

Integrated Financial Management Information System and Financial Performance in Trans Nzoia County, Kenya

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ABSTRACT

Public Finance Management Systems are generally used in the management of finance in the public sector. Although government is not necessarily a profit-making enterprise, sound financial performance is crucial to ensure the right services are rendered to the citizens as is required. Contextual investigations of progressively effective nations demonstrate that variables supporting fruitful execution of financial performance goals emanate from the significant specialists to budgetary change goals. The general objectives of this study was to assess the impact of integrated financial management information system implementation on financial performance in Trans Nzoia county, Kenya The specific objectives were; to establish the effect of IFMIS implementation on financial performance in Trans Nzoia County, to examine the benefits realised from IFMIS implementation on financial performance in Trans Nzoia County, to determine the challenges faced in the IFMIS implementation on financial performance in Trans Nzoia County and to investigate the level of awareness and satisfaction of the public about the IFMIS Implementation on financial performance in Trans Nzoia County. The study is anchored on technology acceptance Model, theory of budgeting and cost reduction theory. Data was examined by descriptive statistics such as mean, mode and median. The study also used inferential statistics such as regression and Pearson's correlation coefficient. The results were statistically presented in forms of frequency distribution tables, charts and bar graphs. The SPSS (version 17) computer software was employed for analyzing data. The study found IFMIS to a great extent, is applied in Trans Nzoia County and there is huge enhancement for duty control and decreased change between spending arrangement and discharges. The greater part of the destinations of IFMIS have been accomplished including upgrading straightforwardness and responsibility, improving public use the executives, encouraging monetary control and limiting dangers. It was uncovered that, through IFMIS, Trans Nzoia County has had the option to build up useful institutional courses of action, create legitimate and administrative system, guarantee rivalry in offering and bolster inward control and responsibility control. The study concluded that there is in this way need to have limit assembling and improved terms of administration for public officials. The utilization of universal measures and strategies in macroeconomic examination, planning, bookkeeping, obtainment, and review requires talented staff that can apply new techniques in proficient way. Presentation of IFMIS and other mechanized framework requires explicit aptitudes and preparing for public officials.

Key Words: *Integrated Financial Management Information, Financial Management Automation, Public Sector Finance*

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1.0 Introduction

IFMIS is a system that accounts for budgetary events and outlines cash related information (Bartel, 2009). Fundamentally, IFMIS is insignificantly improved when compared to an accounting system; intended to fill in as showed by the necessities and points of interest of nature in which it is presented. Casals (2009) observes that generally, the articulation "IFMIS" insinuates the usage of information and exchanges development in cash related exercises to support the board and spending decisions, trustee obligations, and the game plan of budgetary reports and decrees. In the organization area, IFMIS implies even more expressly to the modernization of the public budgetary organization (PFM) structures, from spending availability and implementation to accounts and disclosure, with the help of a consolidated process for fiscal organization of supervisors, consuming workplaces and other communal fragment undertakings. Notwithstanding the convenience, dependability, security, adaptability of IFMIS that is intended to give opportune, exact, and steady information for spending dynamic, it has likewise been addressed by clients who note that while IFMIS has been viewed as vital, it has shortcomings that should be tended to (Bartel, 2010). Ongoing writing on IFMIS has tended to different parts of IFMIS structure, systems advancement, execution and supportability Casals, (2009); Bartel, (2009); Miranda and Keefe, (2010) however no investigation has been adequately done on the effect it has PFM on regressed units of government.

Government of Kenya has embraced various Public Financial Management (PFM) changes planned for improving responsibility and straightforwardness. These changes have focused on the centre PFM systems of spending detailing and execution, public obtainment, income assortment, interior and outside review, parliamentary oversight, finance and benefits, public obligation and ensures, bookkeeping and revealing, the large-scale financial structure and money the board. The aim is to reinforce PFM systems by improving straightforwardness, responsibility and reactivity to public use strategy needs. The PFM change is additionally useful in avoiding inefficient expenditures and debasement. Different examinations presented optimistic outcomes and better presentation by the communal monetary systems, in spite of the fact that difficulties despite everything stay in key territories of the economy. The robotization of PFM forms has been one of the changes attempted by the Government of Kenya (GOK). The presentation of the Integrated Financial Management Information System (IFMIS) has been started on the acknowledgment that GOK can adequately use current and developing innovation to fasten changes in PFM, (GOK, 2011).

As indicated by Diamond and Poker (2011), IFMIS is a robotized framework that is utilized for PFM in charge, bookkeeping, review and announcing. IFMIS is an information system that monetary transactions and sums up monetary information. As indicated by IPSOS Synovate Kenya (2013), IFMIS is a monetary and budgetary administration data framework for governments that bundles all cash related organization limits into one set-up of usages. In direct terms, it is a Data System employing Information Technology to organize and account for facts and figures. It is proposed to help the organization components to structure budgetary arrangement, requests, spend their monetary plans, supervise and report on their cash related activities, and pass on organizations to the public even more gainfully, enough, fiscally and accountably. In previous years, most developing countries benefits realized from IFMISs and accounting processes have been either manual or upheld by extremely old and insufficiently kept up programming applications. This has affected the working of the public use of executive systems. It's additionally noticed that legislatures both national and region have thought that it was hard to give a precise, complete and

straightforward record of their budgetary situation to parliament (national and province gathering), other intrigued accomplices such as development partners, or the public. Due to lack of this information, transparency and accountability has been a mirage. The result has been witnessed in political upheavals, economic disparity amongst the populace, widening gap between the haves and have not, economic and human resource flight and many others. Cash management in the public sector has been recorded to be an area of great improvement (Ajayi & Omirin, 2009)

IFMIS as a financial management system has been implemented and tried in a number of countries across the globe where some challenges myriad with success have been recorded. The challenges differed in between countries depending to some extent, on the uniqueness of each situation. A cross the continent where IFMIS have been implemented includes and not limited to Kosovo, Iraq, Vietnam etc. Within the continent, countries include: Malawi, Uganda, Tanzania, Ghana, South Africa etc. Greater heights of achievement have been documented in the terms of prudent financial management in terms of organization of costs, its allocation, cost management and reporting. In light of this, the Government of Kenya, embarked on IFMIS and IFMIS has been at the centre of this. More so, it's been a prerequisite from the Constitutional dispensation of the 2010 under Chapter Four-the Bill of Rights, the citizens know constitutional rights especially under sec 43 on Economic and Social Rights, Chapter Twelve-Public Finance; and the legislation of Public Finance Management (PFM) Act 2012. IFMIS can empower fast and productive access to dependable budgetary information and help reinforce government's money related controls, improving the arrangement of taxpayer driven organizations, improving the spending procedure to more significant levels of straightforwardness and responsibility, and facilitating government activities (GOK, 2011; Peterson et al., 2010). Different difficulties have been seen in the use of the framework, with clients having issues with the adaptability, unwavering quality and certain security and hard highlights of the framework. Considering this, the exploration attempts to examine the effect IFMIS execution has made at the province level.

Trans Nzoia County is situated on the West of Mount Elgon at around 380km north west of Nairobi. It covers 2495.5 square kilometres constituting of five constituencies namely; Kwanza, Kiminini, Cherangany, Endebess and Saboti. The inhabitants are 818757 people according to the 2009 census. The main source of living is agriculture with most farms opting for maize farming. Other sources of income come from dairy and horticulture. The largest town in Trans Nzoia county is Kitale; situated between Mt. Elgon and Cherangany Hills. It is also the administrative capital of the county and the last stop of the rail line. It has since shown economic prospects in commerce, real estate and agri-business which might be resulting from the railway line promoting movement of goods to and from the town. The county also gives promotion to tourism given its striking areas of interest; national parks like Mount Elgon and Saiwa Swamp. Mt. Elgon National Park is located close to Kitale and hosts varied wild animals including: elephants, buffalos, white columbus monkeys, giant forest hog and over 420 bird species.

1.1 Statement of the Problem

The goal of IFMIS is in creating an 'exceptionally safe, dependable, efficient and fully integrated financial management network' first launched in 1997 in Kenya on limited modules. For many decades, PFM has been synonymous to lack of clarity, accountability and receptiveness of public resource. This has been symptomatic through wasteful spending and corruption, ineffective financial management systems, inappropriate accounting, recording and reporting of financial data, slowed pace of economic growth, inefficient resource allocation mechanisms and mistrusts

from the developmental partners and the public. Inadequate technology, lack of human resource capacity and institutional resistance to change were cited to be major challenges faced in Latin America (Bartel, 2013). It was against this backdrop of challenges that the study aimed to investigate the impacts of the implementation of (IFMIS) on PFM practice in the Kenyan Devolved Government. The research tried to discover; the impact of implementing IFMIS on public financial management practice in county governments, with closer focus on Trans Nzoia County Government. In this study, a focus on the county governments' implementation impact of IFMIS on PFM was conducted to ascertain the gains realised so far and discern the challenges faced or being faced in the implementation that will call for the further re-engineering for higher benefits.

1.2 Objectives of the Study

The overall objective is to establish the effect of integrated financial management information system implementation on financial performance in Trans Nzoia County, Kenya.

The specific objectives are:

- i) To establish the effect of IFMIS implementation on financial performance in Trans Nzoia County.
- ii) To examine the benefits realised from IFMIS implementation on financial performance in Trans Nzoia County.
- iii) To determine the challenges faced in the IFMIS implementation on financial performance in Trans Nzoia County.
- iv) To investigate the level of awareness and satisfaction of the public about the IFMIS Implementation on financial performance in Trans Nzoia County.

2.0 Literature Review

2.1 Theoretical literature review

This research relied on technology acceptance model, theory of budgeting and cost reduction theory. Technology Acceptance Model (TAM) was initially formed by Fred Davis in 1986; the theory centers on functionality and ease as a determinant of intent of system application. It conceptualizes intent as the stimulant to incorporating an actual system. The simplification of tasks within an organization would be enough intent to adopt a proposed system. The author enumerates that; only if technology is accepted as a tool to simplifying tasks can it be successful at producing significant change, (David, 1989). A reproduction of Davis Adam's study was analysed by Segars and Grover (1993), who criticized the applied model and proposed a new form based on three factors; usefulness of system, effectiveness and its ease of use. They both considered functionality and perceived performance as paramount to using new technology. The technology acceptance model is therefore a relevant model when it comes to considering the adoption of technology for improving the performance of a firm. Furthermore, it is rooted on the basis of simplifying organizational tasks, ensuring effectiveness of performance and speed.

Theory of budgeting is one of the fundamental undertakings to apply the rule of minor utility in a 'theory of arranging' was made by Verne Lewis. Lewis fights that specialists should focus on increases of public utilization, at the edge, since 'this is the motivation behind equality at which an additional utilization or any explanation would yield a comparative return'. Lewis (1952) fights that the general estimation of these increases would then have the option to be assessed similarly as their 'relative amplexness in achieving an ordinary objective'. It is the task of administrators to

choose this ordinary objective and review the general suitability of elective employments of public use in achieving this target. Budgeters can help pioneers by presenting elective proposals at various degrees of utilization for each program. Consequently, the tradeoffs between elective employments of additional financing can be revealed. Lewis battles that the possibility of 'relative sufficiency's regarding a 'run of the mill objective' feasibly dodges the issue presented by the nonattendance of a commonplace extent of utility. The complexity among normalizing and illustrative spending theory may be as fundamental as the differentiation between what should work and what works. It has been jumbled in our field by the qualification in perspectives that infrequently depict scholastics and specialists. Controlling speculation is typically associated with reformers, and reformers generally begin from the procedure or insightful system. It may be founded on confined observations and guided by values. Realistic theory is typically founded on various recognitions, as often as possible through investigations, and guided by impression of masters as they approach the movement of choosing spending decisions (Cox and Morgan, 1994). There have been times while normalizing and particular speculation joined.

Cost Reduction Theory was initially formed by Miller (1986), it considers cost reduction as an effort to reduce costs in all measure. Various examples of reducing costs include; online delivery of services, regulations, restrictions, and changes focused on cutting down costs, (Miller, 1986). As per the theory, any item generating cost is scrutinized to identify opportunities for lowering its cost. Beyond this, the theory expresses that cost is an attitude and a habit cropped out of the need for it. According to Juhakam (2003), cost reduction theory shapes financial innovation. This theory is important to this research given it fosters cost reduction as an element of improving profitability; because firms naturally search for modes of boosting performance and offering return on equity to stakeholders.

2.2 Empirical literature review

This segment analyses numerous writings from scholars related to the topic of study. Nyabuto (2009) completed review on the Extent of Implementation of IFMIS as a Tool for SFM in Government. Utilizing a survey, 40 bookkeepers in 40 MDA were engaged with the examination and information was investigated utilizing fundamental examination strategies that included rates and frequencies. Through the distinct study, it was set up that IFMIS usage was bogged down. This was because of obstruction from utilization of IFMIS in those MDA and henceforth for selection to happen easily, the prominent opposition must be survived. Potential purposes behind opposition included absence of preparing and dread of the obscure. Regardless of the opposition, it was discovered that IFMIS had succeeded however still execution was bogged down. Thusly the legislature of Kenya has enormously profited by the benefits of a modernized bookkeeping framework which is more solid than the previous independent heritage systems.

Peterson (2011) embraced an examination on Reforming Public Management in Africa. It's placed that changes succeed when four drivers of public part change: COPS—Context, Ownership, Purpose and Strategy. The motivation behind PFM change as excellent by Ethiopia, should fabricate steady and supportable condition of PFM that are fitting to the nearby setting and they ought not be about dangerous and unessential 'culminations' of universal best practice. Methodology of change has four procedures: perceive, improve, change and continue. Ethiopia prevailing on changes for applying this technique on the side of government strategy of quick decentralization. Spriano (2013) did an examination on the victories and disappointments of e-Government ventures in Developing Countries: a contextual analysis of Zambia. In this

investigation, utilizing Heeks Factor Model that centers around delicate human perspectives known to be basic in the usage of e-Government extends, an online overview was done in 2012. The aftereffects of the investigation prosecuted a class total of 55.1 dependent on Heeks 100 point scale inferring a strong flop absolutely or mostly. Moreover, consciousness of the e-government ventures was seen as lacking.

Musee (2011) did an exploration on factors influencing powerful usage of IFMIS in government services in Kenya and he set that 86% of the staff responsible for IFMIS in all services of government were guys with 73% of clients being built up that they opposed change and undermined the framework to more prominent degree. The examination was done in 42 services with 32 respondents having been included. Staff obstruction was set to result from various reasons named as perspectives. The investigation showed that absence of satisfactory information from clients ($F=5.638$, $p<.05$), rushed usage of the framework ($F=.304$, $p=.041$), Impairment from upper and specialized administration ($F=9.851$, $p=.001$) and uninvolved opposition ($F=18.298$, $p=.000$) had huge effect on the powerful utilization of the IFMIS ($F=4.735$, $p=.017$). Top administration bolster was seen as basic for effective execution of the IFMIS. Responsibility by top administration had huge impact on IFMIS as per listed outcomes ($F=1.423$, $p.05$) their absence of duty ($F=.917$, $p=.042$) and absence of appropriate comprehension of IFMIS with respect to staff ($F=.052$, $p=.021$).

An examination on the viable Implementation of Technology Innovations in Higher Education Institutions was finished by Kandiri (2014) and it concentrated on a study of chosen ventures in African Universities. The examination depended on 26 innovation usage ventures drawn from 7 colleges spread in 6 nations in Sub-Saharan Africa. Utilizing an exploratory investigation, an aggregate of 105 usable reactions were gotten with 53 meetings led. In the examination, the factors were exposed to exploratory factor investigation utilizing head segment strategy and it was discovered that 30% of the activities were fractional fruitful since they met just a portion of the destinations, 55% had techno-political disappointment and 15% total disappointments. The components noted to effect on mechanical execution viability included observing and assessment, top administration and group initiative, budgetary inspiration, hierarchical structure/culture and atmosphere, advancement adequacy. Proposals from the investigation were to oversee innovation move issue, create development receiving nature and absorptive limit in the colleges.

Nixon (2009) did an examination on the e-Government ancient rarity with regards to a Developing nation: Towards a traveling Framework. It was set that the current center is overwhelmed by monetary legitimization; be that as it may, grasping the idea of network systems and other counter systems is of significance just as political defence of e-Government. In the examination, it was noticed that utilization of ICT to upgrade a paternalistic connection among focal and neighbourhood governments must be mooted and improved. This is accomplished as specific implications and jobs of e-government through the technocrats from focal government to accomplish their expert destinations which could be incongruent to the individual plans of political officials who could be muddled of the job of e-government.

2.3 Conceptual Framework

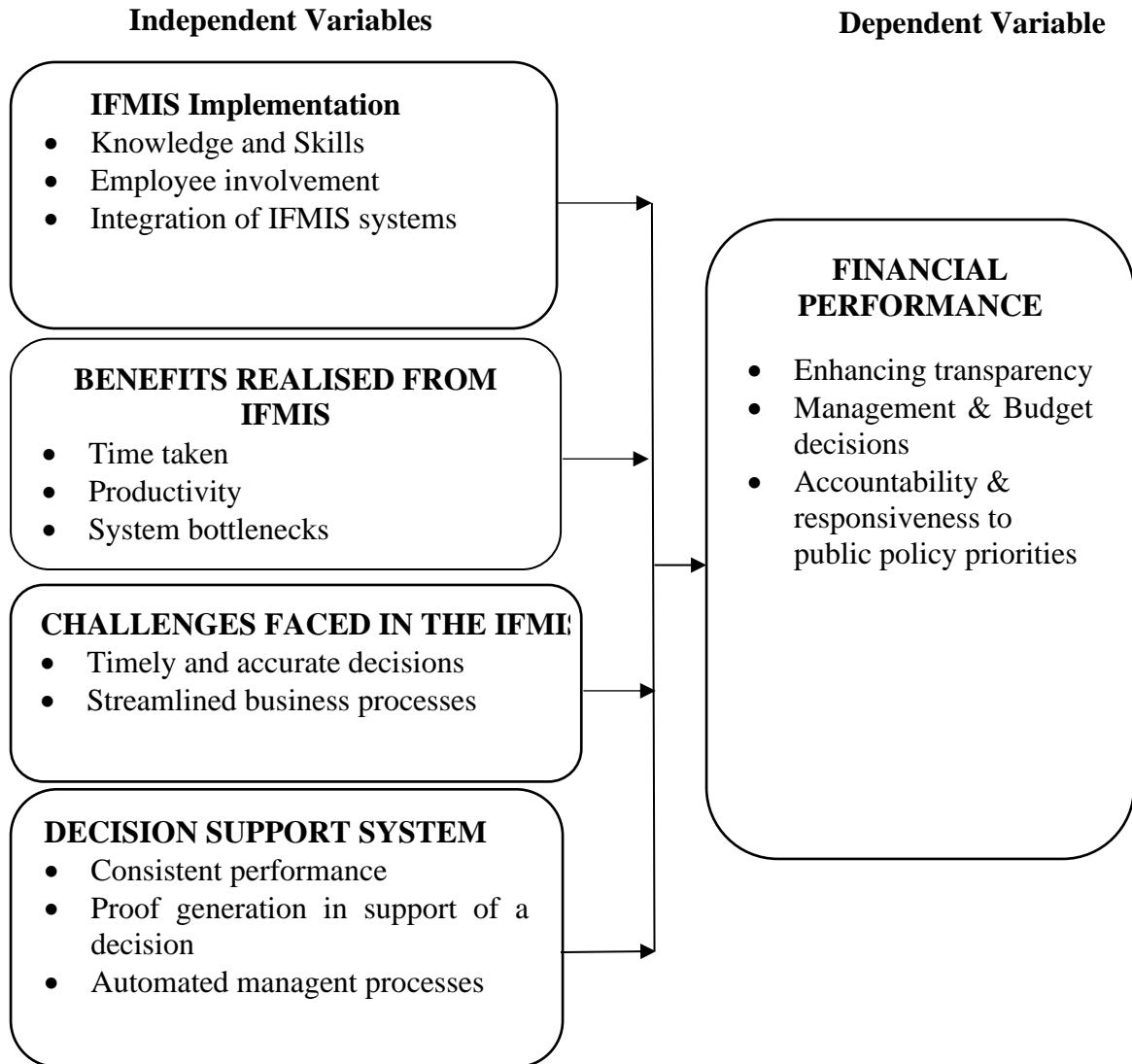


Figure 1: Conceptual Framework

Author, 2021

3.0 Research Methods

The segment highlights methodology used, and procedure in collecting and analysing data in the study. Descriptive study design that indicates the factual and accurate descriptions of findings was applied. The study was carried out at Trans Nzoia County Finance and Treasury department, situated at the County Government Headquarters. The study utilized the management, technical, supervisory and support staff, the stakeholders who included the public (the suppliers/creditors, contractors) and debtors (the revenues paying agencies). Stratified sampling was employed for the exercise. The target population was categorised in managerial, technical, supervisory, support staffs and the stakeholders sub groupings. In this sub groups, then, the target population was divided into groups on the basis of being males or females in the various organisational level or

within the stakeholders' groupings. Random sampling was then applied in the sub groups or each stratum to select the respondents. In this study, Questionnaire, interview schedule and observation forms were used to collect information for the study. Issuing questionnaires is a standard method applied in taking down necessary information from the target group. Quantitative investigation was utilized on information which was gathered through polls. Gathered information was first coded and afterward quantitatively examined by factual data got from the examination questions. The coded information was then classified and introduced for factual examination by computing the rates, means and change on every factor. Information findings were presented statistically set out the interpretations. Information examination was accomplished through utilization of unmistakable and inferential insights so the analyst had the option to portray the connection between factors as well as analyse them appropriately. Multiple regression analysis was applied by the study.

4.0 Data Analysis Results

Regression was done to find the bivariate relationship between independent variables and the IFMIS implementation. This was done by a regression model.

Table 1: Regression Coefficient Matrix

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.40	0.20		1.95	0.05
Adoption of IFMIS	0.21	0.05	0.26	4.19	0.00
Benefits of IFMIS	0.14	0.09	0.16	1.53	0.03
Challenges in IFMIS implementation	-0.23	0.05	-0.28	4.50	0.00
Awareness and satisfaction of public on IFMIS	0.21	0.06	0.24	3.39	0.00

Dependent Variable: IFMIS implementation

Source: Research Data (2020)

Using the details presented in Table 1, the regression model can be constituted as follows: $Y = \beta_0 + \beta_1X_1 + \beta_2 X_2 + \beta_3X_3 + \beta_4X_4 + e$, Where: Y is the financial performance; X_1 is the adoption of IFMIS; X_2 is the benefits of IFMIS; X_3 is the challenges in IFMIS implementation and X_4 is the awareness and satisfaction of public on IFMIS. $\beta_1, \beta_2, \beta_3$ and β_4 are coefficients for adoption of IFMIS; benefits of IFMIS; challenges facing IFMIS as well as awareness and satisfaction of public on IFMIS respectively. Therefore, IFMIS implementation (Y) is constituted as: $Y = 0.40 + 0.26X_1 + 0.16X_2 - 0.28X_3 + 0.24X_4 + e$. At multivariate level, financial performance is 0.40 if all the independent variables (that is adoption of IFMIS; benefits of IFMIS; challenges facing IFMIS and awareness and satisfaction of public on IFMIS were rendered absent. This means that if all the stated independent variables did not, at all, determine the IFMIS implementation' programmes the level of reformation would rate 0.40 points out of 5 points.

Results are also interpreted to mean that, at multivariate level, an increase in one unit of adoption of IFMIS would elevate IFMIS implementation by 0.26 units; an increase in one unit of benefits of IFMIS would elevate financial performance by 0.16 units; and an elevation of one unit of

challenges would decrease financial performance by 0.28 units. In addition, an increase in one unit of awareness and satisfaction of public on IFMIS would contribute to an increase in the demand by 0.24 units.

Table 2: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	13.72	4	3.430	99.39	0.00
Residual	3.675	105	0.035		
Total	17.40	109			

Predictors: (Constant), Challenges, Adoption of IFMIS, Awareness and satisfaction of public on IFMIS, Benefits of IFMIS

Dependent Variable: IFMIS implementation

From Table 2, F-calculated was 99.32 compared to F-critical of 2.29. The criterion is to accept the null hypothesis as stated if f-critical is greater than f-calculated. Consequently, we reject the null hypothesis and adopt alternative hypothesis which infers that there is a significant relationship between all predictors and the IFMIS implementation in Trans Nzoia County since f-critical (2.29) is less than f-calculated (99.32). Approving these results was the significant value of 0.00 giving a confidence level of at least 95%.

Coefficient of determination, also called R-Square (R^2) gives the amount of variance in the dependent variable (performance) which can be predicted from the independent variables. If there are significant outliers, R^2 is adjusted/corrected for errors.

Table 3: Coefficient of Determination

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.866	0.751	0.739	0.204

Predictors: (Constant), Challenges facing IFMIS, Adoption of IFMIS, Awareness and satisfaction of public on IFMIS, Benefits of IFMIS

Table 3 illustrates R^2 of 0.751 which means that for any change in the IFMIS implementation programmes, all the predictors collectively explain up to 0.751 (also stated as 75.1%) of that change. Adjusted R Square was 0.739, a figure close to that of R^2 which indicates that there were no significant outliers in responses for all the variables.

Variable relationship was based on correlation coefficient (with acronymic R). d and is the correlation between the seen and forecasted values of dependent variable.

Table 4: Correlation Matrix

	Financial Performance of Trans Nzoia County	Adoption of IFMIS	Benefits of IFMIS	Challenges facing IFMIS	Awareness and satisfaction of public on IFMIS
Financial Performance of Trans Nzoia County	1.000	0.679	0.665	-0.690	0.715
Adoption of IFMIS	0.679	1.000	0.399	-0.568	0.512
Benefits of IFMIS	0.665	0.399	1.000	-0.407	0.650
Challenges facing IFMIS	-0.690	-0.568	-0.407	1.000	-0.536
Awareness and satisfaction of public on IFMIS	0.715	0.512	0.650	-0.536	1.000

Source: Research Data (2020)

Table 4 shows a correlation coefficient with the lowest correlation being between the benefits of IFMIS and adoption of IFMIS (0.399). All variables positively correlated with each other except for challenges facing IFMIS.

5.0 Conclusions and Recommendations

5.1 Conclusions

In conclusion, IFMIS is largely adopted in Trans Nzoia County and there is large improvement on duty control and decreased difference between spending arrangement and discharges. The vast majority of the targets of IFMIS have been accomplished including upgrading straightforwardness and responsibility, improving public use the board, encouraging monetary control and limiting dangers. It was unveiled that, through IFMIS, Trans Nzoia County has had the option to build up useful institutional courses of action, create legitimate and administrative structure, guarantee rivalry in offering and bolster inside control and responsibility control.

Other largely achieved IFMIS objectives were the allocative efficiency and operational efficiency. From the findings, the correlation was between financial operations and accounting and reporting as well as financial operations and procurement. Objectives related to Integrated Financial Management Information System in Trans Nzoia County have been achieved most (79.12 percent) followed by procurement (75.45 percent) and then accounting and reporting (74.50 percent).

5.2 Recommendations

The following are policy recommendations; It is necessary to construct and upgrade the terms of administration for public officials by applying the universal guidelines and techniques in macroeconomic investigation, planning and bookkeeping. Review requires gifted staff that can apply new strategies in a proficient way. Presentation of IFMIS and other electronic framework requires explicit aptitudes and preparing for public officials. The administration should utilize proficient gracefully fasten officials to deal with the obtainment benefits in public area. This will guarantee that the acquisition is finished by the law and best practices. What's more, work of expert

obtainment officials will guarantee that there is rivalry in offering and government get an incentive for cash in getting, merchandise, administrations and works. The legislature ought to create and improve IFMIS so as to produce exact and opportune money related report for dynamic. This will empower the officials to screen the advantages acknowledged from IFMIS.

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