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Computerized Enterprise Resource Planning Strategy and Revenue Collection: A Government of Kenya Program

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Abstract:

Developing effective ways in revenue collection has been a challenging. It is costly instruments to help businesses work more efficiently affects the way taxes and revenues are collected. Despite the county governments considerable achievements in minimizing customer compliance costs, there is need for the counties to continue enhancing its service levels. The paper investigate computerized enterprise resource planning strategy on revenue collection. It looks in-depth into automation and integrated internal control process on revenue collection. It used descriptive research design. A sample size of 28 senior county officers and 74 support staff from Kericho County Government obtained from target of 30 senior revenue staff and 90 support staff. Questionnaire were used to collect data. Data were analyzed using both descriptive and inferential statistics. The study concluded that through automation, it has come easier to closely monitor the entire performance revenue collection process through proper compliance across the organization. Management has put in place mechanisms for mitigation of critical risks that may result from fraud which is achievable through the use of integrated internal control process. The study recommend that the County government of should allocate adequate resources in adopting effective integrated financial management information system and treat automation as a critical line of development in the revenue collection process.

Keywords: Strategic management, enterprise resource planning strategy, descriptive design, Kericho, Kenya

1. Introduction

Automation of income accumulation framework includes putting resources into present day advancements for instance: ICT keeping in mind the end goal to redesign the income framework to accomplish reconciliation and data sharing to improve proficiency and viability of the framework. All Sectors of the County should set up a compelling and proficient income accumulation framework in checking system that guarantees satisfactory supervision of the planned projects and venture exercises to upgrade responsibility and ingestion of assets Amin, (2013). Mechanization of income accumulation frameworks and structures is instrumental in enhancing and rearranging organization of tax collection through using current innovations for instance ICT.

In the present focused, quick paced business scene, getting the most out of accessible assets is impossible yet rather a need. Associations are adopting an exceptionally proactive strategy to frameworks modernization and operations with an end goal to expand productivity and adequacy in their operations. Framework automation enables firms to computerize new stages of their income gathering frameworks keeping in mind the end goal to receive most extreme rewards (CyberTek, 2012). System modernization provides measureable improvements in the efficiency and effectiveness of development and maintenance activities with on-time delivery and predictable quality (UNCTAD, 2008). This study investigated the effects of computerized ERP strategy on revenue collection in Kericho County.

2. Literature Review

The theoretical review of these paper are contributed by system theory and control theory. It also support by the contextual literature on automation and integrated internal control.

2.1. Theoretical Framework

System theory frame work in based on normal organism system that has subsystem in from the start and an end of a process. This explain the introduction of ERP system in the government institution which control internal controls to avoid fraud and ensure efficient service (Gerald and Phil, 2009).

Control theory is an interdisciplinary branch of building and science that courses of action with the direct of dynamical systems with information sources, and how their lead is adjusted by feedback. The ordinary objective of control speculation is to control a structure, consistently called the plant, so its yield takes after a desired control signal, called the reference, which may be a settled or advancing

regard. Hewege (2012) in the examination an examine of standard organization control theory, the way ahead, Management control speculation has encountered lopsided progression as a result of the quality of accounting based approaches to manage the examination of organization controls.

2.1.1. Automation

Automated income frameworks have been turned out to be fit for acquainting gigantic efficiencies with business forms that can bring about expanded income for the Assemblies. With the utilization of mechanization, there is a noteworthy change in income accumulation at the provinces associated with the framework, through stopping of most wellsprings of income spillage, and straightforwardness of operations is upgraded. Robotized income framework enhances income activation. It depends on the electronic installment framework through applications, for example, toll income accumulation, programmed charge gathering, transport income framework and stopping framework.

Kingsley (2012), states that inner controls insinuate the measures established by an association to ensure accomplishment of the substance's objectives, destinations and missions. The indicators of this objective include; management control, human resource management, cash management and sound accounting. The control techniques are intended to advance operational effectiveness, give reliable budgetary measurements, secure the benefits and records, and urge adherence to endorsed approaches. A sound inner control framework has highlights that advance proficiency and successful following of exchanges and guaranteeing that all exercises are legitimately approved, recorded, and accommodated.

Kamau(2014), sought to determine the impact of adoption of technology as a vital device in improving expense consistence in Kenya. The investigation concentrated on the extensive citizens of Kenya Revenue expert. The examination presumes that in fact the selection of innovation impacts on the duty consistence levels of the expansive citizens. Additionally it was concluded that the Kenya Revenue Authority has effectively implemented its Internet and Communication Technology strategy.

Governments in growing nations are progressively investigating strategies and frameworks to modernize and enhance open monetary administration. For instance, finished the years, there has been a presentation of the - (IFMIS) as a standout amongst the most well-known money related administration change hones, gone for the advancement of productivity, adequacy, responsibility, straightforwardness, security of information administration and extensive budgetary announcing. The degree and usefulness of an IFMIS differs crosswise over nations, however ordinarily it speaks to a gigantic, unpredictable, key change prepare Chene (2009:3).

2.1.2. Integrated Internal Control Process

Rodin-Brown (2008)highlights that an IFMIS is a data framework that tracks monetary occasions and abridges money related data. It underpins sufficient administration revealing, arrangement choices, trustee duties and the planning of auditable budgetary proclamations. In its essential shape, an IFMIS is minimal more than a bookkeeping framework designed to work as per the necessities and particulars of the earth in which it is introduced Rodin-Brown (2008). When all is said in done terms, it alludes to the mechanizing of budgetary operations.

For government to coordinate in execution with the development and desires of its constituents, it should drastically expand its monetary profundity without acquiring exorbitant repeating overheads. Robotized frameworks have been turned out to be equipped for acquainting monstrous efficiencies with business forms that can bring about expanded income. Applying mechanical arrangements towards the vital objectives for government was a key stride towards changing government into a substance that can stay up to date with the necessities, prerequisites and desires of the present current world.

3. Research Objective

The research objectives entails;

- i) To determine the effect of automation on revenue collection.
- ii) To establish the effect of integrated internal controls on revenue collection.

4. Methodology

The study used the descriptive research design in which opinions of County staff was collected. The target population of the study was 30 senior revenue staff and 90 support staff County Government of Kericho. The sample size, n , for target residents with a known population, N , is calculated using Israel (1992) formula as shown below

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

Where n is the desired sample size, e is the desired precision (e.g., 0.05 for 95% confidence level) and N is the total target population. Total senior county officers in Kericho County Government is 30 and the support staff are 90, implying n is as derived below:

$$n = \frac{30}{1+30(0.05)^2} = 28$$

$$n = \frac{90}{1+90(0.05)^2} = 74$$

The study was conducted amongst a sample size of 28 senior county officers and 74 support staff at Kericho County Government giving a total of 102 respondents. This study collected primary data from the county government of Kericho.

Questionnaires were used to collect the information from the county government. Then the data was analyzed using both descriptive and inferential statistics. Regression model was used in inferential statistics. The information were valid and reliable based on contextual review and Cronbach constant respectively.

5. Results and Discussion

Descriptive statistics used means and standard deviations were used to for discussion. These were presented as per the specific objectives of the study as follows. Responses were rated as 5= Strongly Agree; 4=Agree; 3=Neutral; 2=Disagree; and 1=Strongly Disagree while M= Mean and SD = Standard Deviation.

Statement	Mean	SD
Management information system has influenced the number of project done	4.08	1.183
Integrated financial management information system has affected the number of new registered business	3.90	1.035
Integrated financial management information system influenced the number of transacted payments in the county	4.17	0.955
Automation has affected the number of business who have paid tax	4.10	0.807
Automation determine the amount revenue collection in Kericho County	3.93	1.292

*Table 1: Automation and Revenue Collection
Source data (2017)*

The results in Table 1 show that majority of the respondents strongly agreed on the statements that integrated financial management information system has greatly influenced the number of transacted payments in the county (M=4.17). The variation of information system has variation on the influence the number of transaction (SD=0.955) and automation has affected the number of business who have paid tax (M=4.10), Automation variation on number of transaction was moderate (SD=0.807). These were followed by that statements that management information system has influenced the number of project done (M=4.08). The variation was high on management of information system on the number of project (SD=1.183), Automation determine the amount revenue collection in Kericho County (M=3.93) with high variation (SD=1.192) and integrated financial management information system has affected the number of new registered business (M=3.90) with high variation (SD=1.035). The respondents further indicated that automation has led to higher productivity, reliability, availability, and increased performance in revenue collection in the County. Automation has also led to reduced operating costs thus increasing service to the people of Kericho County.

Dorotinsky (2003) highlights that an IFMIS is an information system that tracks cash related events and blueprints budgetary information. It supports adequate organization reporting, course of action decisions, trustee commitments and the preparation of auditable financial clarifications. In its fundamental edge, an IFMIS is insignificant more than an accounting structure intended to fill in as demonstrated by the necessities and judgments of the earth in which it is presented Rodin-Brown (2008:2). At the point when all is said in done terms, it implies the robotizing of budgetary operations.

Statement	Mean	SD
Management tool in internal control process affect the number issuance of licenses	4.13	0.804
Cash management used in integrated internal control process influenced the cash flow transactions	4.43	0.725
Accounting management through Integrated internal control process influence management of financial statements	4.15	1.147
Integrated internal control determines revenue collection	3.87	1.319

Table 2: Integrated Internal Control Process and Revenue Collection

The results in Table 2 show that majority of the respondents strongly agreed on the statements that cash management used in integrated internal control process influenced the cash flow transactions (M=4.43). The variation was noted to be low on internal control process on cash flow (SD=0.725) and that accounting management through Integrated internal control process influence management of financial statements (M=4.15) with high variation (SD=1.147). These were followed by the statements that management tool in internal control process affect the number issuance of licenses (M=4.13), with low variation (SD= 0.804) and integrated internal control determines revenue collection (M=3.87) with high variation (SD=1.319). The respondents additionally demonstrated that interior incorporated control framework has empowered Kericho County government to drive their consistence endeavors, distinguish preparing mistakes, and proactively identify extortion. It has advanced great control operations, and upgrading the way toward surveying the outline and operation of controls in revenue collection process.

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	. ^a	.751	.845	1.294	.071	1.566	4	82	.001

a. Predictors: (Constant) Automation, Integrated Internal Control Process

Table 3: Coefficient of Determination using SPSS Version 21.0

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in Table 3, the value of adjusted r squared was 0.845, an indication that there was variation of 84.5% on revenue collection in County government of Kericho, Kenya due to changes in Automation, Integrated Internal Control Process, Efficiency, Human resource management at 95% confidence interval. This therefore, means that factors not studied in this

research contribute 15.5% of revenue collection in County government of Kericho, Kenya and further studies should be conducted to investigate the other factors (15.5%) that affect revenue collection in County government of Kericho, Kenya.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.485	4	2.621	11.566	.001 ^a
	Residual	137.239	82	1.674		
	Total	147.724	86			

a. Predictors: (Constant), Automation, Integrated Internal Control Process.

b. Dependent Variable: Revenue Collection

*Table 4: Analysis of Variance (ANOVA) Using SPSS Version 17.0
Source: Field Data (2017)*

From the ANOVA statistics in Table 4, the significance level of 0.001^a was an indication that the data was perfect for the population parameters as the value of significance (p-value) was less than 5%. This is an indication that the independent variables under study affects the dependent variable (F (4, 82) = 11.566).

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	0.514	1.156		3.646	.000	1.914	6.513
	Automation	.566	.120	.050	4.464	.000	.294	.183
	Integrated Internal Control Process	.749	.176	.214	1.980	.001	.002	.700

a. Dependent Variable: Revenue Collection

*Table 5: Coefficient Analysis Using SPSS Version 17.0
Source: Field Data (2017)*

The finding revealed that holding independent variables constant(automation and integrated internal control process) to a constant zero, revenue collection in County government of Kericho, Kenya would be at 0.514, a unit increase in automation would lead to increase in revenue collection in County government of Kericho, Kenya by a factor of 0.566, a unit increase in integrated internal control process would lead to increase in revenue collection in County government of Kericho, Kenya by a factor of 0.749.

➤ H₀₁: There is no significant effect of automation on revenue collection.

The null hypothesis that automation does not affect revenue collection in Kericho County, Kenya was thus rejected based on the fact that t statistics 4.464 has a p value of 0.00 which is less than 0.05.

➤ H₀₂: there is no significant effect of integrated internal controls on revenue collection

The null hypothesis that integrated internal control process does not affect revenue collection in Kericho County, Kenya was thus rejected based on the fact that t statistics 1.980 has a p value of 0.01 which is less than 0.05.

6. Conclusion and Recommendation

The paper concluded that automation had a positive and significant effect on revenue collection in Kericho County, Kenya. The study also concluded that through automation, it has come easier to the county government of Kericho to closely monitor the entire performance revenue collection process through proper compliance across your organization. It has led to proper feedback systems in the number of transacted payments in the county.

It also concluded that integrated internal control process had a positive and significant effect on revenue collection in Kericho County, Kenya. The study also concluded that revenue loss and risks had been identified by the management for the benefit of the County governments. Management has put in place mechanisms for mitigation of critical risks that may result from fraud. Management had also defined appropriate objectives for the entire organization, revenue collection procedures were well documented, measures were in place for risk identification and staff was adequately involved in internal controls.

The study recommended that that the County government of Kericho County should allocate adequate resources in adopting efficient and effective integrated financial management information system and treat automation as a critical line of development in the revenue collection process, measure progress of automated revenue collection systems within the County on an ongoing basis, with concrete metrics that check whether the county is achieving its revenue collection goals or not.

The study recommended that the County government of Kericho should ensure that aspects relating to control activities should be enhanced so as to ensure attainment of objectives. Additionally, the study recommended that for the county governments to effectively attain their revenue collection target, they should ensure that information and communication system as an element of internal control system is well managed in the revenue collection departments so as to enable all parties within the department to freely access and utilize the official information. The study recommended that further research to be done on effectiveness of internal controls on

revenue generation of the private organization in order to depict reliable information that illustrates real situation in both public and private sector organizations.

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