough motivation to their workforce so as to be able to retain skilled personnel in IFMIS. These findings are indicated by

over 80% of the respondents disagreeing generally that there is enough motivation to retain them; only 15% agree they are motivated enough, while 3.33% are indifferent. Durevall and Erlandsson (2005) found that one of the reasons for failure of IFMIS in Malawi was due to the fact that the salary structures and terms of employment in government were not attractive and flexible enough to keep staff at the technical and professional level, when there were better employment opportunities in the private sector.

### Top Management Commitment

This section sought to assess the effect that top management commitment to the implementation of IFMIS had on the effectiveness of the implementation process.

Table 5: Top Management Commitment Assessment Factors

<b>Top management commitment assessment factors</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Political class is supportive of IFMIS	Freq	57	61	2	0	0
	%	47.50	50.83	1.67	0.00	0.00
Adequate resources allocated to IFMIS implementation	Freq	40	51	4	15	10
	%	33.33	42.5	3.33	12.5	8.33
Plans underway to roll out IFMIS to sub counties	Freq	59	49	5	7	0
	%	49.17	40.83	4.17	5.83	0.00
County strategic plans outline long term plans to support IFMIS	Freq	64	31	0	14	11
	%	53.33	25.83	0	11.67	9.17

From the findings in the table above, it is clear that the political class is not supportive of the IFMIS implementation process. All the respondents, except 1.67%, are of the opinion that the political class, that is all the elected county officials, does not support the use of IFMIS at the counties. The findings of Dorotinsky and Matsuda (2001) indicate that no matter how technically well designed; an IFMIS will ultimately prove powerless if and when politicians choose to take decisions with fiscal and budgetary implications irrespective of the quality of the apparent laxity of counties to allocate adequate resources, to roll out IFMIS to the sub counties or to include IFMIS in the strategic plans could be attributed to reasons cited by Durevall and Erlandsson (2005), who argue that when IFMIS is working effectively, it removes the discretionary power from the controlling officers to allocate resources and overspend, and makes it easy to detect corruption.

Hence, since such a system runs against the interest of political principals and senior bureaucrats, it will not receive much support.



## CONCLUSION

It is clear from the findings that most counties did not undertake proper change management when integrated financial management information systems (IFMIS) were introduced to their respective counties. The goals and objectives of IFMIS were not clearly communicated; implementation was not gradual and consultative; and management is not actively involved and supportive of the implementation process. These factors contributed to the resistance and negative attitudes towards IFMIS, thereby making the implementation process ineffective. According to Rodin-Brown (2008), the best way to overcome resistance is to sell the changes, relying on credible national resources to deliver the message. The selling can be done through a variety of media: workshops, seminars, training sessions, a website, conferences, or newsletters.

The study noted that most counties had provided the technological infrastructure required for the implementation of IFMIS in terms of software, hardware and internet connectivity. However, no county has rolled out IFMIS beyond the headquarters to their sub counties. This means that all IFMIS operations are still handled centrally, which leads to slower processing of transactions rather than real time, and creates a loophole for more transactions at the sub counties to be handled manually.

Human capital development issues seem not to have been dealt with properly. Most counties did not provide adequate training on IFMIS to their staff; there are no regularly planned skills upgrading courses for IFMIS; and low motivation to retain IFMIS trained staff in the counties. Rodin-Brown (2008) proposes that capacity building and training need to be scoped out early in the implementation process. The different user groups have to be identified; their levels of knowledge determined; recruiting needs established; and training curricula explored. Training programs need to address various audiences, from senior members of the bureaucracy down to mid- and entry-level civil servants.

The study determined that the political class is not supportive of the IFMIS implementation process; the counties have not allocated enough resources towards IFMIS; the counties do not currently have plans to roll out IFMIS to the sub counties; and their strategic plans do not have long term plans towards the support of IFMIS. Political will is very important towards the success of the implementation as Rodin-Brown (2008) notes that successes like the Slovak Republic were the result of real acceptance, at the highest levels of the political system. According to Mzyece (2006), funding e-government programs such as IFMIS should be viewed as investments rather than merely as an expense. The aggregate "return" on these investments in terms of service delivery, operational efficiencies, cost savings and increased revenues could

then be quantified in a well-defined index. The use of IFMIS has helped to curb corruption, and made preparation of reports easier and more transparent.

## RECOMMENDATIONS

For the counties to have a more effective implementation of IFMIS, they should seek internal acceptance of IFMIS by all stakeholders by educating them more on the benefits; consulting them more; and management should lead by example by being more pro active and supportive. Skills upgrading courses should be planned more regularly for staff working with IFMIS both by the counties and the National Treasury; and motivation provided to retain the trained staff in the counties. The technological infrastructure required to roll out IFMIS to the sub counties should be provided to decentralize operations from the county headquarters. The political class should also change their attitudes towards IFMIS and provide more support and leadership; adequate resources should be allocated towards the implementation of IFMIS; and the counties should include long term plans towards the support of IFMIS in their strategic plans since the benefits of IFMIS are already being realized.

## SUGGESTIONS FOR FURTHER RESEARCH

Since devolution is still a relatively new phenomenon in Kenya, and IFMIS was introduced shortly after, not many studies have dealt with the issue of IFMIS in the counties. Further research therefore, should be done on the impact of IFMIS on the public financial management of the county governments of Kenya; the influence of political will on effective implementation of IFMIS in the county governments of Kenya; and challenges faced by the county governments in the implementation of IFMIS.

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