INFLUENCE OF INTERNAL CONTROL SYSTEM ON FINANCIAL MANAGEMENT IN MINISTRY OF FINANCE, KENYA

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ABSTRACT

Before the government introduced Integrated Financial Management Information System, execution of budget as well as process of accounting were done manually or in support of old applications that were not supported adequately. Because of this, the functioning of the management systems dealing management of the public funds suffered greatly because there was no data on expenditure, planning of budget, control of expenditure, and reporting causing negative effect on management of budget which resulted to commitment of resources by the government being controlled poorly; leading to building up of arrears; excess borrowing which pushes up rates of interest and crowds private sector investment and misallocation of resources therefore leading to undermined effective and efficiency in management of finances. This study focused on establishing the influence of internal control systems in IFMIS on financial management in Ministry of Finance. Specific objective was to assess the effects of internal control system on financial management in Ministry of Finance Descriptive research design was used in the study. The study was conducted in the National Treasury. The target population of the study was 128 employees. Stratified random sampling was applied to get the respondents. The study sample size was 97 employees. The study used questionnaires as the tool for data collection. Statistical Package for Social Sciences (SPSS) version 23 for windows was used to analyze quantitative data. Graphs, tables and pie charts were used to present frequencies and percentage while tables were prepared using each variable or indicator. The study found that internal control systems had significant positive relationship with financial management in Ministry of Finance and financial reporting significant systems had positive relationship with financial management in Finance. The Ministry of study recommends that the ministry of finance should ensure that they have systems that are reliable; this will ensure that they provide complete, accurate, timely and consistent information. The ministry should that the infrastructure also ensure supporting IFMIS is secure, corrupt free, secure from unauthorized access and breach of confidentiality this will boost in management efficiency of cash. Management in the ministry of finance should ensure that the IFMIS in use have the ability of monitoring future pipeline of payment. This will ensure that there is effective management of government's flow of cash which will prevent accumulation of debt.

Key Words: cash management, financial management, financial reporting, integrated financial management information system, internal control systems

INTRODUCTION

Koth and Roberts (2011) asserts that; due to the dynamic nature of local and global macroeconomic forces, potential of creating, processing and using information instantaneously with no geographical barriers or physical constraints is enormous and continuously grows exponentially underscoring the need for integrated financial management systems. Every single country has a different scope of IFMIS and its functionality also

differs, usually it provides a representation of enormous, complicated, process of strategic reforms (Husnan & Pudjiastuti, 2006).

In USA, IFMIS was implemented so as to provide transparency and accountability of all financial transactions (Gathogo, Kahari & Wanyoike, 2015). In the early 1980s, Bouckaert, Scheers & Sterck (2005) assert that the Australian government made initiatives on the budget and management system more effective in the public sector and later shifted to integration and comprehensive reform strategy and the public sector started accrual basis reporting and budgeting system. In Japan the public finance management systems has made a lot of contributions to economy through implementation of various reforms in 2001 aimed at upgrading the system and meet the global economic requirements (Nishigaki, 2006).

Nomvalo (2008), indicated that in South Africa (SA), IFMIS is one of the reforms in the management of finances put in place by their government; it began in 1994 when the country institutionalization democracy. The project aimed at enhancing integrity and effectiveness of managing expenditure and reporting of performance with the aim of ensuring that service delivery is effective (National Treasury 2009:3).

In Kenya IFMIS was introduced in 1998 but implemented to various government ministries in 2003. It was further extended to the county governments in 2012 through the IFMIS reengineering process to improve the financial system (Kinyeki, Kipsang & Peterson (2008); Ndung'u, (2006). The implementation was spearheaded by the National Treasury to improve on the Soft Issues Bid Evaluation Tool (SIBET) and Enterprise Resource Planning (ERP) systems previously used as a financial management system (Imbuye, 2013). A department was created within the National treasury mandated to facilitate the implementation process. This was part of the PFM reforms in the public sector which could provide the government with real –time financial information especially for the managers (Muigai, 2012). It also helped the managers in the process of planning, budgeting and management of the resources effectively. Based on a review that was conducted by departments of accounts in the treasury, there was weakness that was revealed in management of financial information (Kinyua, 2003).

Internal Control System

All functions that deal with financial management are all bundled up in one application using the fiscal tool of IFMIS. It is an accounting and budgeting system that is based on IT and is created in a way that it helps the government in planning budget requests, spend their budget, managing reports regarding financial activities and service delivery to the public in a more efficient, economic and effective way. The operations of IFMIS are in a common structure as well as platform enabling improved compatibility and consistency of both financial and fiscal information, reducing government general investment in developing systems that are expensive for every single entity in the government (Diamond & Khemani, 2005).

FMIS is in support of the automated and integrated process of managing public finances which includes formulation of budget and its execution, accounting, and reporting. Solutions of FMIS can lead to a significant improvement in efficiency and equity of operations of the government, and provide a great potential to increase participation, accountability and

transparency. In a case where there is a linkage between FMIS and other systems of PFM with central data warehouse (DW) in recording and reporting all daily transactions, offering reliable consolidated platforms is known as IFMIS (World Bank, 2013).

For any IFMIS to be successful the key is to have integration. Integration simply means that the system should comprise of the following key aspects, standard classification of data to record financial events, internal control on entry of data, processing of transactions, reporting, similar process of transacting, and designing of systems eliminating duplicated entry of data. Most of the time integration applies to the key functions of managing finances supported by IFMIS, in an ideal world it covers other information systems in which the main systems like HR and payroll communicate.

Minimally, designing of IFMIS need to be interfaced with these system. The management of finances by an organization can be enhanced by IFMIS by improving the management of cash, debt and liabilities. It also possesses the ability of using historical information providing better modeling of budgetary process. The advantages that are expected with the implementation of IFMIS include improved governance, low fraud, transparency and accountability and improved monitoring and evaluation.

Financial Management

In public institutions, management of finances is concerned with making sure that there is availability of funds required whenever it is needed and that the finances are obtained and applied in most efficient and effective manner in order that the citizens can benefit (Waddell, 2000). IFMIS is becoming crucial benchmark for the reforms in the budget of the country in regard to precondition to achieve effective management of budgetary resources (Chado, 2015).

In the process of managing public finances in Kenya, financial reporting and government accounting are very important. Record keeping, communication, analysis, summarizing and interpretation of financial statements are some of the activities that are entailed in government accounting. Similarly, Premchand (1999) did argue that the government accounts have dual role to meet requirement of internal management and also provide the public with window on government operations. It is expected of Kenya to undertake this very crucial duty to control and regulate expenditure estimations every fiscal year. The members of the national assembly have the responsibility of making sure that the estimated budget is scrutinized properly to make sure it's accurate, effective and efficient on expenditure of the government.

The democratic government of Kenya passed a very important piece of legislation The Public Finance Management Act (PFMA), 2012 (Act No. 1 of 1999) (as amended by Act No. 29 of 1999). In this act, the goal of having good financial management is promoted with the aim of maximizing service delivery by effective and efficient application of limited resources. The Act has been effective from 1 April 2000, giving effect to sections 213 and 215 to 219 of The Constitution, 1996 (Act No. 108 of 1996) for all spheres of government both national and provincial. In this section, it is required that the national legislation should establish a national treasury for introducing uniform treasury norms as well as standards, prescribing

measures ensuring transparency and control of expenditure in all government spheres and set of operating procedures for borrowing, guarantees, procurement and oversight for different funds national and provincial.

The national government through national legislation should determine uniform norms and standards of the treasury. It is then required that the National Treasury will monitor and enforce the set norms. Implementation of the norms by the National Treasury is not only expected in the national government, but also in other organs in entire government spheres (GoK, 2014).

STATEMENT OF THE PROBLEM

Before the government introduced Integrated Financial Management Information System in 2011, execution of budget as well as process of accounting were done manually or in support of old applications that were not supported adequately. Because of this, the functioning of the management systems dealing with management of the public funds suffered greatly because there was no data on expenditure, planning of budget, control of expenditure, and reporting causing a negative effect on management of budget which resulted to commitment of resources by the government being controlled poorly; leading to building up of arrears; excess borrowing which pushes up rates of interest and crowds private sector investment and misallocation of resources therefore leading to undermined effective and efficiency in management of finances (Chêne, (2013). The recent fund mismanagement in Kenya include from 2015; it is alleged that KSh. 1.9 billion was stolen in a conspiracy between officials at the NCPB and unscrupulous traders, it was reported that KSh 791 million went missing from empowerment program of youth, loss of KSh 5 billion in the ministry of health, Galana and Mwea Irrigation Scheme scandal of KSh 3.5 billion and the loss of Kshs 2.7 billion from the Nairobi County Government (GoK, (2015). It wasn't easy for the government to provide accounts how accurate, transparent and complete their finances were and because of this enforcement of IFMIS was hindered. In order to improve the growth of the economy and its development IFMIS will act as its catalyst. It makes sure that public resources are raised, managed and spent in an efficient and transparent manner, aiming at bettering the process of delivering services. Users of IMFIS in managing cash data and decision making in regard to budgeting question how easy it is to use, security, reliability and flexibility since the system is considered a necessity its weaknesses should be addressed (Hendriks, 2012). Mobegi (2014) surveyed on the extent of implementation of IMFIS as a toll of ensuring that management of finances in the government is sustainable. From the findings of the survey, there was some resistance in the use of IFMIS by various ministries. In order to attain successful IFMIS, it is important to overcome such resistance. Some of the reason for resistance is failure of conducting training and the fear of the unknown by its users. Despite implementation of IMFIS being behind schedule, it was established that it has succeeded. The study focused on extent of implementation but failed to show the influence of IMFIS on financial management. The senior management team and the employees in the Ministry of Finance (MOF) doubt whether there will be effective financial management. The complexity of the system and its inability to generate all the require information in the preparation of final accounts could fault the system for lack of efficiency and effectiveness drive. The MOF

doubts this systems' ability since it has been unable to incorporate all the components of financial reporting, despite having reengineered and modelled with the IPSAS requirements. There is no single study that has sought to establish how various aspects of IFMS have contributed to the management of finances. This study therefore sought to fill this gap by establishing influence of internal control system on financial management in Ministry of Finance.

RESEARCH OBJECTIVE

To establish the influence of internal control system on financial management in Ministry of Finance.

RESEARCH HYPOTHESIS

 \mathbf{H}_{01} Internal control systems do not have significant influence financial management in Ministry of Finance.

THEORETICAL REVIEW

Task-Technology Fit Theory

The theory developed by Goodhue and Thompson (1995) states that the probability of getting positive on performance of individuals is based on IT and that its usage can exceed the IT capabilities in order link up the tasks performed by users. These scholars came up with a task-technology fit measurement which comprised of 8 key aspects: authorization, quality, ease of use or training, locatability, compatibility, systems reliability, production timeliness, as well as users' relationship. All factors are estimated from a range of 2 to 10 based on a likert scale of seven points that ranges from strongly agree to strongly disagree. They discovered the estimate of tasks, alongside the usage as a key determinant of reports of consumers in the improvement of performance of jobs and efficiency attributable to the system usage.

This model analyses its operators individually, despite this, there is another analogous model which was presented by Zigurs and Buckland (1998) that operates at the group level. The basis of this theory is wide range of Information System comprising of e-business system and also expansion of different theories that are linked to produce an information system like TAM. The estimates of this theory that were provided by Goodhue and Thompson went through different transformations with the aim of fitting the objective of a particular research. In this current study, the association between IFMIS and impacts on management of finances, because the government applies the use of this system in monitoring management of public finances through control, accounting, audit and provision of reports. The reason for the creation of this model was to assist the government in collecting, spending public funds in an efficient and transparent manner therefore bettering delivery of service which results to improved performance as well as productivity.

EMPIRICAL LITERATURE

Internal Control Systems and Financial Management

Procedures as well as policies that are put in place by management of government agency with the aim of ensuring the agency achieves its set objectives and comply with external laws as well as regulations is what is termed as Internal control systems. There is a tendency of those policies and procedures covering monetary book-keeping and reporting, monitoring of performance, management of asset as well as procurement (Simson et al., 2011). IFMIS being a tool of management makes it possible for the management to: take control of spending as well as deficit, prioritization of expenditure across policies, projects as well as programs in order to allocate resources in an efficient and equitable manner, making better use of budgeted resources, with the aim of achieving results using the lowest cost possible (Hendricks, 2012). The advantages of implementing IFMIS are that it improves governance, lowers fraud and improved monitoring and evaluation.

Oz (2006) indicated that the objective of financial managers is managing finances of the company in the most efficient way. To achieve their goal, they collect money as soon as possible, make payments latest time as provided by the law/contract, ensure availability of sufficient funds for daily operations and take advantage of arising opportunities to attain high yields on funds not currently used. Simson et al (2011) indicated that with the aim of effectively managing government's flow of cash and prevent accumulation of debt, it's important to monitor future payments pipeline. Additionally, the common source of corruption is procurement, thus their systems have a tendency of having controls with the aim of detecting and deterring corruption via IFMIS.

Hendricks (2012) indicated that IFMIS that has been designed properly provides several features which might assist in detecting excess payments, fraud as well as theft. They are inclusive of automatic identification of exceptions to normal operations, patterns in activities that are suspicious, automatic cross-referencing of personal identification numbers to detect fraud, cross-referencing of asset inventories with equipment purchase for detecting theft, automatic disbursement rules of cash and ghost workers identification.

RESEARCH METHODOLOGY

Research Design

The study was descriptive research. The aim of descriptive research design was to generate knowledge which could be used in describing and developing profile for the research study.

Target Population

Targeted population was 128 employees, who work in the national treasury under the Directorate of Accounting Services. The employees were the key respondents in the research since the whole research revolves around their service delivery in their respective departments.

Sampling Strategy

In this study, sampling frame was the list of employees under the Directorate of Accounting Services in the National treasury, from where the sample was selected. Geteria, (2012) explained sampling as process of selecting units, to be used in a study, from targeted population such that the selected sample is a representation of the population. Stratified random sampling was applied to get the respondents. When simple sampling is used, the respondents have equal opportunity of being selected to form study's sample. Krejcie and Morgan (1970) formula was applied in arriving at the sample size. The formula was:

$$n = \frac{N}{1 + (N-1)s^2}$$

Where: n= the required sample size; N = is the Target Population (128); e = accuracy level required; Standard error = 5%

Sample calculation

$$n = \frac{N}{1 + (N - 1)e^2} = \frac{128}{1 + (128 - 1)0.05^2} = \frac{128}{1 + (127)0.05^2} = 97.15 = 97 \text{ respondents}$$

The study sample size was 97 employees, which represented 75.78% of the entire population.

Data Collection Instruments

Data was gathered with the use of questionnaires. The researcher engaged the use of questionnaires which optimally used structured questionnaire. The questionnaire was self-administered hence the researcher dropped them to the respondent, give them time to complete, and then the researcher will pick the questionnaire at a later date. The researcher also used closed and also open-ended questions which allowed collection of qualitative data. The data collection allowed for un-ambiguity in answering questions and thus a thorough study.

Data Analysis and Presentation

Data collected was first cleaned to ensure accuracy, completeness, or reasonability and then the data was improved by detecting errors and omissions and correcting them. After the data was cleaned, it was coded then entered for preparation of analysis.

Data was analyzed using SPSS version 20. SPSS has the ability of handling large volumes of data because of its wide spectrum of procedures. The variable Y was defined as

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where: Y= Financial management; β_0 = Constant, X_1 = Cash management, X_2 = Internal control systems, X_3 = Financial reporting systems, \mathbf{e} =Error term of the model; β , β_2 , β_3 and β_4 =Coefficients of independent variables.

Graphs, tables and pie charts were applied to present frequencies and percentage. Analysis of qualitative data was done using themes as well as categories.

RESEARCH FINDINGS AND DISCUSSION

The study used a sample of 97 respondents whereby all of the wee issued with questionnaires but only 82 questionnaires were dully filled and returned forming a response rate of 84.5%.

Internal Control Systems and Financial Management

Respondents were asked to indicate their level of agreement with statements about the effect of internal control systems on financial management. The results were as presented in Table 1.

Table 1: Internal Control Systems

	Mean	Std. Dev.
IFMIS provides auditable financial statements from the ministry	3.817	1.325
IFMIS enhances confidence and credibility of the ministry 's budget	3.976	1.201
Use of IFMIS has greatly enhanced security of information	3.890	1.327
which minimizes risk of corruption and improve reliability of the		
system		
IFMIS has improved the effectiveness and efficiency of public	3.963	1.472
expenditure programmes		
Built-in features within IFMIS facilitates effective monitoring	3.817	1.483
and evaluation of public sector's activities		
IFMIS has the ability of tracing all transaction process stages to	3.988	1.398
enhance transparency and process accountability		

Financial Management

Respondents were requested to indicate the trend of the following aspects of financial management in their ministry since they adopted the use of IFMIS. The results were as shown in Table 2.

Table 2: Trends in Aspects of Financial Management

Statement	Greatly	Improving	Constant	Improved	Greatly
	Decreased				Improved
Audit scrutiny	2.6%	2.0%	2.6%	44.1%	48.7%
Planning of financial resources	4.6%	3.7%	8.5%	40.2%	42.7%
Directing of financial resources	2.6%	2.6%	5.9%	44.7%	44.1%
Monitoring of financial resources	5.9%	2.6%	8.6%	41.4%	41.4%
Organizing of financial resources	2.0%	5.3%	12.2%	45.1%	36.8%
Controlling of financial resources	2.6%	2.6%	5.9%	38.8%	50.0%

From the findings most (48.7%) of the respondents and 42.7% indicated that audit scrutiny and planning of financial resources simultaneously greatly improved in the Ministry of Finance since they adopted the use of IFMIS, and majority (50%) of the respondents

indicated that controlling of financial resources Improved greatly. The results also established that most (45.1%), (44.7%) and (41.4%) of the respondents indicated that since they adopted the use of IFMIS, organizing of financial resources, directing of financial resources and monitoring of financial resources improved simultaneously. The findings concur with the findings of Rupanagunta (2006) who indicated that transactions information captured using the right format and classified appropriately and its presentation be simple and in a format that is easy to use can be applied as a support system of value.

INFERENTIAL STATISTICS

Correlation Analysis

Pearson Product Moment Correlation was conducted to establish the association between the dependent and the independent variables in the study. The independents variables in the study were; cash management, internal control system, and financial reporting systems and the dependent variable was financial management. The results are presented in Table 3.

Table 3: Correlation

_		ul ment	ment	control	7 50
		Financial management	Cash management	Internal system	Financial reporting systems
Financial management	Pearson Correlation	1			
	Sig. (2-tailed)	0.2			
	N	82			
Cash management	Pearson Correlation	.872**	1		
	Sig. (2-tailed)	.004			
	N	82	82		
Internal control system	Pearson Correlation	.888**	.279**	1	
	Sig. (2-tailed)	.003	.000		
	N	82	82	82	
Financial reporting	Pearson Correlation	.884**	.272**	.289**	1
systems	Sig. (2-tailed)	.000	.000	.000	
	N	82	82	82	82

The results in table 3 established that a strong positive correlation existed between cash management and financial management in Ministry of Finance, as shown by r = 0.872, internal control system and financial management in Ministry of Finance were found to be strongly and positively correlated as shown by r = 0.888; financial reporting systems and financial management in Ministry of Finance were strongly and positively correlated as shown by r = 0.884. This implies that cash management, internal control system, and financial reporting systems with financial management in Ministry of Finance were related.

Model Summary

The study aimed to establish the variation of the dependent variable as a result of changes in the independent variables. The study analyzed the variation of financial management in the ministry of finances as a result of changes in cash management, internal control system, and financial reporting systems. The results are as presented in Table 4.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	$.890^{a}$.792	.781	.16286

The results in table 4 indicate that the association between the variables under study is shown by R which is correlation coefficient. From the findings, results of correlation coefficient indicate a strong positive relationship between the predictor variables and financial management (r= 0.890). The adjusted r-square indicates that there was 78.1% variation of financial management as a result of change in cash management, internal control system, and financial reporting systems. The remaining 20.8% implies that there are other factors that affect financial management in Ministry of Finance which were not discussed in the study.

Analysis of Variance

The study carried our analysis of variance with the aim of establishing whether the data used in the study was significant. The study selected significance level of 5%. The results were as shown in Table 5.

Table 5: ANOVA

Model		Sum of Squares df		Mean Square F		Sig.
1	Regression	21.032	3	7.011	49.451	$.001^{\rm b}$
	Residual	11.058	78	0.142		
	Total	32.09	81			

From the findings presented in table 5 the p-value (0.001) is less than the selected level of significance (0.005). The F calculated was greater than F critical (49.451> 2.723). This indicates the goodness of fit of the study model and is suitable in conclusion on the population parameters. Hence, cash management, internal control system, and financial reporting systems significantly and collectively explain changes in financial management in Ministry of Finance.

Coefficients of the Study Variables

Coefficients were used to develop the regression model which was used to predict the influence of the dependent variables on the independent variables.

Table 6: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
1 (Constant)	.514	.060		8.567	.000
Cash management	.062	.054	.064	1.148	.003
Internal control system	.257	.095	.491	2.705	.000
Financial reporting systems	ng .219	.091	.192	2.407	.017

From the findings presented in Table 6 above, a regression function was extracted as presented below.

$$Y = 0.514 + 0.062 X_1 + 0.257 X_2 + 0.219 X_3$$

The equation above revealed that internal control system, and financial reporting systems variables to a constant zero, they will significantly influence financial management in Ministry of Finance as shown by constant value of 0.514. The hypothesis of the study was: an internal control system does have a significant influence financial management in Ministry of Finance. The findings on regression analysis demonstrated that Internal control systems is significant at β =0.257; t = 2.705; p = .000. This implies that at 95% confidence level, internal control systems have a positive significant effect on financial management in Ministry of Finance. An increase of one unit of financial management will result to an increase in internal control system in the Ministry of Finance by 0.257 units.

RECOMMENDATIONS

The study recommends that the ministry of finance should ensure that they have systems that are reliable, this will ensure that they provide complete, accrate, timely and consistent information. The ministry should also eensure that the infrustructure supporting IFMIS is secure, corrupt free, secure from unauthorized access and breach of confidentiality this will boost efficiency in management of cash.

Management in the ministry of finance should ensure that the IFMIS in use have the ability of monitoring future pipeline of payment. This will ensure that there is effective management of government's flow of cash which will prevent accumulation of debt. It is also important to ensure that the system has the ability of detecting and deterring corruption automatically without human manipulations.

There is need to have a frequent update of the framework especially during initiation of budget and its finalization and also subsequent review within the financial year this will ensure that the report obtained is reliable.

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