# The Effect of Electronic Reporting on Financial Control in Public Secondary Schools in Narok County, Kenya

Joel Lemein Nchoe, Patrick Gudda, Edmund Kanyugi Gathuru

**To Link this Article:** http://dx.doi.org/10.6007/IJARAFMS/v12-i4/15593 DOI:10.6007/IJARAFMS /v12-i4/15593

Received: 14 October 2022, Revised: 17 November 2022, Accepted: 29 November 2022

Published Online: 09 December 2022

In-Text Citation: (Nchoe et al., 2022)

**To Cite this Article:** Nchoe, J. L., Gudda, P., & Gathuru, E. K. (2022). The Effect of Electronic Reporting on Financial Control in Public Secondary Schools in Narok County, Kenya. *International Journal of Academic Research in Accounting Finance and Management Sciences*, 12(4), 23–32.

Copyright: © 2022 The Author(s)

Published by Human Resource Management Academic Research Society (www.hrmars.com)

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <a href="http://creativecommons.org/licences/by/4.0/legalcode">http://creativecommons.org/licences/by/4.0/legalcode</a>

Vol. 12, No. 4, 2022, Pg. 23 - 32

http://hrmars.com/index.php/pages/detail/IJARAFMS

**JOURNAL HOMEPAGE** 

Full Terms & Conditions of access and use can be found at http://hrmars.com/index.php/pages/detail/publication-ethics



# RESEARCH IN ACCOUNTING, FINANCE AND MANAGEMENT SCIENCES



ISSN: 2225-8329

# The Effect of Electronic Reporting on Financial Control in Public Secondary Schools in Narok County, Kenya

Joel Lemein Nchoe, Patrick Gudda, Edmund Kanyugi Gathuru School of Business and Economics, Maasai Mara University, Narok, Kenya Email: mrnchoe@gmail.com, guddap@mmarau.ac.ke, egathuru@mmarau.ac.ke

#### **Abstract**

A computerized accounting system involves the computerization of accounting information which is established in order to facilitate decision making. Financial controls are at the very core of resource management and operational efficiency in any organization. The overall objective of this study was to determine the effect of electronic reporting on financial control in public secondary schools in Narok county. The study used a descriptive survey design. The study targeted a population of 656 accounting officers in public secondary schools in Narok county. The study used stratified random sampling and obtained a sample size of 240. Data was collected using a questionnaire. The questionnaire was tested for validity and reliability to ensure that it provided the data that was required for the study. The data was analyzed using descriptive statistics for frequency and percentages, Pearson correlation analysis and simple linear regression analysis to summarize and classify data, to establish the relationship between the variables and to determine the strength of association between the variables respectively. On the effect of electronic reporting on the financial control in public secondary schools in Narok county, the majority of the respondents agreed that it had an effect on financial control. The effect was statistically significant when tested using Pearson correlation (r = 0.621; p- value = 0.000). The hypothesis was tested using t-values, where the null hypothesis was rejected based on the t-value (11.506) which was greater than the critical tvalues. The study therefore concluded that public secondary schools that seek to enhance their financial control should embrace electronic reporting as in enhances transparency and accurate reporting.

**Keywords:** Electronic Reporting and Financial Control

#### Introduction

With accounting software today businesses and governmental bodies are able to accomplish any type of accounting function (Ebrahim, 2013). A computerized accounting system involves the computerization of accounting information which is established in order to facilitate decision making (Larson & Pyle, 2018). According to Collins and Collins (2017) an accounting system is a way of keeping a written record of transactions. Receipts are given for all money that is received by an organization and receipts are asked for every time money is spent.

Vol. 11, No. 4, 2022, E-ISSN: 2225-8329 © 2022 HRMARS

Accountability for public institutions is both a legal and ethical obligation for institutions that use resources received to offer services to the general public. Accountability may encompass a full report of activities as well as justification for the way resources are managed (Gordon et al., 2010).

According to Welsch and Short (2017) an accounting system, regardless of the size of the organization, is designed to collect, process and report periodic financial information about the entity. According to Keating and Frumkin (2013) in most government institutions funds are poorly managed and their accounting systems are in poor order. Many government institutions do not have qualified accountants and have problems preparing accurate and timely financial reports, which is one of the major requirements. Ebrahim (2013) notes that government institutions respond to issues of accountability with both tools and processes. Tools are created by stakeholders that have considerable leverage over a government regulator. Familiar tools are annual reports, financial accounts, performance assessments, quarterly reports, independent evaluations and audits. Schnelder (2019) stresses that the heart of fiscal management in any organization is a good accounting system that is appropriate to that organization. In order to achieve consistent financial accountability and control, it is necessary to establish standards and a system for accounting practices. Keating and Frumkin (2013), state that in order to determine the effectiveness of a financial reporting system, one must understand its objectives.

Financial controls are at the very core of resource management and operational efficiency in any organization (Graham & Rosman, 2015). According to Saleemi (2008) financial control is a system established by the management in order to carry the business of the enterprise in an orderly and efficient manner, safeguard the assets and secure as far as possible the completeness and accuracy of the records. Control environment is the major aspect of managing an organization. This is because it is a reflection of the attitude and the policies of management in regard to the importance of internal audit in the economic unit (Theofanis et al, 2011). According to Sudsomboon and Ussahawanitchakit (2009) control environment is the foundation for the other components of financial control. Financial control assists toward reducing the level of fraudulent activities within organizational operations. The quality of an entity's financial control system depends on the function and quality of their control environment (Amudo & Inanga, 2019). Therefore, providing a proper control environment for a public institution is very essential to the effectiveness of their operation.

Theoretically it is expected that a computerized accounting system would result to a quality financial control. Through studies done by Carol (2012) it is easy to do accounting functions using computerized accounting systems. Posting transactions to the ledger, the principle of double entry can largely be automated when done through the use of computerized accounting system. Evidence from academic studies suggests that governments respond to accounting information in making their disbursement decisions to public institutions (Parsons, 2017; Buchheit & Parsons, 2016). In 2010 Gordon and colleagues outlined five best practice recommendations for annual reports in the public sector: completeness, accessibility and transparency in financial reporting, full disclosure and relevance. McBride (2010) stated that managers and accountants cannot easily satisfy statutory and public reporting requirements such as profit and loss account, balance sheet and customized reporting without using computerized accounting systems. With the system in place, this can be done quickly and with less effort.

According to European Union audit in 2003, it was noted that organizations are not enjoying the benefit of computerization of accounting system as they have continued to be inaccurate

Vol. 11, No. 4, 2022, E-ISSN: 2225-8329 © 2022 HRMARS

due to increased number of interruptions due to system failure or breakdown and untimeliness with its reliability left in question. In other studies, Computerization saves time on transaction hence leading to quality of financial reporting for instance timely, accurate and reliable information can be generated (Lewis, 2019).

#### Statement of the Problem

With the growth in information and technology, the manual accounting system has become gradually inadequate for decision needs. Consequently, public and private sector firms in both developing and developed economies view computerized accounting system as a vehicle to ensure effective and efficient information flow in the recording, processing, and analysis of financial data. Effective and efficient information flow enhances managerial decision-making, thereby increasing the firm's ability to achieve corporate and business strategy objectives. The experience of advanced countries is that managing complex financial management information system developing countries, projects require considerable management skill. However, this is typically in short supply in developing countries. Top managers may not be computer literate. The consequence is that often the binding constraint when introducing FMISs is not the technical capacity to create them but the capacity to manage and use them. Most public sector funds are poorly managed and their accounting systems are in poor order. Many public institutions do not have qualified accountants and have problems preparing accurate and timely financial reports. Most public institutions in Kenya, are pre occupied with shortage of funds and illiteracy to the extent that investing for the future becomes a luxury. Financial information has a direct link with the financial accounting system and is expressed in monetary units. In Kenya, few studies have been done in the area of computerized accounting systems. However, no study has been done on computerized accounting systems with a focus on electronic reporting and its effect on financial control in public institutions in Kenya. Hence, the study intended to address the effect of electronic reporting on financial control in public secondary schools in Narok county, Kenya.

#### **Research Objective**

To establish the effect of electronic reporting on financial control in public secondary schools in Narok county, Kenya.

#### **Research Hypothesis**

**H**<sub>o</sub> There is no significant effect of electronic reporting on financial control in public secondary schools in Narok county, Kenya.

#### Significance of the Study

There is growing need to use electronic reporting to enhance accounting process in private and government institutions in Kenya. Findings from the study will form a foundation for implementing an effective electronic reporting system. The study will help policy makers and the Government of Kenya in formulation and implementation of policies for operational efficiency. Through the results of this study, state corporations will find the benefits realized from electronic reporting and how more benefits can be realized for optimal financial control.

#### **Theoretical Framework**

The theoretical foundation for this study was anchored on positive accounting theory.

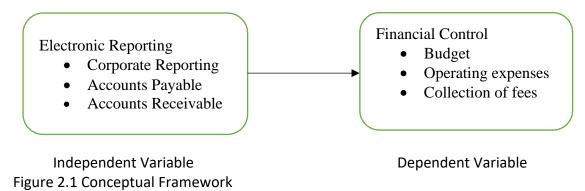
Vol. 11, No. 4, 2022, E-ISSN: 2225-8329 © 2022 HRMARS

#### **Positive Accounting Theory**

Positive accounting theory was developed by Watts and Zimmerman in 1978. The theory seeks to predict and explain why managers elect to adopt particular accounting methods in preference to others. Positive theories are concerned with explanation and prediction (what does/ will happen) and are grounded in empirical data (Ryan et al., 2002). Since they are grounded in empirical data, they appear to offer accounting researchers the prospects, the validity of Johnson and Kaplan's (Relevance Lost) criticisms of management accounting practice. This form of research draws on a wide range of theoretical frameworks to address financial management accounting issues. Different research methods and methodologies are not viewed as competing but are rather used together to provide a variety of insights into a wide range of management accounting research questions (Ryan et al., 2002).

#### **Conceptual Framework**

The study was guided by a conceptual framework. The conceptual framework contained one independent variable and one dependent variable (see Figure 2.1).



#### **Electronic Reporting and Financial Control**

According to Dreytus (2019) reports generated by various streams of accounting, such as cost accounting and management accounting, are invaluable in helping management make informed decisions. While basic accounting functions can be handled by a bookkeeper, advanced accounting is handled by qualified accountants who possess designations such as Institute of Chartered Accountants. All accounting designations are the culmination of years of study and rigorous examinations, combined with a minimum number of years-of practical accounting experience. Computerized accounting according to Eze (2010) is the application of computer and computer software technologies to the business accounting function.

Nweze (2008) opined that computerized accounting involves performing regular accounting functions, accounting research and the accounting training and education through various computer based /internet based accounting tools such-as digital tool kits, various internet resources, international web-based materials institute and company databases which are internet based, web links, internet based accounting software and electronic financial spreadsheet tools to provide efficient decision making. Computerized accounting improves the corporate performance of organizations by enhancing its diverse accounting activities such as associated with accounts payable, accounts receivable, financial reporting and bank and account reconciliations. The above indicators are the independent indicators for electronic reporting.

Vol. 11, No. 4, 2022, E-ISSN: 2225-8329 © 2022 HRMARS

#### **Research Methodology**

This section presents the research methodology used in the study.

#### **Research Design**

The research used descriptive survey design.

#### **Target Population**

The target population for this study consisted of all accounting staffs in government secondary schools in Narok County. The total number of accounting officers in government secondary schools in Narok County was 656 (Narok County education office, 2021).

Table 3.1

Total Population Accounting Officers in Government Secondary Schools in Narok County

Category	Population	
School Principals	164	
School Deputy Principals	164	
School Accountants	164	
School Store Keepers	164	
Total	656	

Source (Narok county education office, 2021)

#### **Sample and Sampling Techniques**

The researcher used stratified random sampling in order to achieve the desired representation from various categories of accounting officers in government secondary schools in Narok county. The sample size was 240 respondents.

#### **Research Instrument**

In this study, primary data was used. Primary data was collected through the administration of a questionnaire to the accounting officers in public secondary schools in Narok County.

#### **Data Analysis Procedure**

This section describes the data analysis process. After the questionnaires were collected back from the respondents, the researcher assessed them for completeness and commenced data analysis process. The researcher computed the descriptive, inferential and test statistics in order to assess the effect of the independent variable on the dependent variable. Coding of the data was done to ensure that the data was appropriately grouped and categorized for analysis.

To establish the relationship between electronic reporting and financial control the study used Pearson's moment correlation coefficient. In order to develop the research model and assess the level of significance of the relationship between the variables the simple linear regression analysis was tested (equation 3.1). Regression helped test how well the model fits the data. The R value represents the correlation between the variables while R square represents the magnitude of the effect of the independent variable on the dependent variable.

Fischer distribution test called F-test was applied to test the significance and level of difference between the regression mean and the error mean. This test was done at a 5 percent level of significance implying 95 percent level of confidence. This was done by

Vol. 11, No. 4, 2022, E-ISSN: 2225-8329 © 2022 HRMARS

analyzing the analysis of variance (ANOVA) test. Similarly, the t-test statistic was used to test the ability of the model to predict the level of statistical significance study. For this test the rule was that if the t – statistic is between -2 and +2 the relationship is not significant and hence the null hypothesis of the study was accepted as to be true. But if the t value is more than + 2 or less than -2 then the null hypothesis was rejected. If the p-value was greater than 0.05 then the model was said to be insignificant and could not be used to explain the variations in the dependent variable.

Where:

Y = Financial Control

 $\beta_0$  = The Y intercept

 $X_1$  = Electronic Reporting

e = the error term

#### **Research Findings and Discussions**

This section presents the research findings and discussion.

#### **Electronic Reporting and Financial Control in Public Secondary Schools in Narok County**

The objective of the study sought to examine the effect of electronic reporting on financial control in public secondary schools in Narok county. The respondents were asked to show their degree of agreement or disagreement with given statements on electronic reporting on a five-point scale of 1-5, where; 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent. Descriptive statistics were calculated and the results are presented in Table 4.5.

Table 4.5

Descriptive Statistics for Electronic Reporting

Statement	VLE	LE	ME	GE	VGE	Total
Electronic reporting improves the	2 (1%)	9 (4%)	17	109	75	213
corporate performance			(8%)	(51%)	(35%)	(100%)
Electronic reporting enhances	6 (3%)	2 (1%)	9 (4%)	117	79	213
accounts payable				(55%)	(37%)	(100%)
Electronic reporting improves	2 (1%)	2 (1%)	18	88	103	213
accounts receivable			(8%)	(41%)	(48%)	(100%)
Electronic reporting enhances	2 (1%)	10	10	87	104	213
financial reporting		(4%)	(4%)	(41%)	(49%)	(100%)
Electronic reporting increases bank	2 (1%)	6 (3%)	15	64	126	213
and account reconciliations			(7%)	(30%)	(59%)	(100%)
Electronic reporting enhances	2 (1%)	10	7 (3%)	111	83	213
financial accountability		(4%)		(52%)	(39%)	(100%)

Key: VLE = Very low extent; LE = Low extent; ME = Moderate extent; GE = Great extent; VGE = Very great extent

The results in Table 4.5 show that highest percentage 109 (51%) of the respondents agreed that there was a great extent that electronic reporting improves corporate performance. The findings are consistent with (Swanson et al., 2018) who highlighted the key electronic accounting required for enhanced financial performance of organizations, similarly (Hegel,

Vol. 11, No. 4, 2022, E-ISSN: 2225-8329 © 2022 HRMARS

2012) in his study highlighted various electronic accounting practices that are important in ensuring enhanced financial control in organizations.

On whether electronic reporting enhances accounts payable, majority 117 (55%) of the respondents agreed that there was a great extent that electronic reporting enhances accounts payable in public secondary schools in Narok county. On whether electronic reporting improves accounts receivable, majority 103 (48%) of the respondents agreed that there was a very great extent that electronic reporting improves accounts receivable. This indicates that through electronic reporting there is enhanced dept collection. For organizations to enhance their dept collection they should put in place a compressive electronic reporting system. This supports Brinkerhoff (2011); Hendrickse (2018) who agreed that effective electronic reporting enhances accounts receivables.

On whether electronic reporting enhances financial reporting, the majority 104 (49%) of the respondents agreed that there is a very great extent that electronic reporting enhances financial reporting. This therefore indicates that the organizations have to embrace electronic reporting for effective financial control. It was further noted that electronic reporting increases bank and account reconciliations since, majority 126 (59%) of the respondents agreed that there was a very great extent that electronic reporting increases bank and account reconciliations. This indicates that for effective bank and accounts reconciliation organizations need to put in place an effective electronic reporting system. This supports the findings of (Brinkerhoff, 2011) and (Hendrickse, 2018) who also noted that effective accounts and bank reconciliation enhances financial control in community support fund organizations. Similarly, majority of the respondents 111 (52%) agreed that there was a great extent that electronic reporting enhances financial accountability in public secondary schools in Narok county. This gave the impression that effective financial control is determined by an effective electronic reporting in the organization. This supports the findings of other studies such as Department of Social Development (2021); Behn et al (2010); Hendrickse (2018) Brinkerhoff (2011) that electronic reporting systems need to be developed, no matter how simple and basic, and maintained by an organization's office bearers to ensure the appropriate use of resources.

The findings were subjected to further analysis using Pearson's Correlation so as to establish the relationship between electronic reporting and financial control in public secondary schools in Narok county. The results are presented in Table 4.6.

Table 4.6

Pearson's Correlation Analysis between Electronic Reporting and Financial Control

		Control	
Electronic Reporting	Pearson Correlation	.621**	
	Sig. (2-tailed)	.000	
	N	213	

Source (Author, 2021)

The results in Table 4.6 show that there is a high positive and statistically significant correlation (r= 0.621, p- value = 0.000) between electronic reporting and the financial control in public secondary schools in Narok county. This means that electronic reporting is necessary for enhanced financial control in public secondary schools in Narok county.

Vol. 11, No. 4, 2022, E-ISSN: 2225-8329 © 2022 HRMARS

The study further sought to establish the effect of electronic reporting on financial control in public secondary schools in Narok county. This analysis was done using simple linear regression and the results are presented in Table 4.7.

Table 4.7
Regression Coefficients for Electronic Reporting

Beta	R Square	F	t-value	Sig.
.719	.386	132.382	11.506	0.000

This was necessary in testing the null Hypothesis which was stated as:

**H<sub>o</sub>:** There is no significant effect of electronic reporting on financial control in public secondary schools in Narok county.

From table 4.7 it is noted that the goodness of fit for the regression between electronic reporting and financial control in public secondary schools in Narok county was satisfactory. An R squared of 0.386 indicates that 38.6% of the financial control in public secondary schools in Narok county is explained by electronic reporting. The F- value of 132.382 and P< 0.05 indicates that electronic reporting plays a significant role in influencing the financial control in public secondary schools in Narok county. A t- value of 11.506 which was greater than the critical t-value together with a P- value which was less than 0.05 led to the rejection of the null hypothesis that there is no significant effect of electronic reporting on financial control in public secondary schools in Narok county. The study thus, concluded that electronic reporting was a significant factor affecting financial control in public secondary schools in Narok county.

#### Conclusion

The study concluded that electronic reporting has an influence on the financial control in public secondary schools in Narok County. Therefore, Public secondary schools that seek to enhance their financial control should ensure that appropriate electronic reporting systems are adopted.

#### **Research Recommendations**

Electronic reporting significantly affects financial control in public secondary schools in Narok County. The study recommended that public secondary schools that seek to enhance their financial control should consider adopting electronic reporting because it enhances transparency and accurate reporting.

#### References

Amudo, H., & Inanga, G. (2019). The Impact of Information Technology on the Internal Audit Process in Jordan, Master Degree, Amman Arab University for Graduate Studies, Faculty of Managerial and Financial Graduate Studies, Amman, Jordan.

Behn, B. K., DeVries, D., & Lin, J. (2010). The Determinants of Transparency in Nonprofit Organizations: An Exploratory Study. *Advances in Accounting*, 26(1), 6-12.

Brinkerhoff, D. W. (2001). *Taking account of accountability: A conceptual overview and strategic options.* Washington, DC: US Agency for International Development.

- Vol. 11, No. 4, 2022, E-ISSN: 2225-8329 © 2022 HRMARS
- Buchheit, R., & Parsons, M. E. (2016). *Public Financial Management Reform in the Middle East and North Africa: Individual economy cases.* World Bank.
- Carol, M. (2012). Accounting for electronic reporting effects on financial performance of public institutions in Tanzania. *The Journal of management and finance*, 120(8), 1454-1460.
- Collins, R., & Collins, M. (2017). Integrated Financial Management Information Systems: Guidelines for effective implementation by the public sector of South Africa. *SA Journal of Information Management*, 14(1), 9-20.
- Dreytus, I. (2019). Accounting and financial control in non-profit making organizations. *International Journal of Business and Management*, 13(7), 2613-2626.
- Ebrahim, P. (2013). Electronic invoicing as a platform for exchanging accounting information the electronic accounting reference concept. Helsinki: Aalto University School of Economics.
- Frumkin, H. N. (2013). A survey of the extent of implementation of integrated financial management information system (IFMIS) as a tool for sustainable financial management in government, Unpublished Doctoral dissertation, of University of Nairobi.
- Graham, S. N., & Rosman, J. H. (2015). The impact of implementation of e-accounting system on financial performance with effects of internal control systems. *Research Journal of Finance and Accounting*, 4(11), 17-28.
- Gordon, C., Bowornwathana, B., & Jones, L. R. (Eds.). (2010). The many faces of public management reform in the Asia-Pacific region. *Emerald Group Publishing*.
- Hendrickse, R. F. (2008). Governance and Financial Sustainability of community support funds in South Africa. Unpublished Doctorate Thesis.
- Larson, B. W., & Pyle, S. C. (2018). Electronic reporting and commercialization orientation effects on financial performance. *Journal of business research*, 59(6), 679-685.
- McBride, D. (2010). On and off the net: Scales for the social capital in an online era. *Computer Mediated Communication journal*, 11, 597-621.
- Nweze, H. W. (2008). Internal Factors Affecting Procurement Process of Supplies in the Public Sector; a Survey of Kenya Government Ministries. Unpublished MBA research project, JKUAT.
- Parsons, T. (2017). The effect of automated service quality on Australian banks' financial performance and the mediating role of customer satisfaction. Marketing Intelligence & Planning.
- Ryan, D. (2002). Local funds: potential to allow donor agencies to support community development and poverty reduction in urban areas. *Environment & Urbanization journal Vol.* 14.
- Schnelder, C. (2019). The many faces of public management reform in the Asia-Pacific region. *Emerald Group Publishing*.
- Swanson, N. H., Hunson, F. K., & Ross, J. N. (2018). "Accounting," (4th ed.). New Delhi: South-Western Publishing Co.
- Theofanis, G., Hunson, F. K., & Ross, J. N. (2011) Financial Control and Accountability Toolkit. Civicus. *Computer Mediated Communication journal*, 101, 593-628.
- Welsch & Short. (2017). From Shouting to Counting: A New Frontier in Social Development, Participation and Civic Engagement Group, Social Development Department, World Bank