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# MODERATING EFFECT OF AUTOMATED REVENUE COLLECTION SYSTEM ON THE RELATIONSHIP BETWEEN BUDGETING PRACTICES AND FINANCIAL PERFORMANCE OF COUNTY GOVERNMENTS IN KENYA

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### ABSTRACT

**Purpose of the study:** The purpose of this study was to establish the moderating effect of automated revenue collection systems (ARCS) on the relationship between budgeting practices and the financial performance of county governments in Kenya.

**Research Methodology:** A pragmatic research philosophy and an ex-post facto research design were adopted for this study. The target population for the study was all 47 county governments in Kenya. A sample of 45 county governments in Kenya was selected and the controllers of budget from each county were invited to participate in the study. Data were collected using questionnaires. Both inferential and descriptive statistical analyses were conducted, including regression and correlation analyses.

**Findings:** The study found that ARCS significantly moderated the relationship between budgeting practices and financial performance of counties ( $R^2 = 0.522$ , F = 30.26,  $\beta = 0.384$ , t = 3.728, p < 0.05). Notably, the introduction of ARCS as a moderating variable changed the R<sup>2</sup> from 0.437 to 0.522.

**Conclusion:** The study concluded that ARCS substantially moderate the relationship between budgeting practices and financial performance. Consequently, the study recommends that county governments in Kenya should adopt ARCS to enhance their financial performance. Future research in the private sector and National government in Kenya is suggested to facilitate the comparability of findings.

**Recommendation:** The study recommends that county governments in Kenya should adopt ARCS to enhance their financial performance. ARCS can help to improve the efficiency and effectiveness of revenue collection, which can lead to increased revenue and improved financial performance.

**Keywords:** Moderating Effect, Automated Revenue, Collection System, Budgeting Practices, Financial Performance

#### INTRODUCTION

Automation of revenue collection system (ARCS) entails employing current technologies to enhance the system of revenue collection, to attain integration and sharing of information which results in to effectiveness and efficiency of the system (Litvack, 2016). William and Edge (1996) defines ARCS as enhancement of technology via improved system software and hardware issues in order to mitigate risks associated with fall in revenues while increasing the amount of revenue collected. This study adopted the definition by Jananga (2018) whereby ARCS is considered as modern technological tools that are applied to replace the manual systems of collection of revenue. Apart from being fast, efficient and effective technique of collection, the automated collection of revenue gives other benefits and the users' experiences a much more secure and efficient system of management of revenue where more is collected and accounted for at lower costs (Tracom, Services, 2020). Automated revenue collection systems are viewed to be efficient in enhancing efficiencies of substantive activities leading to more collection of revenue (Zhou & Madhikeni, 2013). Reporting of cash receipts daily as well as payments that are due to be gathered are generated automatically through the system (Kamolo, 2014).

According to Zhou and Madhikeni, (2013) ARCS is able to introduce massive efficiencies in substantive activities that can lead to in improved collection of revenues. By automating revenue collection systems, county governments will reduce the chances of interference, enhance efficiency and improve security of payments (Kiprotich, Njuguna & Kilika, 2018). Maisiba and

Atambo (2016) note that automated tax systems help to seal corruption loopholes and makes the payment process easier for users. Automated revenue collection systems affect taxation and revenue systems positively by improving the efficiency of the whole process and providing a paper trail that can easily be followed as compared to cash based and manual revenue collection systems therefore making revenue collected more secure (Gituma, 2017). According to Dahiya and Mathew, (2016) automated system includes: ICT infrastructure including physical IT assets; communication technologies; shareable technical platforms and databases that has a significant influence of organizational operations.

The elements of automated system are computer technologies, internet connectivity, reliable power supply, ease of use by the staff, and ICT policy documents (Dahiya & Mathew, 2016). Kirimi (2015) used online payments, online receipt methods and online processes as well as online response to measure automated revenue collection systems. In this study, automated revenue collection system was assessed in in term number of users, the frequency of reports, the timeliness of production of financial reports, the network connectivity and the capacity of human resource. The systems used in revenue collection include telecommunication, intelligent management systems, payment systems, payment processing as well as transmission systems. By automating these systems, county governments can reduce the chances of interference, enhance efficiency and improve security of payments (Kiprotich, Njuguna & Kilika, 2018). Examples of progress made by the automation of systems in government include the National Transport and Safety Authority (NTSA) website and Huduma centers in the country. Maisiba and Atambo (2016) note that automated tax systems help to seal corruption loopholes and makes the payment process easier for users. With the amount of data that needs to be processed increasing with time, it is only right that automated revenue systems are adopted and integrated in new county programs (Maxwell, 2005).

#### STATEMENT OF THE PROBLEM

Automated revenue collection systems are increasingly recognized as a significant factor influencing an organization's financial performance by impacting the amount of revenue generated, which subsequently triggers developmental progress (Arogundade & Barsoum, 2008; Asimiyu & Kizito, 2014). However, in the case of county governments in Kenya, inefficient and often faulty automated revenue collection systems have been reported, permitting fraud and leakages, leading to considerable revenue losses (Mandala, et al., 2020). This inefficiency could

significantly affect the effectiveness of budgeting practices, thereby impacting financial performance. Despite this, existing research between budgeting practices, automated revenue collection systems, and financial performance in public entities is found to be lacking, with several studies offering inconclusive results (Goddard & Mkasiwa, 2016). Moreover, the literature demonstrates a gap in understanding the effect of automated revenue collection systems on the relationship between budgeting practices and financial performance (Okotchi, et al., 2020). Thus, the research problem for the study was to determine the moderating effect of automated revenue collection systems on the relationship between budgeting practices and financial performance of county governments in Kenya. The problem will specifically aim to answer: How do automated revenue collection systems influence the impact of budgeting practices on the financial performance of county governments in Kenya? What aspects of these systems contribute to either the success or failure of the budgeting practices and financial performance, and how can these systems be improved to enhance financial performance?

#### **OBJECTIVE OF THE STUDY**

To determine the moderating effect of automated revenue collection system on the relationship between budgeting practices and financial performance of County governments in Kenya.

#### LITERATURE REVIEW

The literature review section of this study provides an overview of the existing research on the relationship between automated revenue collection systems (ARCS) and financial performance. The review begins with theoretical framework, empirical review and conceptual framework.

#### THEORETICAL FRAMEWORK

The anchoring theory of the study was the Technology Acceptance Model.

#### **Technology Acceptance Model**

Technology Acceptance Model (TAM) started by Davis (1986). It is one of the most widely used model to explain user acceptance behaviours. TAM has hypothesized that the attitude of a user towards a system was a major determinant on whether the use will actually use it or reject the system (Taylor and Todd, 1995). It postulates that the use and acceptance of a particular technology is anchored on the benefits to be derived, alongside ease and use of the technology (Surendran, 2012). The model is grounded on psychology theory in general and the theory of

reasoned action in particular (Fishbein and Azjen 1977). In the last decade, TAM has received considerable attention and empirical support (Taylor and Todd, 1995). Nonetheless TAM model has been criticized regarding its ability to explain the behaviour of individuals. TAM is not sufficiently robust and reliable in explaining users' behaviour when it comes to decision to acquire, accept or reject a particular sort of technology (Hai & Alam Kazmi, 2015).

In addition, Ajibade (2018) noted that TAM is more suitable for individual use and not an institution or organizations that require further ICT integration. Further, though TAM has received a lot of attention from scholars, TAM fails to explicitly explain its use and application in e-government systems (Chandio et al., 2017). In TAM model perceived usefulness and ease determines the desire to use certain system. The ease of use and perceived usefulness are critical features that determines the actual use of the system. According to Venkatesh et al. (2012), attitude, usefulness and ease of use of certain technology impact impacts its actual use. Perceived ease of use defines how friendly is a system when using while perceived usefulness outlines the benefits to be accrued from a system (Davis, 1993). TAM model was relevant in understanding automated revenue collection system as new approach to collect revenue for counties. TAM argues that using certain technology is a function of the benefits to be accrued and ease of using the system. The benefits to be derived in using automated revenue collection system may include efficiency and curb of fraud hence increased revenue collection.

#### **EMPIRICAL REVIEW**

Alshubiri et al, (2019), studied the impact of ICT on the financial development index of Qatar, Kuwait, Bahrain, Oman, Saudi Arabia and UAE from the 2000 to 2016 using a panel approach. ICT has contributed to enhancing the efficiency of electronic transactions, leading to improved performance. However, the study investigated effect of ICT on firm performance contrasting current study that focus on financial performance of county governments. Kessy (2020) while focusing at Kinondoni Municipal in Tanzania conducted a study on e-payment and revenue collection. The study used descriptive survey research. It was found that e-payment positively resulted to increased revenue collection, monitoring of revenue sources, and financial reporting. The study solely focused at impact of e-payment on revenue collection. The debate on budgeting practices on financials performance on organizations has not been quite settled. Most of the

available studies in this area have a mixed of concepts of budgeting practices, budgetary controls and budgetary controls on financial performance of organizations.

It is also notable, that the success of budgeting practices on financial performance of organizations depends on other variables and also within a range of other contextual factors such as the political system and fiscal environment (Okotchi, et al., 2020). Moreover, most of the local studies have been conducted before the promulgation of the new constitution in Kenya, which to a large extent has changed the budgeting and financial in public entities (Serem, 2013). Ambetsa (2020) conducted a survey to determine the extent of use and effectiveness of budgeting practices used by state governments of USA. The results indicated that the state governments of USA are making use of sophisticated budgeting practices. Further that a higher percentage of sates that use sophisticated budgeting practices are effective in their financial performance. Maisiba and Atambo (2016) investigated the influence of budgeting techniques on the performance of commercial airlines at Wilson Airport terminal, Nairobi. Research findings disclosed that the inadequate performance was as a result of poor cooperation in budgeting process, absence of leading monitoring support, and inadequate skills on spending plan examinations. It was additional disclosed that business performance in airline company market was planned implemented as well as evaluated by utilize of budget plan. According to the research study it was ended that all services do preparation by utilize of budgets. The budgeting is official and also methodical in some services while in others it is informal. Normally all business has some budgeting control processes. As a result, the vital worry was just how to prepare a reliable spending plan.

Wanga (2017) researched on the influence of budgeting on SMEs credit report accessibility as well as performance in Nairobi, Kenya. The research study planned to expose the partnership in between the variables. The study was mostly focused on incomplete information theory. The study relied upon second data resource from economic documents of ventures as from 2008 to 2012. Detailed study design was deployed. Results showed that budgeting had a considerable impact on credit report availability and also return on investments for SMEs. Nevertheless, the research depended on secondary information and likewise was done on SMEs and also out commercial banks. This is a study space which needs to be filled up by the research study. According to the research study it was ended that all services do preparation by utilize of budgets. The budgeting is official and also methodical in some services while in others it is informal. Normally all business

has some budgeting control processes. As a result, the vital worry was just how to prepare a reliable spending plan.

Ríos, Benito and Bastida (2017) to take a look at which factors clarify public involvement in the spending plan procedure in a worldwide comparative technique. Particularly, we check out which socioeconomic, institutional, as well as political factors promote public involvement in the main federal government budget plan process. Making use of a sample of 93 countries, our results suggest that Internet infiltration, populace variety, governmental financial situation, as well as spending plan transparency identify possibilities for public engagement in the central government budget process. On top of that, we reveal that not only budget openness promotes public participation but additionally public engagement is required to enhance budget transparency.

Mbogo et al. (2021) focused on county governments in Kenya determined the effect of budgetary process on their performance. It was found that budgetary control and process led to county governments' financial performance. The study was not explicit on how financial performance of county governments was measured, this study measures using own revenue collected and therefore offers a conceptual gap. The findings of the study suggest that financial performance of manufacturing SMEs can be improved by deploying strategic action in budging practices in planning for cash flows, controlling cash flows, resource allocations, activity coordination and monitoring of activities. The debate on budgeting practices on financials performance on organizations has not been quite settled. Most of the available studies in this area have a mixed of concepts of budgeting practices, budgetary controls and budgetary controls on financial performance of organizations (Okotchi, et al., 2020). It is also notable, that the success of budgeting practices on financial performance of organizations depends on other variables and also within a range of other contextual factors such as the political system and fiscal environment. Moreover, most of the local studies have been conducted before the promulgation of the new constitution in Kenya, which to a large extent has changed the budgeting and financial in public entities (Serem, 2013).

In Tanzania, Sebastian (2018) assessed the impacts of budgeting on financial performance of picked production firms within Kinondoni District Dar es salaam. Detailed study design was utilized and also 75 participants from manufacturing organizations selected were used. It was discovered that the official budgeting preparation shows various keys in relation to their effect on

monetary performance. This plan has a higher effect on the development of sales of manufacturing institutions, contrasted to the formal monetary control. Ajibade (2018) looked into on the effect of budget plan preparation on economic job of retail businesses in Kenya. The research study embraced quantitative research strategy. The study noted that budget planning influenced to a big extent the efficiency. The research took on survey research approach and developed that some workers of the retail services did not have details that budget plan preparation is a workout in their venture. Consequently, their efficiency is vulnerable to working risks in addition to inaccuracy. Additionally, there was an overall organizational technique on financial, established guidelines in addition to routine for monetary planning as well as the top administration assists in reduction of resources waste as well as communicates the budget plan. Results also revealed that budgeting overview monitoring planning, gives a great structure for evaluating performance as well as also encourages efficient control and also interaction among diverse divisions of NGOs.

Chepkorir, Rugut and Langat (2021) noted that smartphones have changed how mobile payments are conducted. The study was conducted to add to the literature concerning mobile payments for business models. Compared to previous studies that stopped at the methodical stage, the study was conducted to evaluate and explore the limits of the existing mobile payment models and linking it to new developments especially in the age of smartphones and the app economy. The study concluded by expanding the mobile payment model through the addition of new roles. A conceptual gap exists given the study was conducted primarily to add literature in mobile payments and did not see mobile payments as a variable in revenue collection.

Dalton and Aguinis (2013) noted that local governments in developing countries are increasingly handling large amounts of data. The study found that ICT offers city councils the option of using cashless payment systems built around electronic and mobile payment systems. The study showed that the adoption of ICT has increased revenue collection in the cities. In addition, ICT enables city council to take up cashless payment systems. The study also showed that City councils may suffer if technical issues are not dealt with promptly. In addition, banks should be engaged in order to facilitate the electronic and mobile payments. The study also notes that IT systems that are developed and maintained internationally might be problematic as was the case in Ndola City.

Gitaru (2017) noted that sound revenue collection systems in local governments set the foundation for fiscal decentralization to succeed. Modern electronic and mobile payments offer convenience

in revenue and improve revenue collection. The study used a descriptive research method and targeted 18 departments from the County Government of Nairobi which were in operation between 2013 and 2015. Additional information was gathered from different sources and evaluated through both descriptive as well as inferential stats. The outcomes developed that earnings collection in Nairobi City Area increased dramatically after the fostering of electronic repayment systems. The research study therefore concluded that the adoption of digital and also mobile settlement systems favorably as well as substantially impacted the collection of profits by the Nairobi City Area. Because of this, the study recommended that the County Government of Nairobi City County embrace digital payments across all divisions as well as wards. Additionally, the region government must increase understanding on electronic payment systems.

Nagy, Villaggi and Benjamin (2018) shows an application of Generative Design to an urban scale via the design of a real-world residential neighborhood development project in Alkmaar, Netherlands. Problems in metropolitan layout can benefit greatly from the Generative Style framework because of their intricacy and the presence of many stakeholders with different and also possibly contradictory demands. We demonstrate this potential intricacy by maximizing for two important objectives: the success of the task for the developer and also the potential for power generation of solar panels placed on the roofings of the structures. This paper points to additional research study into the application of the Generative Layout structure to solve layout problems at a city range.

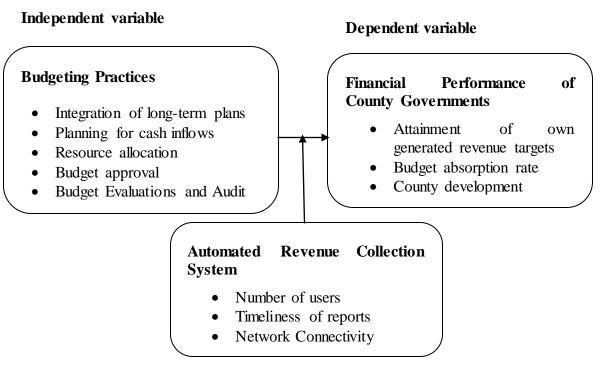
Lacurezeanu, Tiron-Tudor and Bresfelean (2020) kept in mind that Nowadays, Infotech (IT) belongs to basically every company, and also companies that cannot keep the speed with brandnew modern technologies will go away in time. As a result of their nature of specific activities and surpassing other locations, expert accountancy and also bookkeeping solutions can boost their efficiency through Robotic Refine Automation (RPA). Moreover, RPA can add to boosting the trustworthiness of the bookkeeping profession, along with improving the activity in order to abide by the demands enforced by expert requirements but with much lower expenses. This research is based on a testimonial of the literary works and also via an exploratory method opens up a conversation on the principle of RPA as well as tailors it in the field of specialist accounting services by examining robotics designs details to accountancy and audit.

Ivanov, Webster, Stoilova and Slobodskoy (2022) noted that the COVID-19 pandemic of 2020 will have a substantial influence on traveling, tourism and hospitality (TTH) around the world. With a substantial reduction in tourism globally as a result of the wellness situation, the market will need to plan healing and restoring of the sector with higher consideration of the biosecurity of consumers. A vital component in the reorganisation of the sector will certainly entail the boosted incorporation of automation technologies. This short article adopts a supply-side point of view as well as elaborates on the opportunities that automation modern technologies give to TTH companies to minimize the adverse impacts of biosecurity threats on their financial efficiency. It goes over the expenses and benefits of the security and also health and wellness of the consumer. It elaborates on how the existing pandemic would certainly stimulate the fostering of automation innovations. Lastly, the article talks about just how this suit business versions of tourism-related markets and also lays out the mini- and also macroeconomic effects of the greater unification of automation right into the industry.

Haabazoka (2018) conducted a study to investigate the impact of technological advancements on the financial efficiency of commercial banks in Zambia. The study used monthly data for a period of 4 years for all 19 commercial banks in Zambia. The study examined three types of technological advancements: mobile banking, internet banking, and automated teller machines (ATMs). The impact of these technologies on the financial efficiency of commercial banks was measured using return on assets (ROA). The study found that technological advancements had a positive impact on the financial efficiency of commercial banks in Zambia. Mobile banking had the strongest positive impact, followed by ATMs and internet banking. The study also found that the impact of technological advancements on financial efficiency varied depending on the size of the bank. Smaller banks benefited more from technological advancements than larger banks. The study concluded that technological advancements can help commercial banks in Zambia to improve their financial efficiency. This is because technological advancements can help banks to reduce costs, improve customer service, and expand their reach.

#### CONCEPTUAL FRAMEWORK

The conceptual framework shows the relationship between the study variables.



#### Moderating variable

#### **Figure 1: Conceptual Framework**

#### **RESEARCH METHODOLOGY**

The study adopted an ex-post facto research design. The target population for the study was all the 47 county governments in Kenya. The sample of the study was 45 county governments in Kenya. The study used both primary and secondary data to collect data. Semi-structured questionnaires were used to facilitate the collection of primary data. The secondary data was obtained from counties' financial performance reports and revenue collection reports. The collection of secondary data enabled a comparative analysis of revenue collected in counties from 2014 to 2020 in Kenya shillings. Qualitative data was transcribed, coded, classified, and summarized in relation to the research questions of this study. Content analysis was used to analyze the qualitative data. Quantitative data collected via questionnaire was analyzed using SPSS. Simple linear regression was used to assess the relationship between budgetary practices and performance of county governments. Path analysis was used to determine the moderating effect of automated revenue collection systems on the relationship between budgetary practices and financial performance.

#### FINDINGS AND DISCUSSION

The survey had a high response rate of 95.56%, with 43 out of 45 questionnaires being filled out and returned. The majority of the respondents were male (63%), aged between 40 and 49 (32%), and had a Master's Degree (39%). A Bachelor's Degree (30%) was the next most common educational attainment, followed by a PhD (26%). Most of the respondents had worked at the County Government for between 4 and 5 years (33%).

#### **Descriptive Statistics for Automated Revenue Collection Systems**

The researcher asked respondents to indicate their level of agreement with the following statements about the influence of automated revenue collection systems (ARCS) on firm performance.

Statement	Mean	Std. Dev	CV (%)
The online receipting process of automation of revenue collection processes influence financial performance in our county	3.767	1.246	33.08
The Automated Revenue Collection System has increased number of users across the county.	3.722	1.200	32.24
Online process of automation of revenue collection processes has influence performance in our county	3.644	1.174	32.22
The automation of systems saves the cost of revenue collection	3.567	1.209	33.89
The Automated revenue collection system has improved the timeliness and accessibility of financial and budget reports by the county.	3.444	1.367	39.69
Automation minimizes fraud or rogue revenue collectors	3.333	1.332	39.96
The introduction of online payment systems has improved revenue collection processes and influenced financial performance in our county	3.433	1.299	37.84
The automation systems have increased efficiency and convenience by connecting county functions to a single network.	3.244	1.385	42.69

#### Table 1: Descriptive Statistics for Automated Revenue Collection Systems

Table 1 indicate that there was agreement that the online receipting process of automation of revenue collection processes influence financial performance in our county (mean = 3.767, SD = 1.246); the Automated Revenue Collection System has increased number of users across the county. (Mean= 3.722, SD = 1.200); Online process of automation of revenue collection processes has influence performance in our county (Mean= 3.644, SD = 1.174) and that the automation of systems saves the cost of revenue collection (Mean=3.567 and SD=1.209). In addition, the findings

also indicated strongly The Automated revenue collection system has improved the timeliness and accessibility of financial and budget reports by the county (mean = 3.444, SD = 1.367); The introduction of online payment systems has improved revenue collection processes and influenced financial performance in our county (mean = 3.433, SD = 1.299); and that the automation systems have increased efficiency and convenience by connecting county functions to a single network (mean = 3.244, SD = 1.385). This was in line woth the findings of Alshubiri et al, (2019) who established that automated revenue collection improves the processes of revenue collection. Generally, the indicators of automated revenue collection systems on the financial performance of County governments in Kenya had a mean score of 3.519 and an overall Coefficient of Variation (CV) = 36 percent, the coefficients of variation evaluations for this study were determined as follows: 0 to 25 (excellent), 26 to 50% (good), 51 to 75% (fair), and 76 to 100% (poor). From the CV results of 36.26 percent represents a good variation. These responses indicate that the county governments have adopted automated revenue collection systems which may improve the financial performance and follows: 0 to 25 (excellent), 26 to 50% (good), 51 to 75% (fair), and 76 to 100% (poor). From the CV results of 36.26 percent represents a good variation. These responses indicate that the county governments have adopted automated revenue collection systems which may improve the financial performance and the count of 3.520 percent means as was the case in (Kessy, 2020).

#### **Regression analysis**

The study used Path analysis of Baron and Kenny (1986) to test the moderating effect of automated revenue collection systems on the relationship between budgetary practices and financial performance of county governments in Kenya. Partial mediation is confirmed when the effect of the independent variable is not significant but the value of the beta coefficient or  $R^2$  is above zero. The results of the moderating effect of automated revenue collection systems on the relationship between budgetary practices and the financial performance of County Governments in Kenya are presented below.

## Table 2: Regression Analysis

Model Sun	nmary							
Model	R	R 5 quare	Adjusted Rsquare	Std. Error of the Estimate				
1	.661a (	).437	0.431	0.42345				
2	.716a	).513	0.502	0.39622				
3	.717a	0.522 0.515		0.39834				
ANOVA								
Model		Sum of S qu	ares Df	Mean S quare	F	Sig.		
1	Regression	12.27	1	12.27	68.428	.000b		
	Residual	15.78	41	0.179				
	Total	28.05	42					
2	Regression 1	14.391	2	7.196	45.834	.000b		
	Residual	13.658	40	0.157				
	Total	28.05	42					
3	Regression	14.404	3	4.801	30.26	.000ь		
	Residual	13.646	39	0.159				
	Total	28.05	42					
Model	UnstandardizedCoef		dizedCoefficients Std. Error					
		B	S ta. Error	Beta	t	Sig.		
1	(Constant)	0.378	0.376		1.006	0.317		
	Budget Practices	0.826	0.1	0.661	8.272	0.000		
2	(Constant)	-0.520	0.429		-1.213	0.228		
	Budget Practices	0.760	0.095	0.608	7.982	0.000		
	Automated Revenue Collection System	0.320	0.087	0.280	3.676	0.000		
3	(Constant)	0.045	2.039		0.022	0.982		
	Budget Practices	0.601	0.568	0.481	1.059	0.293		
	Automated Revenue Collection System Budget Practices *	0.384	0.103	0.139	3.728	0.003		
	Budget Practices 4	1		1				

In the first step, financial performance was regressed on budget practices. The results demonstrate that the effect of budget practices on financial performance of County Governments is significant ( $R^2$ =0.437, F=68.428,  $\beta$ = 0.826,t=8.272, p<0.000), implying that 43.7 percent of the change in the performance of County Governments is linked to one unit change in budget practices. Automated Revenue Collection Systems was added as a moderator in the second step. The introduction of the automated revenue collection system as a moderator greatly increased the influence of budgeting practices on the financial performance of County Governments from 43.7 percent to 51.3 percent implying that budget practices together with automated revenue collection systems explain 51.3 percent of the change in financial performance of County Governments. The overall model is statistically significant ( $R^2$ =0.513, F= 45.834,  $\beta$ =0.320), t= 3.676, P<0.05). Similarly, the beta coefficient for automated revenue collection systems is statistically significant.

In step three, the interaction term was incorporated in the regression model. All the variables, budget practices, automated revenue collection systems and the interaction term (Budget Practices \* Automated Revenue Collection Systems) were entered in the regression model. The outcome found out that R<sup>2</sup> increased from 51.3 percent in step two to 52.2 percent in step three. The overall model in step three indicate that the interaction is statistically significant (R<sup>2</sup>=0.522, F=30.26,  $\beta$ = 0.384), t= 3.728, p<0.05). The outcomes therefore, provide evidence in support of the hypothesis that automated revenue collection systems moderates the association between budget practices and the financial performance of County Governments. The results imply that automated revenue collection systems moderate the association amongst budget practices and financial performance of County Governments in Kenya. This means that a positive change in automated revenue collection systems the association amongst budget practices and financial performance of County Governments in Kenya.

#### **5.0 CONCLUSION**

The study concluded that automated revenue collection systems moderate the relationship between budgeting practices and the financial performance of county governments in Kenya. The study found that a positive change in automated revenue collection systems resulted in the relationship between budgeting practices and financial performance of county governments getting stronger. The level of automation of revenue collection systems plays a key role in determining the financial performance of county governments. The use of automated systems to collect revenue increases

efficiency and reduces the costs of revenue collection. In addition, it reduces cases of fraud and graft among the revenue collectors leading to more revenue collected.

#### **6.0 RECOMMENDATIONS**

The study further recommends that County governments should adopt automated revenue collection systems. This will help to improve their financial performance. By automating these systems, county governments can reduce the chances of interference, enhance efficiency and improve security of payments. Automated revenue collection systems affect taxation and revenue systems positively by improving the efficiency of the whole process. With the amount of data that needs to be processed increasing with time, it is only right that automated revenue systems are adopted and integrated in new county programs in their financial operations.

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