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Njeru, C. W., & Malenya, A.

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INFLUENCE OF INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEMS ON EFFECTIVE FINANCIAL SERVICE DELIVERY IN THE COUNTY GOVERNMENT OF KAKAMEGA, KENYA

Njeru, C. W.,[1*] & Malenya, A.[2]

[1*]MBA (Finance) Candidate, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

[2] Ph.D, Lecturer, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

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ABSTRACT

This study investigated the influence of e-budegeting, e-procurement, e-sytem audit and e-system security on effective financial service delivery in Kakamega County government. The study used descriptive research design and targeted 112 respondents comprising of ICT officers, procurement officers, auditors, finance officers in Kakamega County government; from where a sample size of 87 respondents was drawn. Structured questionnaires were used to collect primary data and piloting of the research instrument was done in Vihiga County Government so as to ensure content validity and a Cronbach's alpha which tests internal consistency was used to check reliability. SPSS version 24 was used to compute statistical data; whereby collected data was cleaned, coded and transformed to allow regression analysis. Analyzed data was presented in tables. A total of 88 questionnaires were dispatched in the field for data collection, from which 81 were returned when dully filled showing a response rate of 94.3% which was good for generalizability of research findings to a wider population. Both descriptive and inferential statistics showed that all conceptualized study variables (e-budgeting, e-system procurement, e-system audit, e-system security) significantly influence effective financial service delivery in the county government of Kakamega. The study concluded that use of e-budgeting is an effective way of checking deviations from county budgetary allocations which eventually enhances effective financial service delivery in the County Governments; transparent and effective e-system audits using IFMIS platform significantly assists in tracing suspicious fraudulent financial transactions in county government expenditures thus significantly improves effective financial service delivery in the county governments. The study recommended that county governments should enforce use of e-procurement system to reduce costs and financial misappropriations associated with manual procurement process, thus eventually improve financial service delivery in the county governments; and county governments should embrace use of e-system audits with forensic financial audit experts so as to tame fraudulent financial misappropriations and improve financial service delivery in the county governments.

Key Words: *E-Budegeting, E-Procurement, E-Sytem Audit And E-System Security, Service Delivery*

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INTRODUCTION

Effective Financial service delivery in governments encompases efficient collection and disbursement of money and any temporary investment of cash, thus, summarily inolves the process of forecasting, collecting, disbursing, investing, and planning for the money a government needs to operate smoothly (Zimmerer et al., 2008).

Further, Government finance management may be defined as the strategy and associated processes for managing cost-effectively the government's short term cash flows and cash balances, both within government, and between government and other sectors (Summer, 2001). Governments own none of the resources they spend. Taxpayers do. In a democratic society, the ways in which governments spend resources must be transparent and readily open to questioning. Accounting for Public sector funds and their proper expenditure is not only part of good fiancia management it is essential to good government and good governance of the public enterprise. It is also where governments are most heavily scrutinized and where they can get into a great deal of fiancial trouble (Summer, 2001).

According to Rozner (2008) most developed countries have adopted IFMIS which is defined as 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.

Thus, most countries have embraced IFMIS as an effective public finance management system; where an IFMIS comprises of the following modules and systems; "General ledger, Budgetary accounting, Accounts payable and Accounts receivable, and the noncore or other modules as, Payroll system, Budget development, Procurement, Project ledger and Asset module (Diamond & Khemani, 2005). The system uses an integrated approach where all the date is controlled from recording transactions, data entry, processing and reporting (Diamond & Khemani, 2005).

Following very many unresolved cases of misappropriation of government funds in Kenya, which has negatively affected efficient financial delivery to citizens, IT experts suggested the introduction of IFMIS. An IFMIS is a fiscal tool for government that bundles all financial management functions into one suite of applications. It is an Information Technology (IT) based budgeting and accounting system designed to assist the government entities on how to plan budget requests, spend their budgets, manage and report on their financial activities, and deliver services to the public more efficiently, effectively and economically. IFMIS operates on a common structure and platform that will enable improved compatibility and consistency of fiscal and financial information, reduces governments overall investment in the development of expensive accounting systems in each government entity. Further, an IFMIS is a standardized monitoring and reporting system, which consolidates all the information needs of a government into one information database. It facilitates consistent recording and reporting of information, to enable a government to take macro decisions that affect the country as a whole (GoK, 2010).

The Office of Auditor General (OAG) has the primary oversight role of ensuring accountability in the use of public resources in all counties and is required to audit and report on the accounts of all County government entities, covering revenue, expenditure, assets, and liabilities within six months of the end of every financial year. But the external audit and scrutiny by the legislature as currently undertaken does not hold the County governments accountable for their fiscal and expenditure policies and their implementation; due politicization of audit reports. The public finances are independently reviewed by the OAG but the

external follow-up on the implementation of recommendations for improvement by the executive has not been efficient. The audit reports are issued with delays of up to 12 months, are scrutinized late, and effective hearings are not confirmed. The delays are quite often occasioned by low staff levels at the OAG as well as the back and forth between the OAG and the counties in correction of errors identified in the submitted financial statements. The scrutiny by the County assemblies, the Senate and the Parliament do not result in actions to be taken up by the executive, nor is their work transparent to the public.

Statement of the Problem

The continued efforts of effective financial management of public funds have led to the need for the introduction of an IFMIS system in both the National and County Governments in most countries (World Bank, 2014). Further, in Kenya, ICPAK (2017) reported that poor financial service delivery has been reported in cases where IFMIS is absent; that is, overspending due to poor financial controls, unrealistic budgets, focus on inputs rather than outputs, growing pending bills problem, spending not aligned to priorities, fraud, poor management of transactions/documents, lack of effective auditability, procurement issues (poor value for money).

Initially, the implementation was done correctly in some institutions for example in the Central bank in Kenya, but this has not been met with resounding success in the ministries and has therefore not attained most of the intended objectives. The implementation of such a project has proved to be a very demanding undertaking and has also not been met with resounding success in County Governments (World Bank, 2014), thus the need for empirical studies to identify systemic issues of IFMIS that affect financial service delivery.

From Office of Auditor General reports (2017), poor fiancial service delivery in county governments has been caused by expenditure and revenue deviations; where expenditure deviations in the counties are mainly attributed to; delay in the disbursement of funds from the National government, procurement delays related to capital projects, low collection of own source revenue, technical and human capacity constraints in relation to budget preparation and execution, procurement delays that create a mismatch between the electronic procurement plan and the implementation, weak internal audit systems because of low staffing levels and skills plus poor IFMIS connectivity which causes delays in processing of financial transactions and late submission of financial reports by counties (KIPPRA, 2018).

For instance in regard to report of the Auditor General on financial statements of the County Assembly of Kiambu for the year ended 30th June, 2018, there were variances between IFMIS records with actual financial statements (ledgers, statements of receipts and payments), mismatch of records on recurrent and development expenditure, mismatch of general suspense account and payment vouchers, only to mention but a few; thus revealing suitability of IFMIS in highlighting financial mismanagement in county governments.

Further, report of the Auditor General on financial statements of the County Assembly of Kakamega for the year ended 30th June, 2018, there were variances between IFMIS records and disclosure of financial statements, mismatch of accounts payables and bank statements for deposits account, variance of financial figures on pending bills and the schedules accompanying the notes, variances between cash and cash equivalents and accompanying bank balances, non-verification of huge outstanding imprests, huge cash disbursements with no accompanying record of approved beneficiaries, irregular reallocation and unaccounted for expenditures, un-vouched expenditures, irregular procurement, just to mention but a few leading to unexplained financial deficits; thus revealing appropriateness of IFMIS in highlighting financial misappropriations in county governments.

Therefore, lack of empirical evidence on systemic issues of IFMIS and existing cases of poor financial service delivery in both the national and county governments even after the introduction of IFMIS, motivated this study in investigating the influence of e-budegeting, e-procurement, e-sytem audit and e-system security on effective financial service delivery in Kakamega County government.

Objectives of the Study

The general objective of the study was to investigate the influence of integrated financial management information systems on effective financial service delivery in the county government of Kakamega. The specific objectives;

- To determine the influence of e-budgeting on effective financial service delivery in the county government of Kakamega.
- To evaluate the influence of e-procurement on effective financial service delivery in the county government of Kakamega.
- To examine the influence of e-system audit on effective financial service delivery in the county government of Kakamega.
- To evaluate the influence of e-system security on effective financial service delivery in the county government of Kakamega.

The research hypotheses were;

- **Ho_1;** There is no significant relationship between e-budgeting and effective financial service delivery in the county government of Kakamega.
- **H_{02};** There is no significant relationship between e-procurement and effective financial service delivery in the county government of Kakamega.
- **H_{03}:** There is no significant relationship between e-system audit and effective financial service delivery in the county government of Kakamega.
- **H_{04}:** There is no significant relationship between e-system security and effective financial service delivery in the county government of Kakamega.

LITERATURE REVIEW

E-technology perfective Theory

E-technology perfective theory was formulated by Markus and Robey in 1988. The theory supports a broad spectrum of business activities that allows for a smooth procurement model which facilitates internal process including procedures preceding the restrictions (Broussean, 2000). The theory was supported by a number of scholars O'Neil and Perez (2013) who asserted that e-procurement is instrumental in county governments operations particularly E sourcing and E-collaboration. While Saurin and Henringson (2013) posits that the use of e-collaboration enables the suppliers to increase harmonization with the help of the internet and E-government in demand management, inventory management and production scheduling with their clients.

Systems theory

System theory was proposed by Ludwiq in the 1940s and furthered by Ross in 1956. A system is a collection of connected and interacting mechanism, which toils in jointly to attain a desired set of objectives (Kang'ethe, 2002). According to systems theory, most organization managers recognize how different systems can affect workers delivery and how workers can equally affects the systems around them, hence, different efforts combined make a system work effectively to accomplish goals. Through Systems theory managers are able to effectively examine patterns and events of occurrences at the workplace which is significant in coordinating programs to work as a collective whole for the overall goal or mission of the organization rather than for isolated departments (Hawthorne, 2013).

Technology acceptance model (TAM)

TAM identifies two theoretical constructs including Perceived Usefulness and Perceived Ease of Use that affect the intention to use a system. Several studies have used have used TAM as their academic contextual for explanation on ICT acceptance and usage. Scholars have established that the perceived usefulness has a positive connection with both

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adoption purpose and continuance purpose (Romi *et al*., 2013).

Perceived use of a new technology has in the past been found to affect satisfaction and attitudes of the users, while on the other hand, perceived ease of use has been found to affect both the intention to use a new technology as well as the perceived ease of use of the technology (Nakata and Berger, 2013).

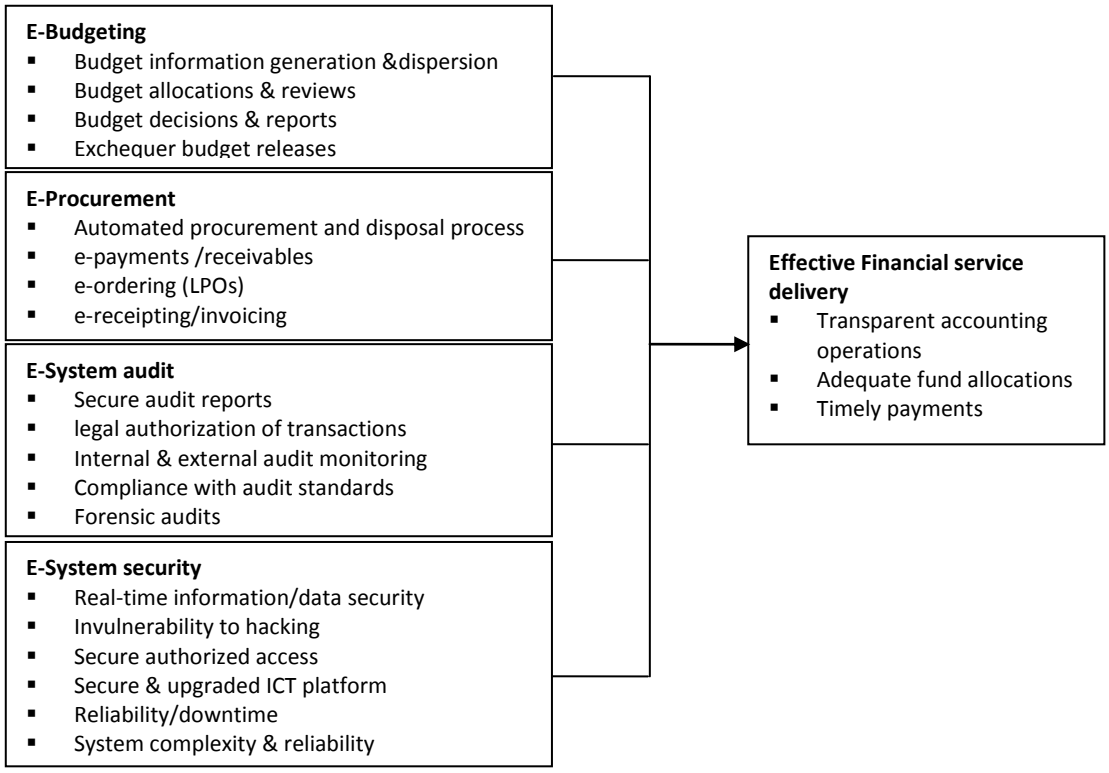

Figure 1: Conceptual Framework

Empirical Literature Review

First, GoK (2017) reported that IFMIS improve budget planning and effecting by giving appropriate and precise information for budget management and judgment. IFMIS also enables the formulation of a standardized and practical budget across government at the same time enhancing better management over budget implementation fully integrating budget completion data. Further, IFMIS enables devolution of financial processes and functions that are controlled by Ministry of Finance thereby enhancing financial restraint and control of working costs by minimizing managerial responsibilities and the junior staff workload.

In Europe, Dener and Young (2013) focused on determining the effects of integrated financial management systems on publishing of open budget data and recommend improvements in budget transparency. A literature review approach was adopted through analysis of reports. The study findings indicated that despite the fact that the system is widely acknowledge and used worldwide, only 12% of the user's portrayed good practices in presenting open budget data from the systems.

Matheri (2016) commended on the need for financial reforms because they lead to bribery elimination as well as elimination of inappropriate expenditure. In this regard, for the last ten years, the Kenyan government has spearheaded improvements in public management systems aimed at bringing transparency, accountability and efficiency in public finance management. The main focus of the systems has been on various processes such as procurement which was seen as the major avenue for financial mismanagement (GoK, 2017).

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Lundu (2010) studied the effect of IFMIS implementation on supply chain performance with a focus on the County government of Nairobi. Using a descriptive research design, the study focused on employees in the ICT, procurement and finance sections. Primary data was collected and analyzed using correlations. The effect of IFMIS on supply chain performance was found to enable cost saving, effectiveness, efficiency and an improvement in quality sourcing.

For the last ten years, the Kenyan government has spearheaded improvements in public management systems aimed at bringing transparency, accountability and efficiency in public finance management. The main focus of the systems has been on various processes such as budgeting, gathering revenue, auditing, accounting as well as reporting and public debt management (GoK, 2017).

Majority of the population measured performance of their County Governments based on; Success for effective and efficient use of County revenue on development projects including infrastructure, health, education, trade and corporate social responsibility, without knowing IFMIS audit platform provides better reports of County financial allocations and expenditure.

First, with regard to business process re-engineering (BPR) principle, implying process automation IFMIS has been seen as a driver to drive improved public service delivery (Ziemba & Oblak, 2015). This has however been opposed in civil service due to uncertainties of job cuts leading to low adoption and work arounds to beat the system, thus implying internal attacks to IFMIS to compromise its security.

Hendricks (2012) found that accountability can be enhanced when the IFMIS system is used securely. Through that, there is usefulness and improvement in the efficiency of public payments. The system also brings about accountability mainly through secure tracking of financial activities as well as controlling expenditure.

Diamond and Khemani (2005) further indicated that the benefits of the IFMIS are extensive particularly in the reinstatement of expenditure control and enhanced secure stages of accountability and transparency. The Commitment secure control system helps in curbing overspending and a considerable decline in household debts thus improving the financial performance in the public sector.

Isidore (2012) also studied on how IFMIS enhances financial decision making in two case study organizations in Tanzania. Using descriptive study design, the study focused on thirty four respondents sampled purposively. Primary data collection was conducted and the findings revealed that the use of the secure system leads to efficiency in financial management in Tanzania.

In a study in South Africa, Hendriks (2012) sought to establish the risks as well as challenges involved in the secure implementation of the integrated financial management systems. The study mainly relied on literature review without data collection. The findings revealed significant challenges of the system especially where the data involved is of large quantity and system security concerns. However, when a secure IT infrastructure is well maintained, it leads to effective financial management.

METHODOLOGY

This study adopted the descriptive survey design. For this study, the target population or those cases that contained the desired information consisted of procurement officers, ICT officers, internal auditors, accountants, revenue and finance officers who either directly or indirectly deal with financial matters in the county government of Kakamega. The sampling frame in this study consisted of officers in the county government of Kakamega who directly or indirectly influence the financial system in the county. The sample size of this study was determined by Taro Yamane's proportional sampling technique formula. 88 respondents were used in this study as sample size. Primary data was

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collected from respondents directly using self-administered structured questionnaires (closed ended questions). For modeling the relationship between the dependent variable and Independent variables, the following multiple regression equation was applied;

$$Y=\alpha + \beta_1X_1 + \beta_2X_2+\beta_3X_3+\beta_4X_4+\varepsilon$$

Where **γ**= Dependent variable [effective financial service in Kakamega county government]

α=Constant; the y intercept or the average response when both predictor variables are 0

X_1= Independent variable 1 [e-budgeting]

X_2= Independent variable 2 [e-procurement]

X_3= Independent variable 3 [e-system audit]

X_4= Independent variable 4 [e-system security]

ε= error term

$\beta_{1....}$ B_4 = Beta Coefficients

RESULTS

E-budgeting

This assessed descriptive responses on whether electronic budgeting influences effective financial service delivery in the county government of Kakamega as summarized in table 1.

Table 1 : Descriptive statistics: E-Budgeting

Statement	5	4	3	2	1	mean	Std. Dev
There is electronic Budget information generation &dispersion	8(9.6)	44(53.1)	10(12.0)	13(15.7)	8(9.6)	3.37	0.855
Theres effective electronic Budget allocations and Budget reviews	11(13.3)	46(55.4)	9(10.8)	11(13.3)	6(7.2)	3.54	0.808
IFMIS has effectively supported county budgeting process	9(10.8)	45(54.3)	10(12.0)	10(12.0)	9(10.8)	3.42	0.870
IFMIS account ledgers easily point to the Generals Ledgers (GL) for ease of periodic accounts consolidation of county budget	12(14.5)	48(57.9)	6(7.2)	10(12.0)	7(8.4)	3.58	0.838
Exchequer budget releases of funds are based on IFMIS	8(9.6)	41(49.5)	10(12.0)	17(20.5)	7(8.4)	3.31	0.857
Generally, electronic budgeting influences effective financial service delivery	12(14.5)	45(54.2)	11(13.3)	10(12.0)	5(6.0)	3.59	0.871
Valid listwise 83							
Grand mean = 3.47							

From Table 1, 53.1% of the respondents agreed and 9.6% strongly agreed that there exists electronic Budget information generation and dispersion, implying that the county government of Kakamega has embraced electronic budgeting system. Further, Thirteen point three percent (13.3%) and 54.3% strongly agreed and agreed respectively, that effective electronic budget allocations and budget reviews were done. This indicates that use of electronic means to generate and disperse budget information; allocate and review budgets improves efficiency in financial service delivery.

Further, 54.3% of the respondents agreed and 10.8% strongly agreed that IFMIS has effectively supported County budgeting process, meaning that the county government of Kakamega has adopted and appreciates the efficacy of IFMIS in making the budgeting process cost effective**.** Additionally, 14.5% and 57.9% strongly agreed and agreed respectively that IFMIS account ledgers easily point to the Generals Ledgers (GL) for ease of periodic accounts consolidation of county budget**.** Moreover 49.5% agreed and 9.6% strongly agreed that exchequer budget releases of funds are based on IFMIS, thus points out the importance of IFMIS in

improvement of financial management in the county government of Kakamega.

On overall, most respondents agreed (54.2%) and strongly agreed (14.5%) that generally, electronic budgeting influences effective financial service delivery. The grand mean is 3.47 rounded off to 4 which is 4 on the Likert scale of measurement, implying that most respondents were of the opinion that electronic budgeting influences effective t financial service delivery in Kakamega county government. This is supported by GoK (2017) that reported that IFMIS improve budget planning and effecting by giving appropriate and precise information for budget management and judgment. IFMIS also enables the formulation of a standardized and practical budget across government at the same time enhancing better management over budget implementation fully integrating budget completion data. Further, IFMIS enables devolution of financial processes and functions that are controlled by Ministry of Finance thereby enhancing financial restraint and control of working costs by minimizing managerial responsibilities and the junior staff workload.

E-procurement

This assessed descriptive responses on whether electronic procurement influences effective financial service delivery in the county government of Kakamega as summarized in table 2.

Table 2 : Descriptive statistics: E-Procurement

Statement	5	4	3	2	1	mean	Std. Dev
There are automated procurement and disposal process	5(6.0)	43(51.8)	11(13.3)	14(16.9)	10(12.0)	3.47	0.872
All procurement payment approvals are captured in IFMIS	8(9.6)	41(49.5)	10(12.0)	15(18.1)	9(10.8)	3.29	0.995
IFMIS has robust support towards procurement of most county items	7(8.4)	37(44.5)	12(14.5)	16(19.3)	11(13.3)	3.16	0.825
LPOs and Invoices are electronically captured onto the IFMIS system	10(12.0)	44(53.1)	9(10.8)	12(14.5)	8(9.6)	3.43	0.971
E-receipting improves financial accountability & revenue collection	12(14.5)	45(54.2)	6(7.2)	13(15.7)	7(8.4)	3.59	0.973
Generally, e-procurement has led to effective financial service delivery in the county government	8(9.6)	48(57.9)	5(6.0)	14(16.9)	8(9.6)	3.41	0.869
Valid listwise 83							
Grand mean = 3.39							

Table 2 summarized the descriptive statistics on E-procurement. Most of the respondents 51.8% and 6% agreed and strongly agreed respectively that there was automated procurement and disposal process. This implied that automated procurement and disposal process had been adopted by the county government as a cost effective measure to improve financial service delivery. Further, 49.5% agreed and 9.6% strongly agreed respectively that procurement payment approvals were captured in

IFMIS. This meant that financial loopholes emanating from use of manual procurement payment approvals had been sealed by use of electronic procurements.

Most respondents also agreed (44.5%) and strongly agreed (8.4%) that IFMIS had a robust support to the procurement process, implying that IFMIS really fast tracks a transparent procurement process.

Further, the respondents also agreed (53.1%) and strongly agreed (12.0%) that LPOs and invoices are captured in the IFMIS system. E-receipting was also seen to improve financial accountability and revenue collection since 54.2% agreed and 14.5% strongly agreed to the statement. This implied that e-receipting had a strong positive effect on boosting revenue collections. These results indicated that e-procurement embedded in the IFMIS system has a positive influence on financial management of Counties.

On overall, most respondents agreed (57.9%) and strongly agreed (9.6%) that generally, e-procurement had led to efficient financial service delivery in the county government. This generally indicates that e- procurement embedded in the IFMIS system has a positive influence on financial management of Counties. The results were supported by Matheri (2016) who commended on the need for financial reforms because they lead to bribery elimination as well as elimination of inappropriate expenditure. In this regard, for the last ten years, the Kenyan government had spearheaded improvements in public management systems aimed at bringing transparency, accountability and efficiency in public finance management. The main focus of the systems has been on various processes such as procurement which was seen as the major avenue for financial mismanagement (GoK, 2017).

E-system audit

This assessed descriptive responses on whether electronic system audit influences effective financial service delivery in the county government of Kakamega as summarized in table 3.

Table 3 : Descriptive statistics: E-system Audit

Statement	5	4	3	2	1	mean	Std Dev
There is adoption and effective use of electronic audit systems	10(12.0)	42(50.7)	8(9.6)	14(16.9)	9(10.8)	3.39	0.916
IFMIS has great capabilities of ensuring audit trails remaining intact for a considerable period	11(13.3)	41(49.3)	12(14.5)	11(13.3)	8(9.6)	3.43	0.871
There is effective internal and external monitoring of all financial transactions	9(10.8)	42(50.7)	10(12.0)	13(15.7)	9(10.8)	3.48	0.894
All financial accounting information complies with audit standards	8(9.6)	39(47.0)	12(14.5)	18(21.7)	6(7.2)	3.52	0.834
There are forensic audits of the IFMIS to guarantee effectiveness and efficiency	7(8.4)	41(49.4)	16(19.3)	11(13.3)	8(9.6)	3.44	0.918
Generally, e-system audit has led to effective financial service delivery in the county government	11(13.3)	40(48.2)	13(15.7)	9(10.8)	10(12.0)	3.61	0.909
Valid listwise 83							
Grand mean = 3.48							

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Table 3 showed respondents' perceptions of E-system Audit. Most of the respondents agreed (50.7%) and strongly agreed (12%) that electronic audit system was adopted and effectively used, implying that electronic audit system had been adopted and was being used in the county government. Further, they (49.3%) also agreed that IFMIS had great capabilities of ensuring audit trails remaining intact for a considerable period, implying that electronic audit trails can assist trace fraud incidences in the county financial system, thus assist to deter fraud occurrences.

Additionally, 50.7% and 10.8% of respondents agreed and strongly agreed respectively that there existed effective internal and external monitoring of all financial transactions. This implies that adoption of IFMIS has improved external and internal monitoring of all county government financial transactions which help deter financial misappropriation.

Regarding audit standards 47.0% agreed and 9.6% of respondents agreed and strongly agreed respectively that all financial accounting information complies with audit standards, while 49.4% and 8.4% of respondents agreed and strongly agreed that forensic audits were necessary for assurance of efficiency. This shows that compliance with audit standards plus use of forensic audits can boost financial management in the county government which definitely improves financial service delivery.

On overall, most respondents agreed (48.2%) and strongly agreed (13.3%) that generally, e-system audit has led to efficient financial service delivery in the county government. The grand mean is 3.48 rounded off to 4 which is 4 on the Likert scale of measurement, implying that most respondents were of the opinion that electronic system audit has led to efficient financial service delivery in the county government. This implies that electronic system audit is viewed as an approach of improving efficiency in financial service delivery in the county governments. This is supported by Transparency International (2014) assertion that County governments of Kenya have been troubled on the tireless poor presentation in financial supervision due to absence of dependable and immediate information for decision building. Majority of the population measured performance of their County Governments based on; Success for effective and efficient use of County revenue on development projects including infrastructure, health, education, trade and corporate social responsibility, without knowing IFMIS audit platform provides better financial reports of County financial allocations and expenditure.

E-system security

This assessed descriptive responses on whether electronic system security influences effective financial service delivery in the county government of Kakamega as summarized in table 4.

Table 4 : Descriptive statistics: E-System Security

Statement	5	4	3	2	1	mean	Std Dev
The IFMIS platform is secure and upgraded frequently	9(10.8)	53(64.0)	4(4.8)	9(10.8)	8(9.6)	3.55	0.829
There is real-time data/ information security & confidentiality	12(14.5)	48(57.9)	7(8.4)	9(10.8)	7(8.4)	3.59	0.927
The system is not prone to hacking	16(19.3)	47(56.7)	5(6.0)	10(12.0)	5(6.0)	3.71	0.899
The IFMIS is highly reliable to	15(18.1)	48(57.8)	4(4.8)	11(13.3)	5(6.0)	3.69	0.924

manage the accounts payable and account receivables							
IFMIS has in build controls at each level to ensure strict authorization of county expenditure	5(6.0)	37(44.6)	18(21.7)	16(19.3)	7(8.4)	3.20	0.891
6. Generally, e-system security has led to effective financial service delivery in the county government.	14(16.9)	40(48.2)	8(9.6)	15(18.1)	6(7.2)	3.49	0.883
Valid listwise 83							
Grand mean = 3.54							

Table 4 displays responses regarding E-system security in relation to financial management effectiveness. First, 64.0% and 10.8% of respondents agreed and strongly agreed respectively that IFMIS platform is secure and upgraded frequently, implying that the county government has adopted a secure IFMIS platform that is regularly upgraded. Further, 57.9% agreed and 14.5% strongly agreed that IFMIS had real-time data or information security and confidentiality, implying that there was data security that can be exposed to unauthorized access.

Further most of the respondents agreed (56.7%) and (19.3%) strongly agreed respectively that the system was not prone to hacking and was highly reliable. This still reinforces the idea of system security that is not open to external or even internal unauthorized access which can comprise the security and privacy of the county government financial data or information.

Additionally, 57.8% and 18.1% of respondents agreed and strongly agreed that the IFMIS was highly reliable to manage the accounts payable and account receivables. This implied that the county electronic financial system had a strong data base to run all accounts payables and receivables without frequent system hanging in case of data overloads.

Furthermore, majority agreed (44.6%) and strongly agreed (6.0%) that there exists in build controls at each level in IFMIS to ensure strict authorization of county expenditure. This indicated that the respondents had confidence in IFMIS as a secure financial management strategy.

On overall, most respondents agreed (48.2%) and strongly agreed (16.9%) that generally, electronic system security had led to efficient financial service delivery in the county government. The grand mean was 3.54 rounded off to 4 which was 4 on the Likert scale of measurement, implying that most respondents were of the opinion that electronic system security has led to efficient financial service delivery in the county government of Kakamega. This was supported by Diamond and Khemani (2005) assertion that the benefits of the IFMIS are extensive particularly in the reinstatement of expenditure control and enhanced secure stages of accountability and transparency. The Commitment secure control system helps in curbing overspending and a considerable decline in household debts thus improving the financial performance in the public sector.

Inferential statistics

First the assumptions of multiple regression analysis were checked and met as explained in the following sub-heading.

Multiple Regression Analysis

Multicollinearity was checked using correlations between all pairs of independent variables (e-budgeting, e-procurement, e-system audit, e-system security). Most scholars assert that if correlation coefficient, (r) is close to 1 or -1, then there is multicollinearity but if correlation

coefficient (r) is not above 0.9, then there is no multicollinearity. In this study (table 5 on correlation analysis), the highest correlation coefficient between all pairs of the study's independent variables (e-budgeting, e-procurement, e-system audit, e-system security) is 0.777, which is below the threshold of 0.9, thus multicollinearity assumption was checked and met.

Table 5: Correlations

		E-Budgeting	E-Procurement	E-System Audit	E-System Security	Financial Service Delivery
E-Budgeting	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	83				
E-Procurement	Pearson Correlation	.589**	1			
	Sig. (2-tailed)	.000				
	N	83	83			
E-System Audit	Pearson Correlation	.639**	.623**	1		
	Sig. (2-tailed)	.000	.000			
	N	83	83	83		
E-System Security	Pearson Correlation	.618**	.569**	.552**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	83	83	83	83	
Financial Service Delivery	Pearson Correlation	.771**	.777**	.775**	.757**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	83	83	83	83	83

**. Correlation is significant at the 0.01 level (2-tailed).

Multiple regression analysis

Linear regression analyses showing both the F values and the corresponding significant values revealed that the study's independent variables (e-budgeting, e-procurement, e-system audit, e-system security) were indeed different from each other and that they affected the dependent variable (effective financial service delivery in the county government of Kakamega) in a different manner, hence, the possibility of running multiple regression. The mandatory model assumptions for running multiple regression analysis were also checked and met. The results were shown in table 6.

Table 6: Multiple regression analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.778[a]	.605	.585	.66002	.605	29.895	4	78	.000

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.093	4	13.023	29.895	.000[b]
	Residual	33.979	78	.436		
	Total	86.072	82			

a. Depen dent Variable: Effective Financial Service Delivery

b. Predictors: (Constant), E-System Security, E-Procurement, E-System Audit, E-Budgeting

Table 6 showed the multiple regression results of the combined effects of the study's independent variables (e-budgeting, e-procurement, e-system audit, e-system security). The multiple regression

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results showed the F statistics is significant (F = 29.895; significant at *p<.001*), thus confirming the fitness of the model. An R^2 of 0.605 shows that the study explains 60.5% of variation in effective financial service delivery in the county government of Kakamega, while other factors not in this study model accounts for 39.5%, hence, it is a good study model.

Further, from the values of unstandardized regression coefficients with standard errors in parenthesis in table 7, all the independent variables (e-budgeting; β = 0.880 (0.080) at *p<0.01*; e-procurement; β = 0.620 (0.245) at *p<0.05;* e-system audit; β = 0.850 (0.404) at *p<0.05,* e-system security; β = 0.591 (0.247) at *p<0.05,* significantly predicted effective financial service delivery in the county government of Kakamega (dependent variable).

Table 7: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.404	.237		5.919	.000
	E-Budgeting	.880	.080	.987	11.060	.000
	E-Procurement	.620	.245	.722	2.537	.013
	E-System Audit	.850	.404	.963	2.105	.038
	E-System Security	.591	.247	.688	2.390	.019

a. Dependent Variable: Effective financial service delivery

Hypotheses testing

Study **hypothesis one** stated that there is no significant relationship between e-budgeting and effective financial service delivery in the county government of Kakamega. The multiple regression analysis indicated that there exist a positive and significant effect of e-budgeting on the effective financial service delivery in the county government of Kakamega, (β= 0.880 (0.080); *at p<.01*). Hypothesis one was thus rejected. This implied that a single increase in effective e-budgeting will yield 0.880 unit improvement in the effective financial service delivery in the county government of Kakamega. The results are supported by Kasumba (2009) who found that IFMIS gives a stage to a superior budgeting, recording and handling of government money related exchanges. This permits quick and productive access to solid money related insights at whatever point required. Further to this, it bolsters upgraded straightforwardness and responsibility of the official to parliament, the overall population, and other outer offices. Moreover, IFMIS assumes a noteworthy part in fortifying money related budget controls and in addition encouraging a full and overhauled picture of duties and consumption on a consistent premise.

Study hypothesis two stated that there is no significant relationship between e-procurement and effective financial service delivery in the county government of Kakamega. The multiple regression analysis indicates that there exist a positive and significant effect of e-procurement on the effective financial service delivery in the county government of Kakamega, (β= 0.620 (0.245); *at p<.05*). Hypothesis two was thus rejected. This implied that a single increase in transparent e-procurement system will yield 0.620 unit improvement in the effective financial service delivery in the county government of Kakamega. The results are supported by Lundu (2010) who studied the effect of IFMIS implementation on supply chain performance with a focus on the County government of Nairobi. Using a descriptive research design, the study focused on employees in the ICT, procurement and finance sections. Primary data was collected and analyzed using correlations. The effect of IFMIS on supply chain performance was

found to enable cost saving, effectiveness, efficiency and an improvement in quality sourcing.

Study hypothesis three stated that there is no significant relationship between e-system audit and effective financial service delivery in the county government of Kakamega. The multiple regression analysis indicates that there exist a positive and significant effect of e-system auditt on the effective financial service delivery in the county government of Kakamega, (β= 0.850 (0.404); *at p<.05*). Hypothesis three was thus rejected. This implies that a single increase in transparent e-system audits will yield 0.850 unit improvement in the effective financial service delivery in the county government of Kakamega. The results are supported by Transparency International (2014) assertion that County governments of Kenya have been troubled on the tireless poor presentation in financial supervision due to absence of dependable and immediate information for decision building. Majority of the population measured performance of their County Governments based on; Success for effective and efficient use of County revenue on development projects including infrastructure, health, education, trade and corporate social responsibility, without knowing IFMIS audit platform provides better audit reports of County financial allocations and expenditure.

Lastly, study hypothesis four stated that there is no significant relationship between e-system security and effective financial service delivery in the county government of Kakamega. The multiple regression analysis indicated that there exist a positive and significant effect of e-system security on the efficient financial service delivery in the county government of Kakamega, (β= 0.591 (0.247); *at p<.05*). Hypothesis four was thus rejected. This implies that a single increase in effective e-system security will yield 0.247 unit improvement in the effective financial service delivery in the county government of Kakamega. The results are supported by Hendricks (2012) who found that accountability can be enhanced when the IFMIS system is used securely. Through that, there is usefulness and improvement in the efficiency of public payments. The system also brings about accountability mainly through secure tracking of financial activities as well as controlling expenditure.

CONCLUSIONS

The study concluded that first; use of e-budgeting is an effective way of checking deviations from county budgetary allocations which eventually enhances efficient financial service delivery in the county governments.

Secondly, embracing of e-procurement system checks anomalies arising from manual procurement process in county governments thus significantly influences efficient financial service delivery in the county governments.

Thirdly, transparent and effective e-system audits using IFMIS platform significantly assists in tracing suspicious fraudulent financial transactions in county government expenditures thus significantly improves effective financial service delivery in the county governments.

Lastly, e-system security plays a vital role in checking against internal and external financial system manipulations which then boosts effective financial service delivery in the county governments.

RECOMMENDATIONS

First, the study recommended that county governments should embrace e-budgeting that is supported by the IFMIS platform so as to reduce costs associated with manual budgeting process.

Secondly, county governments should enforce use of e-procurement system to reduce costs and financial misappropriations associated with manual procurement process, thus eventually improve efficient financial service delivery in the county governments.

Thirdly, county governments should embrace use of e-system audits with forensic financial audit experts so as to tame fraudulent financial

misappropriations and improve efficient financial service delivery in the county governments.

Lastly, county governments should timely upgrade electronic system security as provided on the IFMIS platform so as to ensure real time financial data security free from internal or external manipulations.

Areas for further research

First, another study can be done on implementation of forensic audits in county government so as to assess their efficiency in checking public financial expenditures.

Secondly, another study can be done on IFMIS risk management in relation to county government public financial expenditures.

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