

**EFFECT OF COMPUTERIZED ACCOUNTING SYSTEMS ON FINANCIAL
CONTROL IN PUBLIC SECONDARY SCHOOLS IN NAROK COUNTY**

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DECLARATION

This research project is my original work and has never been presented for a degree or any other award in Maasai Mara University or any other institution.

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DEDICATION

This work is dedicated to Joan and Hellen.

ACKNOWLEDGEMENT

I sincerely appreciate the effort of my supervisors Dr. Edmund Gathuru and Dr. Patrick Gudda who made valuable contributions to this noble course. I also thank my family for their support and understanding when I was unavailable to spend time with them. Finally; I thank my classmates, colleagues and friends for their constant encouragement. Thank you all!

ABSTRACT

The development of information and technology has made manual accounting techniques steadily unsuitable for decision-making. In order to ensure effective and efficient information flow in the recording, processing, and analysis of financial data, both public and private sector companies in emerging and established economies consider computerized accounting information systems as a vehicle. This study's main objective was to determine how computerized accounting systems affected financial control in Narok County's public secondary schools. The specific objectives were: to establish the effect of electronic transaction processing on financial control in public secondary schools in Narok county, to analyze the effect of electronic reporting on financial control in public secondary schools in Narok county, to find out the effect of electronic audit on financial control in public secondary schools in Narok county and to establish the effect of electronic payroll on financial control in public secondary schools in Narok county. The study used a descriptive survey design. The study targeted a population size of 656. A sample size of 240 officers in public secondary schools in Narok County was used. The study used primary data. Data was collected using a questionnaire. The data was analyzed using descriptive statistics for frequency and percentages, Pearson correlation analysis, simple linear and multiple linear regression using SPSS version 23 to summarize and classify data, to establish the relationship between the variables, to determine the effect of independent variables on dependent variable and to determine the overall effect of all the independent variables on financial control. The study established that electronic transaction processing was an important factor in enhancing financial control in public secondary schools ($r=0.639$, $p\text{-value} = 0.000$), the study also established that electronic reporting was important in enhancing financial control in public secondary schools ($r = 0.621$; $p\text{-value} = 0.000$). The study further noted that electronic audit was important in enhancing financial control in public secondary schools ($r = 0.684$; $p\text{-value} = 0.000$). On the effect of electronic payroll on financial control majority of the respondents agreed that it has an influence on financial control ($r = 0.670$; $p\text{-value} = 0.000$). The hypothesis of each of the four factors was tested using simple linear regression analysis, where all the four null hypotheses were rejected based on the t -values which were all greater than critical t -values. There was a general perception from most of the accounting officers that sound financial control in public secondary schools was influenced by electronic transaction processing, electronic reporting, electronic audit and electronic payroll. The study therefore concluded that public secondary schools should ensure that appropriate computerized accounting is adopted to enhance sound financial control. The findings of the study will assist in the formulation of appropriate policies on sound financial control for not only public secondary schools in Narok county but for all other public secondary schools in Kenya. The was limited to Public secondary schools and therefore the results might not be generalized to other public sectors. Therefore, a similar study incorporating other public sectors should be conducted.

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ABBREVIATIONS AND ACRONYMS

ANOVA:	Analysis of Variance
ATM:	Automated Teller Machines
CAS:	Computerized Accounting System
CAIS:	Computerized Accounting Information System
DCs:	Developing Countries
FMIS:	Financial Management Information System
GAS:	General Auditors Software
HR:	Human Resources
HRIS:	Human Resources Information System
HRM:	Human Resources Management
ICAN:	Institute of Chartered Accountants
ICT:	Information Communication and Technology
IFMS:	Integrated Financial Management System
NGOs:	Non-governmental Organizations
POS:	Point of Sale
SPSS:	Statistical Package for Social Science
TAM:	Technology Acceptance Model
USA:	United States of America

OPERATIONAL DEFINITION OF TERMS

Financial control: The systems and procedures used to ensure that money is handled properly are referred to in this study as financial control.

Internal control systems: The entire collection of financial and other controls put in place by management to run the company's operations in an organized and effective manner, guarantee that management rules are followed, protect assets, and ensure that records are as complete and accurate as feasible (Millichamp, 2000). Internal control systems in this study refers to authorization, segregation of roles, financial controls and recording controls.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Computerized accounting continues to have many distinctive qualities since accounting software enables organizations and governmental bodies to do any type of accounting job (Ebrahim, 2013). Accounting in itself is a system made up of diverse controls, processes and procedures for the summarization, classification, recording and collection of financial data to help businesses, individuals, governments and other entities make decisions and understand their financial status. Computerized accounting is carried out via computerized accounting software and computers in the recording, analysis and storage of financial and accounting data (Cetorelli & Goldberg, 2017).

Computerized accounting is designed to automate and integrate all the business operations and helps the company handle all the business processes easily and cost-effectively. With computerized accounting the company will have greater visibility into the day-to-day business operations and greater access to vital information automatically (Graham & Rosman, 2015). It can handle huge volumes of transactions faster or more efficiency. The advantages from the use of these systems have led many to conclude that computerized accounting systems in corporate reporting are the 'engine of growth' in business organizations (Soudani, 2017). Financial reports are an essential source of information for the decision-making processes of economic agents. It allows decision makers to judge the results of business strategies and activities in objective monetary terms to evaluate the financial performance of a business (Burfield & Van, 2017).

1.1.1 Computerized Accounting System

The use of computer-based software to enter, process, store and output accounting data is known as a computerized accounting system. With the help of this application, businesses will be able to use computer programs to carry out jobs that were previously done manually thanks to the always improving technology (Gordon et al., 2010). In order to make decision-making easier, a computerized accounting system incorporates the computerization of accounting information systems. These provide a number of advantages, including expediency in doing routine tasks, accuracy in reporting, speedy analysis and timeliness. The business documents, data, reports, and processes that an organization uses to record transactions and report their impacts make up an accounting system, according to Larson and Pyle (2018). According to Collins and Collins (2017), preserving a written record of transactions is possible through the use of an accounting system. Every time money is spent and every time it is received by an organization, receipts are requested. Institutions that use funding to provide services to the general public are required by law and ethics to be accountable. Accountability can include both a detailed report of operations and an explanation of how resources are used. (Gordon et al., 2010).

An accounting system is created to gather, process, and report recurring financial data about the institution, according to Welsch and Short (2017). The majority of government entities, according to Keating and Frumkin (2013), have disorganized accounting systems and inadequate financial management. One of the main criteria is the timely and accurate preparation of financial reports, but many government organizations struggle with this because they lack experienced accountants. According to Ebrahim (2013), government institutions use both instruments and procedures to address concerns of accountability.

Stakeholders with significant influence on a government regulator create the tools. Annual reports, financial statements, performance evaluations, quarterly reports, independent reviews, and audits are common tools. A strong accounting system that is suitable for that business serves as the foundation of fiscal management, according to Schnelder (2019). Standards and a framework for accounting processes must be established in order to provide consistent financial accountability and management. According to Keating and Frumkin (2013), one must comprehend a financial reporting system's aim in order to assess its performance.

1.1.2 Financial Control System

The methods, procedures, and techniques used by an organization to monitor and manage the use, allocation, and direction of its financial resources are known as financial controls. Resource management and operational effectiveness in every organization start with financial controls (Graham & Rosman, 2015). Financial control, according to Saleemi (2008), is a system set up by the management to conduct the operations of the organization in an orderly and effective manner, protect the assets, and ensure as far as is practical the completeness and correctness of the records. The primary factor in managing an organization is the control environment. This is so that management's policies and attitude toward the value of internal audit in the economic unit may be seen (Theofanis et al, 2011). Control environment, according to Sudsomboon and Ussahawanitchakit (2009), is the cornerstone of all other financial control elements. Financial control contributes to lowering the prevalence of fraud in organizational operations. The effectiveness and quality of the control environment affect an entity's financial control system (Amudo &

Inanga, 2019). Therefore, a public institution's ability to operate effectively depends heavily on the environment that is provided for adequate control.

Identification and analysis of pertinent hazards connected to the accomplishment of management objectives constitute risk assessment (Theofanis, et al 2011). Similar to this, Sudsomboon and Ussahawanitchakit (2009) define risk assessment as the process of locating and assessing management-related risks to the creation of financial statements that would be presented fairly in accordance with generally accepted accounting principles. To accept a risk, management must carefully assess its magnitude and work to keep it within predetermined bounds. Therefore, in order to take the appropriate steps, public institutions must periodically evaluate the level of risk they are facing. Policies, practices, and processes used in financial control activities ensure that financial directions are correctly carried out (Aikins, 2011; Rezaee, Elam & Sharbatoghlie, 2001). The proper documentation of these policies and procedural rules aids in determining not only how the financial control activities are to be carried out but also provides sufficient data for the auditor to examine in order to determine whether the overall control design over financial management practices is adequate (Aikins, 2011). These control measures make sure that all necessary steps are taken to address risks in order to meet corporate objectives. Segregation of duties, daily cash deposit, bank reconciliations, and limiting access to check stock are a few examples of control measures. In order to achieve the goals of financial reporting, the process of discovering, capturing, and transmitting pertinent information in an acceptable manner and within a set timeline is referred to as "information and communication" (Aldridre & Colbert, 2014). However, effective communication should take place across the board in all divisions of the firm (Theofanis et al, 2011). Due to its

significance in affecting the working relationships inside the business at all levels, information and communication have received attention in contemporary literature on financial control system frameworks (Amudo & Inanga, 2019).

As a result, in order to enable staff to carry out their duties with regard to aim achievement, such information must be shared throughout the entire organization. It is generally acknowledged that in order to evaluate the caliber and efficacy of the system's financial performance over time, financial control systems must be adequately monitored. Monitoring guarantees that the conclusions of audits and other evaluations are made as soon as possible. Monitoring operations guarantees that the financial control system is operating effectively, according to (Theofanis et al., 2011).

1.1.3 Computerized Accounting and Financial Control Systems

Theoretically, a computerized accounting system should lead to a high level of financial control. Using computerized accounting systems to do accounting tasks is simple, according to Penttinen (2015). When using a computerized accounting system, the double entry principle can be largely automated when posting transactions to the ledger. Evidence from academic studies suggests that when governments decide how much money to give to public organizations, they take accounting information into consideration (Parsons, 2017; Buchheit & Parsons, 2016). Five best practice suggestions for annual reports in the public sector were made by Gordon and colleagues in 2010: completeness, accessibility and transparency in financial reporting, full disclosure and relevance.

According to McBride (2010), managers and accountants cannot easily complete statutory and public reporting obligations, such as profit and loss account, balance sheet and

customized reporting, without the usage of computerized accounting systems. The infrastructure is in place, and this can be done fast and with little effort. Computerized accounting systems make auditing easier and provide greater access to essential data, like check numbers, payment details and other transactions, which helps to reduce the time needed to provide this kind of information and supporting documentation during auditing. Organizations are not benefiting from computerized accounting systems, it was highlighted in a 2003 European Union audit, since the systems have remained inaccurate due to an increase in interruptions caused by system failure or breakdown, untimeliness, and reliability concerns. In other research, computerization reduces transaction time, which improves financial reporting quality by enhancing the production of timely, accurate and trustworthy data (Lewis, 2019).

1.2 Statement of the Problem

The development of information and technology has made manual accounting techniques steadily unsuitable for decision-making. In order to ensure effective and efficient information flow in the recording, processing and analysis of financial data, public and private sector companies in both emerging and established countries consider Computerized Accounting Information System (CAIS) as a means. A smooth and effective information flow improves managerial judgment, which increases the firm's capacity to meet corporate and business plan goals. The management of complex Financial Management Information System (FMIS) projects demands a high level of management skill, according to the experience of industrialized nations. But in developing nations this is often in short supply. It's possible that top administrators lack computer literacy. As a result, the ability to manage and use FMISs rather than their technological creation is

frequently the limiting factor when adopting them. The majority of public sector finances are mismanaged and their accounting procedures are disorganized. Many governmental entities struggle to produce accurate and timely financial reports because they lack skilled accountants. The majority of Kenya's public institutions are so preoccupied with funding issues and illiteracy that investing in the future becomes a luxury. Financial information is stated in monetary units and has a close relationship with the financial accounting system. There aren't many studies on computerized accounting systems in Kenya. The impact of computerized accounting systems on financial control in Kenyan public institutions, particularly with regard to electronic transaction processing, electronic reporting, electronic audit and electronic payroll, hasn't been studied, nevertheless. Therefore, the purpose of this study was to address the following question: Does Narok County's public secondary schools' use of a computerized accounting system have an impact on their ability to maintain financial control?

1.3 Research Objectives

1.3.1 General Objectives

The general objective of the study was to establish the effect of computerized accounting systems on financial control in public secondary schools in Narok County.

1.3.2 Specific Objectives

The study sought to achieve the following specific research objectives:

- i. To examine the effect of electronic transaction processing on financial control in public secondary schools in Narok County.
- ii. To establish the effect of electronic reporting on financial control in public secondary schools in Narok County.

- iii. To assess the effect of electronic audit on financial control in public secondary schools in Narok County.
- iv. To determine the effect of electronic payroll on financial control in public secondary schools in Narok County.

1.4 Research Hypotheses

This study sought to test the following hypotheses:

H₀₁ There is no statistically significant effect of electronic transaction processing on financial control in public secondary schools in Narok County.

H₀₂ There is no statistically significant effect of electronic reporting on financial control in public secondary schools in Narok County.

H₀₃ There is no statistically significant effect of electronic audit on financial control in public secondary schools in Narok County.

H₀₄ There is no statistically significant effect of electronic payroll on financial control in public secondary schools in Narok County.

1.5 Significance of the Study

In both private and public institutions in Kenya, there is an increasing need for computerized accounting systems to improve the accounting process. The study's findings will enlighten policymakers by demonstrating how computerized accounting affects the financial control of public institutions and by identifying mechanisms that regulators can use to enhance the performance of these businesses, which serve as the foundation for achieving Vision 2030's goals for economic growth and development. The study will also focus on assisting organizations and businesses that have not yet adopted computerized accounting. In order to improve their financial control, the management of these businesses

and organizations will be able to choose the computerized accounting system that is best for them. The study's conclusions will also serve as the basis for developing a successful computerized accounting procedure. The report will support the Kenyan government in developing and implementing operational efficiency initiatives. State businesses will learn from the study's findings about the advantages reaped and how to reap even more advantages for the best possible financial control. The study's conclusions will be utilized as a guide by students and academics who might desire to pursue studies in a related or connected subject. By emphasizing similar issues that need further research and conducting a review of the empirical literature to identify the study gaps, the study will also be helpful to academics and scholars in identifying additional research areas on other subject matters.

1.6 Limitations of the Study

This study was constrained by the reality that numerous other factors might have an impact on Kenya's public institutions' ability to govern their finances. These additional variables include current political and economic conditions in the economy. These elements might be outside the control of the Narok County public secondary schools. The research also covered a crucial area of the institutions. Due to this some accounting officers felt that the information they were being requested to give was too sensitive and would end up revealing their weaknesses thus leading to the withdrawal of the information.

1.7 Delimitation of the Study

The research covered a critical area of public institutions. Due to this some accounting officers felt that the information that they were being requested to give was too sensitive. This was overcome by issuing an introductory letter and also assuring them that the

information was to be used for academic purposes only also the confidentiality of the information was guaranteed.

1.8 Scope of the Study

This study assessed the effect of computerized accounting on financial control in public secondary schools in Narok County. The study assessed the effect of electronic transaction processing, electronic reporting, electronic audit and electronic payroll on financial control of secondary schools in Narok County. The study used primary and secondary data. Primary data was collected through administration of questionnaires while Secondary data was collected from schools' financial records for a period of 10 years (2012 – 2021).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

A review of the pertinent literature is presented in this chapter. Theoretical framework, conceptual framework, empirical investigations, and research gaps are all covered in this chapter.

2.2 Theoretical Framework

A theoretical framework offers specific viewpoints through which the subject might be examined. The systems theory, technological acceptance model and positive accounting theory served as the study's theoretical pillars.

2.2.1 Systems Theory

Bertalanffy (1968), a biologist, expanded on systems proposed by Kaufmann (1966) to explain historical history as a dynamic process. Bertalanffy (1968) stated that as everything is connected, we should investigate this connection in order to comprehend the world. The systems theory method of analysis entails breaking down the phenomenon under study, which needs to be explained, before formulating explanations that account for the behavior of each component's properties separately and finally synthesizing these explanations into a comprehensive understanding of the whole. General systems theory experiences stages of mockery and neglect, just like other cutting-edge conceptual frameworks. However, it has profited from the concurrent development and ascent to prominence of cybernetics and information theory. Systems theory is relevant to this study because it encourages modeling complex entities resulting from multiple components interacting while abstracting from certain component and structure details and concentrating on dynamics that define the

characteristics functions, properties, and relationships that are internal or external to the system. The computerized accounting system incorporates aspects from accounting concepts with the notion of information systems to record, process, analyze, and produce financial information for its users to use in making economic decisions (Gelinas et al, 2015). Since CAS involves numerous interdependent components that work together to provide useable results, such as input, processing, storage, users, and output, it is related to systems theory.

2.2.2 Technology Acceptance Model

This model explains how customers accept and use an innovation. Davis established the Technology Acceptance Model (TAM) in 1989. According to this concept, once a client receives an alternative innovation, various factors affect their decisions regarding the means and timing of use. This takes into account its ostensible usefulness and convenience. TAM upholds a well-established causal chain of sincere conduct convictions, goal, and disposition. Social clinicians created this based on the idea of anticipated activity. Davis' analysis identifies two crucial components: seen convenience and seen helpfulness (Davis, Pallister & Foxall, 2002). TAM is frequently used and makes a significant contribution to the creation of a prediction of a person's technology usage (Fishbein & Ajzen, 2010). Perceived ease of use affects how beneficial something is perceived and whether someone plans to adopt it (Davis, 1989).

TAM has a number of drawbacks, including the initial design goal of parsimony and generality (Dishaw & Strong, 1999), disregarding the organization's non-organizational surroundings, and omitting the elements that temper the adoption of ICT (Davis & Venkatesh, 2000). Research on the acceptability of technology has been impacted by this

hypothesis. TAM was used in this investigation to ascertain how the use of technology advancements in public institutions is impacted by the availability of computerized accounting.

2.2.3 Positive Accounting Theory

Watts and Zimmerman created the positive accounting theory in 1978. The theory aims to forecast and clarify why managers choose some accounting techniques over others. Positive theories are based on factual evidence and focus on explanation and prediction (what has happened or will happen) (Ryan et al, 2002). They seem to provide accounting scholars the possibilities, the validity of Johnson and Kaplan's (Relevance Lost) criticisms of management accounting practice because they are based on actual facts. In order to address problems with financial management accounting, this type of research makes use of numerous theoretical frameworks. In order to provide a variety of insights into a wide range of management accounting research problems, many research methods and methodologies are used together rather than competing with one another (Ryan et al, 2002).

2.3 Conceptual Framework

The conceptual framework served as the study's direction. Four independent variables and one dependent variable made up the conceptual framework (Figure 2.1). The independent variables were electronic transaction processing, electronic reporting, electronic audit and electronic payroll. The dependent variable was the financial control of government secondary schools in Narok county.

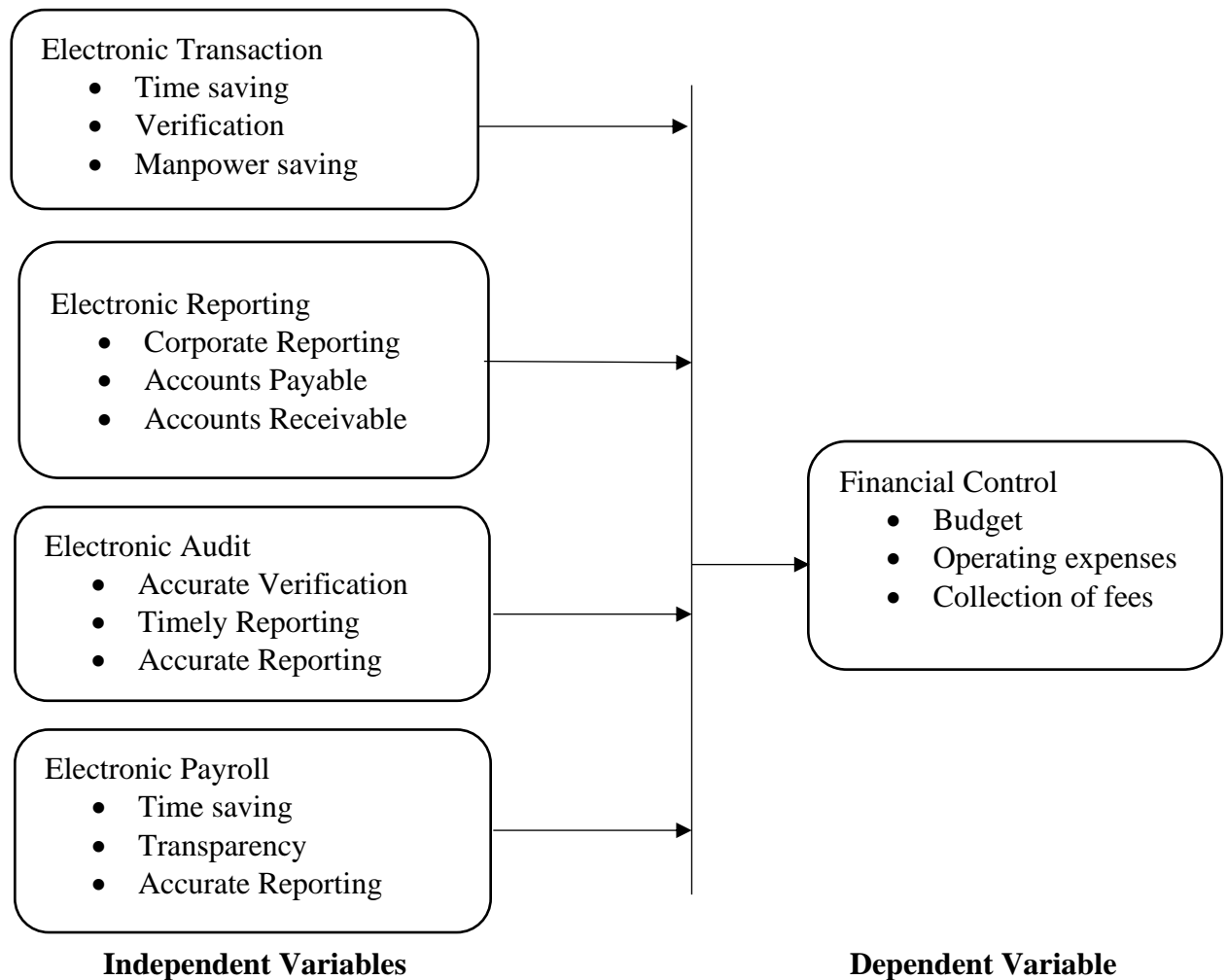


Figure 2.1 Conceptual Framework

2.3.1 Electronic Transaction Processing and Financial Control

In order to start, approve and hasten the transfer of money between two parties, a payment infrastructure is made up of a network of connected businesses (Scholnick et al., 2018). These functions are successfully completed by an effective payment system at a reasonably modest cost to the parties concerned. To enable economic transactions, payment systems exist in a variety of shapes and sizes. High value payment systems and the retail payment system are the two primary categories of payment structure (Scott, 2015). Retail payments are exchanges carried out by a number of different clients. This applies to payments made

between individuals, businesses, and other individuals. It involves a variety of payment methods, including those used for remote transactions and at the point of sale. Additionally, it utilizes private networks heavily, including automated clearing houses and credit card companies (BIS, 2003).

According to Rogers (1995), the volume of the retail payments industry at the national level is determined by the number of retail transactions. The quantity of payment devices, such as ATMs and points of sale, as well as the amount of online and mobile banking usage, affect the adoption level. The settlement time and financial costs of processing client payments have both decreased thanks to new payment technologies that take the shape of electronic ways (Humphrey et al., 2006). Bank operating costs have been decreased as a result of the transition from conventional paper-based payment systems to electronic ones. Financial performance will improve as a result of the combination of advanced payment methods and the lower operating costs brought about by the transfer from traditional payment methods to electronic payment approaches.

2.3.2 Electronic Reporting and Financial Control

Dreytus (2019) asserts that management may greatly benefit from reports produced by different streams of accounting, such as cost accounting and management accounting, in order to make wise judgments. A bookkeeper can perform basic accounting tasks, while skilled accountants with credentials like the ICAN manage complex accounting (Institute of Chartered Accountants). All accounting certifications are the result of many years of education, difficult exams, and at least a few years of real-world accounting experience. Eze (2010) defined computerized accounting as the use of computer and computer software technology in commercial accounting.

According to Nweze (2008), computerized accounting entails carrying out routine accounting tasks, conducting accounting research, and providing effective accounting training and education through a variety of computer-based and internet-based accounting tools, including digital toolkits, various internet resources, international web-based materials, institute and company databases that are internet-based, web links, internet-based accounting software, and electronic financial spreadsheet tools. By enhancing various accounting tasks like those related to accounts payable, accounts receivable, financial reporting, and bank and account reconciliations, computerized accounting enhances an organization's overall performance. The independent indicators for electronic reporting are those mentioned above.

2.3.3 Electronic Audit and Financial Control

According to Braun and Davis (2013) auditors should use GAS (General Auditors Software) in auditing processes and parallel imitation, for their impact on the efficacy of auditing process, and its easiness and its swiftness in testing data. The auditor can give an opinion, not only at the end of the year, but also can give his opinion at the quarter or half of the year. Bible et al. (2015) states that auditors in computerized work environments are less capable to specify mistakes than those auditors working in traditional paper environments. The auditors working in computerized work environments require experiences, efforts and knowledge in computerized methods that suit with work environment.

According to Jaber (2019) there is no statistically significant differences between computerizing Accounting Information Systems and Perpetuating auditing path which preserves and perpetuates the element of documentation, follows up and records events and

accounting processes; as the designer and analyzer of the systems should know the importance of perpetuating auditing path, and that leads to saving all supervision and control requirements. Khaddash and Syam (2013) auditors perceive the importance of using Information Technology in Auditing as it has more effect in providing accuracy, strengthening efficacy and reducing the cost, but their actual use has not reach the required limit due to some obstacles, such as: the use of Traditional Accounting Systems by some companies, some auditors lack experience and skill, and the absence of obligating legislations that organize the use of Information Technology in Accounting and Auditing.

2.3.4 Electronic Payroll and Financial Performance

Hegel contends that conducting wage reviews and administering salaries are crucial aspects of financial control. Before the introduction of automated payroll, creating employee pay slips was mostly a manual or administrative task (Hagel, 2012). The first significant application of technology to an HR-related issue came with the introduction of using it to manage payroll. At the same time, it was acknowledged that these payroll systems frequently contained a helpful database of employee information, including information on positions, salary, expenses, absence rates, and personal information. Electronic payroll interfaces can calculate salaries and perform a variety of ancillary tasks, like creating pay slips and payroll reports, when combined with payroll management (Hagel, 2012). An organization may give its employees 24/7 access to money and always pay them on time with a comprehensive payroll pay card, eliminating the need for time-consuming trips to the bank and more (Hagel, 2012).

According to a survey by Blair et al. (2019), due to subpar payroll management, newly hired employees were frequently not paid for three to four months and, in some rare

situations, for a complete year. Some former employees passed away without getting a pension. Blair et al. state that as of 2019, the process for locating ghost employees—those who were still paid but were no longer contributing to the company's operations due to retirement, termination, death, or other similar reasons—and stopping their salaries frequently took an average of six months, in some instances taking close to two years. For years, the performance review has been used to determine annual wage increases in terms of remuneration. Although traditionally done by hand, this method has undergone a significant lot of debate and change (Avebrok, 2012). The strongest influence on certain behaviors is undoubtedly compensation, which operates differently depending on the occupational category.

Base compensation is a wonderful tool for boosting general employee satisfaction and performance, while incentive compensation is a terrific tool for boosting sales and particular performance targets (Rietsema, 2015). A corporation suddenly becomes capable of managing its employees by taking a look at payroll concerns when it makes an affordable computerized payroll system investment. In addition to these software programs, businesses also spend money on computerized payroll systems that enable them to utilize all of the labor force's potential, including the diverse experiences, abilities, and skills of every employee (Rietsema, 2015).

2.3.5 Financial Control

The core of financial management is the idea of financial control (Alin et al., 2016). Financial control makes sure that an organization's finances are properly managed. Without financial control, assets are at danger, money may not be spent in line with the organization's goals or the wants of the community, and managers' competency and the

organization's integrity may be questioned (Alin et al., 2016). Designing methods and procedures to meet the specific requirements of a business is how financial control is achieved (Alin et al., 2016). A comprehensive financial policy must be implemented for the aim of financial control and accountability of public institution money. The organization budget is another crucial component of financial management. An estimate of revenue and expenses for a specific time period constitutes a budget (Alin et al., 2016).

In Kenya, the majority of public institutions are unable to fund their intended projects, with less than 2% of them being able to fund over 75% of their intended target projects, according to a report by Odindo (2019). A third of the organizations, or slightly more than half, were only able to cover 25% of the intended target projects, according to the survey. The majority, or just over half, of public institutions were able to cover between 25% and 50% of the planned target projects. The remaining projects made up 51–75% of the total. A major factor in this issue was ineffective public money management.

2.4 Empirical Review

In a study published in 2014, Sugut (2014) sought to determine how computerized accounting systems affected the financial reports of non-governmental organizations (NGOs) in Nairobi County. The questionnaires were the primary tool for gathering data. Both descriptive and inferential analysis were applied to the analysis of quantitative data. Content analysis was used to conduct a qualitative study of the data obtained from the open-ended questions and document analysis. 100 NGOs operating in Nairobi County made up the study's sample, which was chosen using a non-proportional quota sampling method. The variable was taken into account through Analysis of Variance and Percentages, a multivariate regression model. The Statistical Package for Social Sciences

(SPSS) software was used to examine the data acquired using descriptive statistics, with a focus on regression analysis.

The study discovered that, when all other independent variables were set to zero, an increase in transparency led to an increase in financial report quality of 0.478, whereas an increase in leadership led to an increase in financial report quality of 0.143, and an increase in computerized accounting systems led to an increase in financial report quality of 0.0915 for NGOs. This suggests that leadership, followed by transparency, and finally computerized accounting systems, are the three factors that most influence the quality of financial reports of NGOs. The study suggests that NGOs should invest in computerized accounting systems to boost the speed, timeliness, accuracy, and relevance of their organizations' financial reporting in order to guarantee that they have high-quality financial reports. The legislative frameworks that strike a balance between the rights to disclosure and confidentiality should be followed by the finance management as well. In order to hire skilled personnel to raise the standard of work in the companies, the management should make sure that they have an open recruitment policy for staff that is based on merit. The survey, however, was only done on NGOs in Nairobi County. The study is unable to represent the public sector.

In comparison to commercial organizations, most public institutions around the world, according to Davis (2013), have poor financial control. Financial management practices might be held responsible for the weak financial control. Strong internal control systems are necessary for the institutions to implement effective financial management practices. Regarding the link between internal control system and financial performance, actual

research findings are scarce. The extent to which employees in positions managing cash fail to take regular leave and the lack of rotation of staff handling particularly sensitive areas in the finance and administration department are just a few of the flaws in public institutions' rules, procedures, and internal audit. The major goal of Davis' (2013) study was to determine how internal control systems affected the financial performance of public institutions of higher education in Nairobi City County. Determine the impact of control activities, risk assessment, control environment, information and communication, and monitoring on the financial performance of institutions of higher learning in Nairobi City County was one of the study's particular objectives. Agency theory, stewardship theory, positive accounting theory, and attribution theory served as the study's main pillars. A descriptive research design was employed in the study. The target population of this sample study was the various employee categories in various departments of public institutions of higher learning in Nairobi City County, Kenya. 96 workers were included in the sample. Using both open-ended and closed-ended questionnaires, primary data were gathered from the sample population. The data analysis and information presented in statistical forms both made use of descriptive statistics.

In order to examine the link between the dependent and independent variables, a multiple linear regression was also performed. The study discovered that the financial performance of the institutions of higher learning in Nairobi City County, Kenya, is significantly influenced by the control environment, risk assessment, control activities, information, and communication as indicators of internal control systems. 99.1% of the changes in the institutions' financial performance were explained by the variables. The report suggests that institutions' internal control systems be strengthened and that organizational resource

accountability be upheld. The study, however, was only done in Nairobi County. Only institutes of higher education were the focus of the investigation. Computerized accounting was not included in the study as a component of financial control.

In their 2014 study, Wakiriba et al. intended to determine the impact of control action on financial management in Nyandarua County's Mirangine Sub County. A descriptive design was used for the study, which focused on 30 accounting, finance, and administrative staff members working for the local government in Mirangine Sub County. All participants in the research's census survey, which was used to collect data, made up the study sample. To gather information, a structured questionnaire was used. Data analysis employed both descriptive and inferential statistics. Tables and figures that included both descriptive and inferential results were used to present the study's findings. According to the study's findings, the public sector in Mirangine Sub County has an efficient internal control system that is defined by management commitment, supervision, and a distinct separation of duties. However, because the internal audit function is not properly extended to all the departments, there are flaws in the execution of financial controls. Regarding financial management, the study comes to the conclusion that, despite better asset use and classification of income and expenditures, the prudential use of financial resources in Mirangine Sub County is inadvisable. The study's ultimate finding is that there is a sizable beneficial association between financial management and control activities. The report suggests competency personnel profiling, the development of departmental information systems, and enhancing the generation of additional funds for the functioning of government departments.

However, the study was only conducted in Nyandarua county's Mirangine sub-county. Computerized accounting was not taken into account as a component of financial control in the study.

Braun & Davis (2013) studied the relationship between Computer-Assisted Audit Tools and firm performance. The data of the study were obtained from 90 expert auditors in GAS (General Audits Software) and work in official Auditing Offices in several states of USA. They have been chosen through an initial interview in order to find out experts in the abovementioned software. The study concluded that the auditor should use GAS (General Auditors Software) in auditing processes and parallel imitation, for their impact on the efficacy of auditing process, and its easiness and its swiftness in testing data; therefore, the auditor can give an opinion, not only at the end of the year, but also can give his opinion at the quarter or half of the year. The researchers recommend to increase auditors training on using computers in auditing process for their effect in increasing the validity of the results. However, the study was carried out in the United States of America which as different technological, economic and social environment from Kenya. The study was further limited to auditing only as a measure of financial control.

Bible et al. (2015) examined the effect of electronic audit environments on performance in Nigeria. In order to achieve the objective of the study a sample of 48 expert's auditors working in one of the four greatest auditing companies in the world has been taken; the researchers as well relied on the researches that reached to results that the electronic work environments are the most knowledge demanding than those paper traditional environments; this matter will negatively affect the auditor's performance. The study

concluded that the auditors in electronic work environments are less capable to specify mistakes than those auditors working in traditional paper environments. The auditors working in electronic work environments require experiences, efforts and knowledge in electronic methods suit with work environment. However, the study was carried out in Nigeria which has different context from Kenya. The study was limited to auditing only as a measure of financial control.

Jaber (2019) explored the Effect of Computerizing Accounting Information Systems in Perpetuating Auditing Path from Perspectives of Auditors and Employees in Information Technology in Jordan. The study relied on the questionnaire tool in collecting field data, and they have been distributed onto the whole population of the study that consists of (4) audit companies and (13) companies working in Information Technology Field– which have excellent classification– this study reached that there is no statistically significant differences between computerizing Accounting Information Systems and Perpetuating auditing path which preserves and perpetuates the element of documentation, follows up and records events and accounting processes; as the researcher recommends that the designer and analyzer of the systems should know the importance of perpetuating auditing path, and that leads to saving all supervision and control requirements. However, the study was limited to computerized accounting and auditing only. The study did not capture the effect of computerized accounting on overall financial control.

Al-Jabari (2014) focused on the Impact of Information Technology on the Internal Audit Process in Jordan. This study aimed to set a model or steps for performing effective auditing process in the light of accounting system depending on the computer, and how to

use the computer in supporting auditing process, this study relied on performing interviews with all auditors in Fast Link Company— amounting to (10) auditors—; whereas this study reaches that putting a model for performing auditing process within Electronic Accounting System distributes the company into sessions then the activities are determined in each session, after that the most important risks are determined in these activities; finally these risks are audited. This study reached that proving model's effectiveness in respect of taken time and reducing loses because it starts with the most important risks. The researcher recommends to start auditing with the most important risks due to its importance because falling in these risks lead to cause great loose for the company.

Khaddash and Syam (2013) Studied the Extent of Auditors Accepting to Use Information Technology", Field Study on Auditing Offices in Jordan. This study aimed to measure the extent of Jordan Auditors' perception of the importance of using Information Technology in Auditing Process, in addition to determining the extent suing it and the obstacles that limit this use; to achieve the objectives of the study, a questionnaire was developed and distributed onto a sample of auditors working at 10 big auditing offices in Jordan, their number is (125) auditors, 46 questionnaires are approved from 60 distributed questionnaires. This study concluded that the auditors perceive the importance of using Information Technology in Auditing as it has more effect in providing accuracy, strengthening efficacy and reducing the cost, but their actual use has not reach the required limit due to some obstacles, such as: the use of Traditional Accounting Systems by some companies, some auditors lack experience and skill, and the absence of obligating legislations that organize the use of Information Technology in Accounting and Auditing. The researchers recommend the necessity of strengthening the Auditors' perception and to

increase their contents in the importance of using Information Technology in Auditing Process because of the abovementioned characteristics (Accuracy, Efficacy, Reducing Cost). However, the study was carried out in Jordan which has different technological and economic environment from Kenya. The study was limited to adaptability of auditors to technology. the study failed to capture effect of adaptability of technology on financial control.

Hegel (2012) suggested that HRM's key duties include managing salaries and conducting compensation reviews. The requirement to handle numerous employees pay slips, which was primarily a manual or clerical task until the 1960s, gave rise to the first human resource technologies. The use of technology to manage payroll marked the beginning of the first significant application of technology to an HR-related issue. At the same time, it was acknowledged that these payroll systems frequently contained a helpful database of employee information, including information on positions, salary, expenses, absence rates, and personal information. HRIS payroll interface may calculate salaries and perform a variety of auxiliary tasks, including creating pay slips and payroll reports, when coupled with payroll administration. A HRIS could be integral to or closely related to an integrated financial management system (IFMIS). An organization can give its employees 24/7 access to cash and on-time pay no matter what by using a comprehensive payroll pay card. This eliminates time-consuming excursions to the bank for employees who are on vacation, sick leave, or the like (Hagel, 2012). The study, however, was only able to look at payroll.

In Swaziland, Uganda, and Rwandan government departments, a Blair et al. (2009) survey on addressing problems with the HRIS revealed that, as a result of poor payroll

management, newly hired staff were frequently not paid for three to four months and, in some extreme cases, staff were not paid for an entire year. Some former employees passed away without getting a pension. Many respondents reported that it frequently took an average of six months to identify ghost workers—workers who were still on the payroll but were no longer active in the workforce due to retirement, termination, death, and similar circumstances—and stop their salaries, with some cases taking nearly two years. For years, the performance review has been used to determine annual wage increases in terms of remuneration. Although this procedure has traditionally been carried out by hand, it has also undergone a great lot of dispute and change. The strongest influence on certain behaviors is undoubtedly compensation, which operates differently depending on the occupational category. Base compensation is a wonderful tool to drive overall employee happiness and performance improvement, whereas incentive compensation is a terrific tool to push sales and particular performance targets.

The measurement of performance improvements from year to year and the effect that compensation has on performance have been absent from all linkages between compensation and performance. The importance of integrating performance and HRIS to measure total compensation and rewards is understood by organizations that take an interactive approach to performance management and make sure that compensation is just one of many outcomes, which may also include promotion, new opportunities for learning and development, and other forms of recognition. Organizations who still use pay-for-performance as a once-a-year, requirement-meeting tool will soon learn that the war for talent and workforce shortages will necessitate an integrated process approach to pay-for-performance (Avebrok 2012).

When a business invests in a cheap HRIS, it immediately gains the ability to manage its personnel by focusing on two of the key elements: payroll and HR. In addition to these software options, businesses also spend money on HRIS modules that enable them to utilize all of their workforce's potential, including the diverse experiences, abilities, and skills of every employee, according to Rietsema (2015). In Kenya, a 2009 evaluation survey at the Ministry of Health, sponsored by the World Bank and USAID, found that nurses posted, particularly to rural areas, delayed reporting but continued to withdraw their salary since there were insufficient transfer and payroll posting procedures. Patients suffered unnecessarily as a result of this. It was also discovered that the Ministry of Health payroll contained a large number of "ghost" employees; these individuals had left the organization due to natural attrition, such as death, retirement, or service termination or resignation, but were still listed on the payroll due to a lack of efficient automation and integration of HR activities.

2.5 Research Gaps

According to the literature analysis, the study done in Kenya and other parts of the world focuses on various computerized accounting-related challenges. As a result, there hasn't been a lot of research on computerized accounting in Kenya, especially on the subject of control. In this study, the aspects that emerged but weren't explored in past examinations were examined. The following issues, according to (Hagel, 2012), led to the ineffectiveness of public institutions in delivering in-service support: staff information technology ignorance, money theft and sluggish financial reporting. Based on the aforementioned characteristics, the researcher created the study's variables. Additionally, public institutions must be used to carry out government and community projects; as a result, their financial

management must be strengthened. Therefore, it was necessary to conduct this study to determine how computerized accounting affected the financial control of public secondary schools in Narok County.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research design, target population, sample size and sampling methods, data collection tools and procedures, pilot study, validity, reliability, and data analysis are all covered in this chapter.

3.2 Research Design

The research used a descriptive survey design. This design involves the collection of quantitative information and describing categories of qualitative information. The advantage of the descriptive design is that it can lead to the acquisition of information that can be used to identify variables and hypothetical constructs which can be further investigated (Creswell & Creswell, 2017).

3.3 Target Population

Target population is the total or entire group of objects, events or individuals having a common observable characteristic (Mugenda & Mugenda, 2003). The target population for this study consisted of all accounting officers and officers working under the accounting officers in public secondary schools in Narok County. The total number of accounting officers and officers working under them in public secondary schools in Narok County was 656 (Narok County Education Office, 2021).

Table 3.1: Total 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)

3.4 Sample and Sampling Techniques

In order to obtain the appropriate representation from different categories of officials in government secondary schools, the researcher used stratified random sampling. In stratified random sampling, participants are chosen so that the population's existing subgroups are more or less replicated in the sample (Mugenda & Mugenda, 2003). When stratification is done properly, each stratum is homogeneous within and diverse with respect to the others. This is significant when a researcher wishes to examine the features of various demographic groupings (Cooper et al., 2006). Using stratified sampling the population was divided into four different strata (school principals, deputy principals, accountants and store keepers). Then from the strata the samples were obtained using simple random sampling, using the formula provided by Mugenda and Mugenda (2003). The formula is as follows:

$$n = \frac{Z^2 p q}{d^2} \dots\dots\dots 3.1$$

Where:

n = The sample size (If the target population is greater than 10,000)

Z = The standard normal deviate at a given confidence level.

P = The proportion in the target population estimated to have needed characteristics.

q = 1-p

d = Statistical significance set level.

If an estimate of the percentage of the target population thought to have the desired qualities is not available, 50% should be utilized (Mugenda & Mugenda, 2003). Z-statistics are assumed to be 1.96 and desired accuracy to be 0.5. The sample size is:

$$N = \frac{(1.96)^2 (0.5) (0.5)}{(.05)^2} \dots\dots\dots 3.2$$

$$= 384$$

The sample size needed will be reduced if the target population is less than 10,000, and it is determined using the formula below (Mugenda & Mugenda, 2003).

$$n_f = \frac{n}{1 + \frac{(n-1)}{N}} \dots\dots\dots 3.3$$

Where n_f = is the desired sample size (when the population is less than 10,000)

n = the desired sample size (when the population is more than 10,000)

N = the estimate of the population size.

Using the formula, the sample size will be.

$$n_f = \frac{384}{1 + \frac{(384-1)}{656}} \dots\dots\dots 3.4$$

= 242 respondents

The researcher determined percentage presentation by taking into account the size of each stratum as a percentage of the overall population in order to get equitable representation from each stratum. To obtain a representative proportionate sample from each stratum, the researcher multiplied the percentage of each stratum by 242.

Table 3.2: Sample Size

Category	Population Size (x)	Representative of Each Stratum ($\frac{x}{y} \times 100$) = Z%	Sample Size = Z% of 242
School Principals	164	25	60
School Deputy Principals	164	25	60
School Accountants	164	25	60
School Store Keepers	164	25	60
Total	656	100	240

3.5 Research Instrument

Primary data was employed in this investigation. Primary data is that which is gathered for the first time and is therefore unique in nature (Kothari, 2004). A questionnaire with a five-

point Likert scale was given to the accounting officers in the public secondary schools in Narok County in order to gather primary data. A questionnaire is a tool for gathering data that was created by the researcher with the primary goal of informing the respondents of the research's intentions and eliciting the desired response in the form of empirical data from the respondents (Mugenda & Mugenda, 2003).

3.6 Pilot Testing

In order to find any potential misconceptions or biasing impacts of various questions and methods, the questionnaire is first pre-tested using a small representative sample known as a "pilot" (Kang'ethe et al., 2008). Pre-testing of the data collecting tool for this study was done using a small sample of accounting officers from Narok County's public secondary schools. The pre-testing assisted in identifying unclear questions, ones that could be read differently by different persons, as well as questions that were identical. Following the pre-testing, the instruments underwent improvements, and the final copies were created.

3.7 Validity and Reliability of Instruments

3.7.1 Validity of the Instruments

This is the extent to which the results will truly address the research questions and test the study's premise, according to Mugenda & Mugenda (2003). It is the extent to which a test obtains the expected results. Both face and content validity were examined for this study. The size of the questionnaire and the time anticipated for a respondent to answer the questions are both determined by face validity. While content validity assesses how well information gathered with a certain tool represents a particular concept's specific domain. An expert in the field of finance was used to assess the content validity. The investigation established the validity of the instrument using the KMO sampling adequacy formula from

factor analysis, and it was found that the results from each objective were above 0.4 and hence dependable. The table 3.3 illustrates this.

Table 3.3 Validity of the Instrument

Items/scale	Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO)	Sig.
Electronic Transaction Processing	.692	.000
Electronic Reporting	.804	.000
Electronic Audit	.740	.000
Electronic Payroll	.727	.000
Financial Control	.726	.000

Based on the results shown in Table 3.3 it was established that the instrument was valid as all KMO values were above 0.4.

3.7.2 Reliability of the Instruments

The consistency of the results from the testing of the instruments is measured by reliability. It gauges the extent to which a research tool produces reliable outcomes or information after numerous trials. Based on the order of numbering of the questionnaire items, the Cronbach's coefficient alpha was used to determine the reliability of the research instrument for either even or uneven items. As a general rule, a proposed psychometric instrument should only be employed if a value of 0.70 or higher is obtained on a sizable sample, according to (Fraenkel & Wallen, 2000). Since the threshold was 0.7 according to Frankel and Wallen (2000) and Kothari, the reliability for this study was calculated with the aid of SPSS, and the alpha reliability coefficient obtained was 0.943 and hence approved as reliable (2004). Table 3.4 includes a summary of this.

Table 3.4: Reliability Coefficient Index

Items	Cronbach's Alpha	N of Items
All items on the questionnaire	.943	32
Electronic Transaction Processing	.781	6
Electronic Reporting	.836	6
Electronic Audit	.805	7
Electronic Payroll	.849	6
Financial Control	.804	7

Source (Author, 2021)

The questionnaire was considered reliable since the Cronbach's alpha reliability index for all the scale was above 0.7.

3.8 Data Analysis Procedure

The procedure for data analysis is described in this section. The researcher checked the completeness of the returned questionnaires from the respondents before starting the data analysis process. To evaluate the impact of the independent factors on the dependent variable, the researcher computed the descriptive, inferential, and test statistics. To make sure the data was properly sorted and categorized for analysis, the data was coded. The simple linear regression analysis was put to the test in order to create the research model and determine the degree of significance of the relationship between the variables.

Previous studies have examined the association between variables using regression models. Regression analysis was employed by Aduda (2011), Ngugi, Johnsen, & Erdélyi (2010), and Njeru (2016) to examine the relationship between the studied variables in Kenyan finance. Regression was used to examine the model's ability to fit the data. The extent of

the impact of the independent variable on the dependent variable is shown by the R square, whereas the R value shows the correlation between the variables.

The significance and degree of the difference between the regression mean and the error mean were examined using the Fischer distribution test, or F-test. This test was conducted with a 95 percent level of confidence at a significance level of 5%. Analyzing the analysis of variance (ANOVA) test was used to achieve this. Similar to this, the t-test statistic was employed to evaluate the model's propensity to forecast study statistical significance. For this test, the criteria were that the link is not significant if the t statistic is between -2 and +2, hence the study's null hypothesis was accepted as being true. On the other hand, the null hypothesis was disproved if the t value was more than +2 or less than -2.

The model was deemed to be insignificant and unable to account for fluctuations in the dependent variable if the p-value was higher than 0.05. The level of significance of the association between the independent variables (electronic transaction processing, electronic reporting, electronic audit, and electronic payroll) and the dependent variable was tested by additional analysis using multiple regression models (financial control in public secondary schools in Narok county). Below is the multiple regression model.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e \dots\dots\dots 3.5$$

Where:

Y = Financial Control

β_0 = The Y intercept

X_1 = Electronic Transaction

X_2 = Electronic Reporting

X_3 = Electronic Audit

X_4 = Electronic Payroll

e = the error term

3.8.1 Correlation Analysis

A statistical tool called correlation analysis is used to assess how linearly related two variables are (Senthilnathan, 2019). Ordinary Least Square presupposes that each independent variable and dependent variable always have a linear connection. Using Pearson's moment correlation coefficient, the study examined if there was a linear relationship between each of the independent factors and the dependent variable. The following null and alternative hypotheses served as the foundation for the 95% level of confidence test for the existence of a linear relationship;

$$H_0 : r = 0$$

Against

$$H_1 : r \neq 0$$

The correlation coefficient's t-statistic was used to test the hypothesis. The test's test statistic was provided by;

$$t = \frac{r}{\sqrt{\frac{1-r^2}{n-2}}} \dots\dots\dots 3.6$$

The test statistic has $n - 2$ degrees of freedom and follows a t distribution. It is possible that the specific independent variable does have an impact on budgetary control in public secondary schools because the test's rejection of the null hypothesis would indicate that the

particular independent variable has a linear relationship with the dependent variable. The degree and kind of the association between the independent and dependent variables were also measured using the correlation coefficient. A positive correlation coefficient indicates a direct association, while a negative correlation coefficient indicates an inverse relationship. The correlation coefficient is assumed to have values between -1 and 1.

3.8.2 Multiple Linear Regression Model

The study fitted a basic linear regression model in order to assess the study's four research hypotheses and provide an answer to the research question. The study evaluated the suitability of the regression model and the model parameters in order to evaluate the research hypotheses. The F-test was used to determine the adequacy of the regression model, and the t-test was used to determine the adequacy of the regression parameters.

F-test for Adequacy of Regression Model

The purpose of the adequate regression model test is to determine whether at least one of the independent variables in the model has an impact on the dependent variable. Using the following null and alternative hypotheses, the test was run in the study with a 95% level of confidence;

$$H_1: \beta_0 = \beta_1 X_1 = \beta_2 X_2 = \beta_3 X_3 = \beta_4 X_4 = 0$$

Against

$$H_2: \beta_0 \neq \beta_1 X_1 \neq \beta_2 X_2 \neq \beta_3 X_3 \neq \beta_4 X_4 \neq 0$$

The hypothesis testing is based on an F-statistic which is given by;

$$F = \frac{\frac{SSR}{p-1}}{\frac{SSE}{n-p}} \dots\dots\dots 3.7$$

Where;

SSR – is the sum of square due to regression

SSE – is the sum of square due to Error/residuals

n – is the sample size

p – is the number of regression parameter

The test statistic follows a F distribution with p - 1 degrees of freedom in the numerator and n - p degrees of freedom in the denominator. The null hypothesis' rejection would demonstrate that at least one of the independent parameters does have an impact on financial control.

t-test for Adequacy of Individual Regression Parameter

When the null hypothesis is rejected by the test for regression parameter adequacy, the test for individual parameter adequacy will be conducted to identify the specific independent variable that affects the financial control. The following null and alternative hypothesis were used to guide the test, which was conducted with a 95% level of confidence;

$$H_0 : \theta_i = 0$$

Against

$$H_1 : \theta_i \neq 0$$

The test statistic for the hypothesis is given by;

$$t = \frac{\hat{\theta}_i}{SE(\hat{\theta}_i)} \dots\dots\dots 3.8$$

Where;

$\hat{\theta}_i$ the estimate of the regression parameter.

$SE(\hat{\theta}_i)$ the standard error of the regression parameter estimate.

The rejection of the null hypothesis of the test would show that the parameter is significantly different from zero meaning that the independent variable that is coefficient by the given coefficient $\hat{\theta}_i$ do have significant effect on the financial control, otherwise the failure to reject the null hypothesis would show that the independent variable coefficient by the particular parameter estimate $\hat{\theta}_i$ do not affect the financial control.

Assumptions of the Multiple Linear Regression Analysis

Multiple linear regression analysis makes several key assumptions:

Multi-collinearity - The study has four independent variables and multi-collinearity was tested in the regression of coefficients on the relationship between the independent and dependent variables.

Linearity - The independent factors and the result variable must be correlated linearly. To demonstrate a linear or curved relationship, scatter plots were utilized.

Multivariate Normality – The residuals are presumed to be regularly distributed in multiple regression.

CHAPTER FOUR
RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

The research findings are presented in this chapter along with a discussion of how they relate to the particular study objectives. The chapter contains: Introduction, Response rate, effect of electronic transaction processing on financial control in public secondary schools in Narok county, effect of electronic reporting on financial control in public secondary schools in Narok county, effect of electronic audit on financial control in public secondary schools in Narok county, effect of electronic payroll on financial control in public secondary schools in Narok county. The chapter ends with effect of computerized accounting systems on financial control in public secondary schools in Narok County.

4.2 Response Rate

A total of 240 questionnaires were given out by the researcher; 213 of those were returned and used in the analysis. This information is displayed in Table 4.1.

Table 4.1: Questionnaire Return Rate

Category of Respondents	Questionnaires Issued	Questionnaires Returned	Percentage Returned (Percent)
Principals	60	60	100
Deputy Principals	60	48	80
Accountants	60	57	89
Store Keeper	60	48	80
Total	240	213	88.8

Source (Author, 2021)

Table 4.1's findings indicate that 213 questionnaires were returned, whereas just 27 were not. This translates to a response rate of 88.8, which was deemed sufficient. Marton (2016) states that a response rate of greater than 70 is adequate for a descriptive study. In order to conduct the analysis, the researcher employed the 213 questionnaires.

4.3 Effect of Electronic Transaction Processing on Financial Control in Public Secondary Schools in Narok County

The study's first objective was to determine how electronic transaction processing affected financial control in Narok County's public secondary schools. On a scale of 1 to 5, the following statements about electronic transaction processing were presented to the respondents: 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, and 5- Very great extent. The results of the calculation of descriptive statistics are shown in Table 4.2.

Table 4.2: Descriptive Statistics for Electronic Transaction Processing

Statement	VLE	LE	ME	GE	VGE	Total
	%	%	%	%	%	%
Electronic transaction processing shortens the date of service-to-payment lifecycle	6 (3)	6 (3)	57 (27)	95 (45)	49 (23)	213 (100)
Electronic transaction processing provides electronic test verifications of data to ensure proper banking information	2 (1)	9 (4)	21 (10)	94 (44)	87 (41)	213 (100)
Electronic transaction processing allows for immediate funds availability	17 (8)	2 (1)	28 (13)	94 (44)	72 (34)	213 (100)
Electronic transaction processing offers even quicker payment on negotiated bills through our prompt pay option	6 (3)	17 (8)	57 (27)	65 (30)	68 (32)	213 (100)
Electronic transaction processing reduces the handling of paper transactions	2 (1)	2 (1)	28 (13)	64 (30)	117 (55)	213 (100)
Electronic transaction processing saves time and manpower	2 (1)	9 (4)	9 (4)	43 (20)	150 (70)	213 (100)

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

The results in Table 4.2 show that the highest percentage 95 (45) of respondents agreed that there was a great extent to electronic transaction processing shortening the date of service-to-payment lifecycle. This indicates that there was a general perception that enhanced financial control in public secondary schools could be attributed to electronic

transactions that shortens the date of service to payment lifecycle. The results are in agreement with the findings of (Davis, 2013) who noted that shortening of service-to-payment lifecycle is important in enhancing the financial control of community supported organization.

The study also established that the highest percentage 94 (44) of the respondents agreed that there was a great extent that electronic transaction processing provides electronic test verifications of data to ensure proper banking information. This indicates that there was a general perception that enhanced financial control of the fund in public secondary schools could be attributed to electronic transaction processing. This was in line with Wakiriba et al. (2014) assertion that electronic transaction processing was crucial for financial control since, as they stated, a lack of efficient electronic transaction processing in place causes financial control issues for the majority of community organizations. These findings were also corroborated by Jaber's (2019) research, which showed that electronic test verification is crucial for guaranteeing sound financial management of community money.

The study further sought to establish whether electronic transaction processing allows for immediate funds availability. It was revealed that majority 94 (44) of the respondents agreed that there was a great extent that electronic transaction processing allows for immediate funds availability. This indicates that most of the respondents attributed enhanced financial control to electronic transaction processing which allows for immediate funds availability. This supports the findings of (Blair et al., 2019) and (Avebrok, 2012) who noted that electronic transaction processing allowed for immediate funds availability

in community funds. This implies that the electronic transactions were very important in ensuring timely availability of funds in organizations.

On whether electronic transaction processing offers even quicker payment on negotiated bills through prompt pay option, majority 68 (32) of the respondents agreed that there was a very great extent that electronic transaction processing could offer quicker payments on negotiated bills through organizations prompt pay option. It was also important to establish whether electronic transaction processing reduces the handling of paper transactions. Majority of the respondents 117 (55) agreed that there was a very great extent that electronic transaction processing reduced the handling of paper transactions. This agreed with Hegel (2012) and Bible et al. (2015) who established that electronic transaction processing reduced paper handling in community funds.

Finally, on whether electronic transaction processing saves time and manpower majority 150 (70) of the respondents agreed that there was a very great extent that electronic transaction processing saves time and manpower. This supports the findings of Amalokwu and Hegel (2012) and Rietsema (2015) who also indicated that electronic transactions helped reduce manpower in community funds.

The data was subjected to further analysis using Pearson's Correlation to establish whether there was a relationship between electronic transaction processing and financial control in public secondary schools in Narok county. The results are presented in Table 4.3.

Table 4.3: Pearson’s Correlation Analysis between Electronic Transaction Processing and Financial Control

		Control
Electronic Transaction Processing	Pearson Correlation	.639**
	Sig. (2-tailed)	.000
	N	213

Source (Author, 2021)

The results in Table 4.3 show that there is a moderate positive and statistically significant correlation ($r= 0.639$, $p = 0.000$) between electronic transaction processing and the financial control in public secondary schools in Narok county. This means that electronic transaction processing is necessary for enhanced financial control in public secondary schools in Narok county. This agrees with the findings by Jaber (2019) who also established a positive significant correlation between electronic transaction processing and financial control in community support funds in Kenya.

The study further sought to establish the effect of electronic transaction processing on financial control in public secondary schools in Narok county. To achieve this the study tested the first null hypothesis which stated that:

H₀₁: There is no significant effect of electronic transaction processing 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 4.4.

Table 4.4: Regression Coefficients for Electronic Transaction Processing

R^2	β	F	t	p
.408	.698	145.389	12.058	0.000

From table 4.4 it is noted that the goodness of fit for the regression between electronic transaction processing and financial control in public secondary schools in Narok county was satisfactory. An R squared of 0.408 indicates that 40.8% of the financial control in public secondary schools in Narok county is explained by electronic transaction processing. Electronic transaction processing significantly affects the financial control in public secondary schools in Narok county, according to the F- value of 145.389 and P 0.05. The null hypothesis that there is no significant impact of electronic transaction processing on financial control in public secondary schools in Narok county was rejected by a t value of 12.058 that was higher than the critical t value and a P value that was less than 0.05. The study came to the conclusion that an important factor influencing financial control in public secondary schools in Narok county was electronic transaction processing.

4.4 Effect of Electronic Reporting on Financial Control in Public Secondary Schools in Narok County

The study's second objective was to determine how electronic reporting affected budgetary control in Narok County's public secondary schools. On a scale of 1 to 5, the following statements about electronic reporting were presented to the respondents: 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, and 5- Very great extent. The results of the calculation of descriptive statistics are shown in Table 4.5.

Table 4.5: Descriptive Statistics for Electronic Reporting

Statement	VLE	LE	ME	GE	VGE	Total
	%	%	%	%	%	%
Electronic reporting improves the corporate performance	2 (1)	9 (4)	17 (8)	109 (51)	75 (35)	213 (100)
Electronic reporting enhances accounts payable	6 (3)	2 (1)	9 (4)	117 (55)	79 (37)	213 (100)
Electronic reporting improves accounts receivable	2 (1)	2 (1)	18 (8)	88 (41)	103 (48)	213 (100)
Electronic reporting enhances financial reporting	2 (1)	10 (4)	10 (4)	87 (41)	104 (49)	213 (100)
Electronic reporting increases bank and account reconciliations	2 (1)	6 (3)	15 (7)	64 (30)	126 (59)	213 (100)
Electronic reporting enhances financial accountability	2 (1)	10 (4)	7 (3)	111 (52)	83 (39)	213 (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, 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 debt collection. For organizations to enhance their debt collection they should put in place a comprehensive electronic reporting system. This supports Brinkerhoff (2011) and (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.

Similar to this, the majority of respondents 111 (52) believed that electronic reporting significantly improves financial accountability in Narok County's public secondary

schools. This provided the idea that an organization's ability to effectively use electronic reporting is what determines successful financial control. This supports the findings of other studies, including (Department of Social Development, 2021); (Behn et al., 2010); (Hendrickse, 2018); and (Brinkerhoff, 2011), which found that, in order to ensure the efficient use of resources, electronic reporting systems must be developed and maintained by an organization's office bearers, no matter how simple and fundamental they may be.

In order to determine the relationship between electronic reporting and financial control in public secondary schools in Narok county, the data was subjected to additional analysis using Pearson's Correlation. Table 4.6 provides the findings.

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 ($r = 0.621$, $p = 0.000$) 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.

The study further sought to establish the effect of electronic reporting on financial control in public secondary schools in Narok county. To achieve this the study tested the second null hypothesis which stated that:

H₀₂: There is no significant 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

R ²	β	F	t	p
.386	.719	132.382	11.506	0.000

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 R² of 0.386 indicates that 38.6% of the financial control in public secondary schools in Narok county is explained by electronic reporting. Electronic reporting significantly affects the financial control in the public secondary schools in Narok county, according to the F- value of 132.382 and P value of 0.05. The null hypothesis that electronic reporting has no discernible impact on financial control in public secondary schools in Narok County was rejected by a t value of 11.506, which was higher than the critical t value and a P value of less than 0.05. The study came to the conclusion that electronic reporting had a substantial impact on budgetary control in Narok County's public secondary schools.

4.5 Effect of Electronic Audit on Financial Control in Public Secondary Schools in Narok County

The final goal of the study was to determine how electronic auditing affected financial control in Narok County's public secondary schools. On a scale of 1 to 5, the following statements about electronic audit were presented to the respondents: 1- Very low extent, 2- Low extent, 3-Moderate extent, 4- Great extent, and 5- Very great extent. The outcomes of the descriptive statistics calculations are shown in Table 4.8.

Table 4.8: Descriptive Statistics for Electronic Audit

Statement	VLE	LE	ME	GE	VGE	Total
	%	%	%	%	%	%
Using electronic auditing system leads to increasing the credibility factor in the information extracted from electronic accounting.	2 (1)	6 (3)	23 (11)	109 (51)	73 (34)	213 (100)
Electronic auditing system is capable to deal with multi-generations in electronic accounting information systems	2 (1)	0	36 (17)	119 (56)	53 (25)	213 (100)
Designing the electronic auditing systems in a way suitable to the accounting session, that can follow up mistakes and extracting them gradually in electronic accounting information system	2 (1)	6 (3)	30 (14)	109 (51)	66 (31)	213 (100)
Electronic Auditing system can deal with several forms of data entry in electronic accounting information systems	2 (1)	0	23 (11)	117 (55)	68 (32)	213 (100)
Electronic Auditing system can compare its results with the results of electronic accounting information systems	2 (1)	0	30 (14)	87 (41)	94 (44)	213 (100)

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

The results in Table 4.8 show that majority 109 (51) of the respondents agreed that there as a great extent that by using electronic auditing system leads to increasing the credibility factor in the information extracted from electronic accounting. This shows that most of the

respondents had the perception that at by using electronic auditing system leads to increasing the credibility factor in the information extracted from electronic accounting. This ensures that there is proper auditing of how funds are utilized within government secondary schools. These findings are in agreement with the studies of (Waren, 2021); (Preetabh, 2020) and (Scarlett, 2018) who noted that auditing is an important activity within organizations as it enhances proper monitoring of how funds are utilized within organizations.

It is also noted that majority of the respondents 119 (56) agreed that there was a great extent that electronic auditing system is capable to deal with multi-generations in electronic accounting information systems. Meaning that most of the respondents had the perception that the electronic auditing system is capable to deal with multi-generations in electronic accounting information systems. On whether designing the electronic auditing systems in a way suitable to the accounting session, that can follow up mistakes and extracting them gradually in electronic accounting information system, majority 109(51) of the respondents agreed that there was a great extent that designing the electronic auditing systems in a way suitable to the accounting session, that can follow up mistakes and extracting them gradually in electronic accounting information system to the statement. The findings were in agreement with the findings of (Waren, 2021); (Preetabh, 2020) and (Scarlett, 2018) whose findings on the role of auditing in the control of organizational activities enhances financial control in most organizations.

On whether electronic auditing system can deal with several forms of data entry in electronic accounting information systems, majority 117 (55) of the respondents agreed

that there was a great extent that Electronic Auditing system can deal with several forms of data entry in electronic accounting information systems. It was also noted that electronic auditing system can compare its results with the results of electronic accounting information systems. The results show that majority 94(44) of the respondents agreed that there was a great extent to the above statement. This is in line with the findings of (Nafula, 2014) who observed that many organizations do experience auditing challenges and this shows that if auditing is not adequately performed it would affect financial controls.

The data was subjected to further analysis using Pearson’s Correlation to establish the relationship between electronic audit and financial control in public secondary schools in Narok county. The results are presented in Table 4.9.

Table 4.9: Pearson’s Correlation Analysis between Electronic Reporting and Financial Control

		Control
Electronic Audit	Pearson Correlation	.684**
	Sig. (2-tailed)	.000
	N	213

Source (Author, 2021)

The results in Table 4.9 show that there is a high positive and statistically significant correlation ($r= 0.684$, $p = 0.000$) between electronic audit and financial control in public secondary schools in Narok county. This means that electronic audit is necessary for enhanced financial control in public secondary schools in Narok county.

The study also aimed to determine how computerized auditing affected financial control in Narok County's public secondary schools. In order to do this, the study examined the third null hypothesis, which was:

H₀₃: There is no significant effect of electronic audit 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 4.10.

Table 4.10: Regression Coefficients for Electronic Audit

R ²	β	F	t	p
.468	.896	185.295	13.612	0.000

From table 4.10 it is noted that the goodness of fit for the regression between electronic audit and financial control in public secondary schools in Narok county was satisfactory. An R² of 0.468 shows that 46.8% of the financial control in public secondary schools in Narok county is explained by electronic audit. The electronic audit significantly influences the financial control in the public secondary schools in Narok county, according to the F-value of 185.295 and P 0.05. The null hypothesis that there is no significant effect of electronic audit on financial control in public secondary schools in Narok county was rejected by a t value of 13.612 that was more than the critical t value and a P value that was less than 0.05. The study came to the conclusion that financial control in public secondary schools in Narok county was significantly influenced by electronic audit.

4.6 Effect of Electronic Payroll on Financial Control in Public Secondary Schools in Narok County

The study's fourth goal was to determine how electronic payroll affected budgetary control in Narok County's public secondary schools. On a scale of 1 to 5, the following comments about electronic payroll were presented to the respondents: 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, and 5- Very great extent. Table 4.11 displays the outcomes of the descriptive statistics calculations.

Table 4.11: Descriptive Statistics for Electronic Payroll

Statement	VLE	LE	ME	GE	VGE	Total
	%	%	%	%	%	%
E-payroll ensures speedy analysis and generation of salary reports	0	6 (3)	17 (8)	51 (24)	138 (65)	213 (100)
E-payroll improves generation of pay slips	0	6 (3)	15 (7)	60 (28)	132 (62)	213 (100)
E-payroll improves record of hours absent for effective payroll management.	2 (1)	13 (6)	6 (3)	87 (41)	104 (49)	213 (100)
E-payroll assures accuracy of data in payroll management	0	9 (4)	13 (6)	94 (44)	98 (46)	213 (100)
E-payroll improves the payroll interface with accounts for efficiency in payroll management.	2 (1)	2 (1)	21 (10)	102 (48)	83 (39)	213 (100)
E-payroll enhances quality of information generated for payroll	0	6 (3)	17 (8)	79 (37)	111 (52)	213 (100)

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

From the results presented in Table 4.11 majority 138 (65) of the respondents agreed that there was a very great extent that E-payroll ensures speedy analysis and generation of salary reports. On whether, E-payroll improves generation of pay slips majority 132 (62) of the respondents agreed that there was a very great extent to the statement. This supports the findings of (Blair et al., 2019) and (Wakiriba et al., 2014) which affirms that organizations should adopt E-payroll for efficient handling of staff salaries and wages in community funds in Kenya.

On whether E-payroll improves record of hours absent for effective payroll management. majority 104 (49) of respondents agreed that there was a very great extent to the statement. On whether E-payroll assures accuracy of data in payroll management, majority 98 (46) of the respondents agreed that there was very great extent to the statement. This shows that E-payroll enhances accuracy in payroll management thus helping in eliminating ghost workers. It was also established that E-payroll improves the payroll interface with accounts for efficiency in payroll management, since majority 102 (48) of the respondents agreed that there was a great extent to the statement. This demonstrates that the majority of respondents consider E-payroll to be crucial for financial control. The results of (Kumar & Sharma, 2021) and (Millichamp, 2020) who observed that internal control through E-payroll has an impact on the financial control in businesses are supported by this.

Finally, the study sought to determine whether E-payroll improves the quality of information generated for payroll. The majority of respondents, 111 (52) agreed that the statement was true to a very great extent, indicating that the respondents believed E-payroll improved the quality of information generated for payroll because it assisted in the

generation of crucial payroll information. The findings of Malvern (2012), Kumar & Sharma (2021), and Blair et al. (2019) that management uses E-payroll to manage organization payroll while guarding against ghost labor are supported by the results.

In order to determine the relationship between electronic payroll and financial control in public secondary schools in Narok county, the data was subjected to additional analysis using Pearson's Correlation. Table 4.12 presents the findings.

Table 4.12: Pearson’s Correlation Analysis between Electronic Payroll and Financial Control

		Control
Electronic Payroll	Pearson Correlation	.670**
	Sig. (2-tailed)	.000
	N	213

The results in Table 4.12 show that there is a high positive and statistically significant correlation ($r = 0.670$, $p = 0.000$) between electronic payroll and financial control in public secondary schools in Narok county. This means that electronic payroll is necessary for enhanced financial control in public secondary schools in Narok county. This is consistent with the findings of (Hegel, 2012), who also discovered that E-payroll improves efficient financial control in community support funds. Hegel (2012) employed Pearson's correlation in his research.

The study also aimed to determine how electronic payroll affected financial control in Narok County's public secondary schools. In order to do this, the study examined the fourth null hypothesis, which was as follows:

H₀₄: There is no significant effect of electronic payroll 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 4.13.

Table 4.13: Regression Coefficients for Electronic Audit

R ²	β	F	t	p
.449	.845	172.144	13.120	0.000

From Table 4.13 it is noted that the goodness of fit for the regression between electronic payroll and financial control in public secondary schools in Narok county was satisfactory. An R squared of 0.449 shows that 44.9% of the financial control in public secondary schools in Narok county is explained by electronic payroll. The financial control in the public secondary schools in Narok county is significantly influenced by electronic payroll, as shown by the F- value of 172.144 and P 0.05. The null hypothesis that there is no significant impact of electronic payroll on financial control in public secondary schools in Narok county was rejected by a t-value of 13.120, which was higher than the critical t-value and a P-value of less than 0.05. The study came to the conclusion that an important factor influencing financial control in public secondary schools in Narok county was electronic payroll.

4.7 Financial Control

The objective of the study was also to determine how the four criteria covered in this part relate to financial control in Narok County's public secondary schools. The findings were shown in Table 4.14.

Table 4.14 Responses on Effective Financial Control

Statement	VLE	LE	ME	GE	VGE	Total
	%	%	%	%	%	%
The operation costs have decreased after the adoption of automated accounting.	6 (3)	9 (4)	43 (20)	104 (49)	51 (24)	213 (100)
The schools' revenue has been rising steadily	2 (1)	36 (17)	51 (24)	81 (38)	43 (20)	213 (100)
Computerized accounting system ensures that fees is collected from all the students	9 (4)	21 (10)	32 (15)	72 (34)	79 (37)	213 (100)
Computerized accounting ensures timely collection of fees	15 (7)	9 (4)	49 (23)	87 (41)	53 (25)	213 (100)
The school operates with a periodic budget	6 (3)	6 (3)	45 (21)	98 (46)	58 (27)	213 (100)
The school budgeting process relies on historical data	9 (4)	15 (7)	30 (14)	89 (42)	68 (32)	213 (100)
The school budgeting process is electronic	17 (8)	15 (7)	38 (18)	60 (28)	81 (38)	213 (100)

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

From the results in Table 4.14 majority 104 (49) of the respondents agreed that there was a great extent that since the adoption of computerized accounting the operation expenses

have been minimized. This shows that most of the respondents perceived that computerized accounting had an effect of financial control in public secondary schools in Narok county. On whether the schools' revenue has been rising steadily, majority 81(38) of the respondents agreed that there was great extent to the statement. This again shows that majority of the official's perceived through computerized accounting school revenue has been rising steadily. This could be attributed to the fact that through computerized accounting there is proper record keeping and efficient fee collection from students.

On whether computerized accounting system ensures that fees is collected from all the students, majority 79(37) of the respondents agreed that there was a very great extent to the statement. This shows that most of the officials perceive the financial control as being more effective now since fees is collected from all students. On the other hand, the study established that computerized accounting ensures timely collection of fees, majority 87(41) of the respondents agreed that there was a great extent to the statement. On whether the school operates with a periodic budget, majority 98(46) of the respondents agreed that there was a great extent to the statement. This shows that the schools have a well-designed budgetary system which could have led to effective financial control hence effective funds utilization.

It was also noted that the school budgeting process relies on historical data, majority 89(42) of the respondents agreed that there was a great extent to the statement. On whether, the school budgeting process is electronic, majority 81(38) of the respondents agreed that there was a very great extent to the statement. This shows that most of the respondents perceived the schools as having a well-developed computerized accounting system which has

enhanced financial control. These findings are in agreement with (Blair et al., 2019) and (Jaber, 2019) who noted that through a well-developed computerized accounting system there is a great extent to improvement in financial control in community funds.

Table 4.15: An Overview of Total Revenues Generated by Schools Before and After Adoption of Computerized Accounting System

Name of School	Years Before Adoption					Years After Adoption				
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	Sh. (Milli on)	Sh. (Milli on)	Sh. (Milli on)	Sh. (Milli on)	Sh. (Milli on)	Sh. (Milli on)	Sh. (Milli on)	Sh. (Milli on)	Sh. (Milli on)	Sh. (Milli on)
Narok High School	42.6	33.2	37.7	41.1	29.8	53.9	55.2	59.4	25.4	61.8
Ololulu nga Boys	34.1	29.6	31.4	35.6	27.8	35.2	36.6	39.3	16.5	44.1
Enoosa yen Girls	18.5	12.8	11.9	17.9	12.6	19.9	20.1	23.1	8.0	25.0
Suswa Girls Second ary School	9.3	7.9	8.9	7.6	10.3	11.9	13.4	14.8	6.6	15.7
Naikarr a Second	28.3	22.4	25.9	33.6	26.8	36.6	38.8	41.5	18.0	42.1

ary School										
Kilgori s Girls' Second ary	38.0	34.5	35.1	31.6	30.3	33.7	34.3	35.0	12.9	37.0
Total Reven ues	170.9	140.4	151.1	167.2	137.6	191.3	198.4	213.2	87.4	225.2

Source (Narok County Education Office, 2022)

The results in Table 4.15 show that the revenues generated by all secondary schools after the adoption of computerized accounting system were much higher than revenues generated before the adoption of computerized accounting systems. This shows that in deed the adoption of computerized accounting system by secondary schools was significant in enhancing revenue generation. This could have been achieved by sealing the loopholes that were used to divert money generated by schools and hence reporting lower revenues generations.

Table 4.16: An Overview of Total Expenditures Incurred by Schools Before and After Adoption of Computerized Accounting System

Name of School	Years Before Adoption					Years After Adoption				
	2012 Sh. (Milli on)	2013 Sh. (Milli on)	2014 Sh. (Milli on)	2015 Sh. (Milli on)	2016 Sh. (Milli on)	2017 Sh. (Milli on)	2018 Sh. (Milli on)	2019 Sh. (Milli on)	2020 Sh. (Milli on)	2021 Sh. (Milli on)
Narok High School	41.8	37.2	45.8	46.1	34.8	40.9	38.3	37.0	20.5	36.1

Ololulunga Boys	39.1	33.6	31.4	39.6	42.8	34.5	32.5	30.3	15.4	30.9
Enoosayen Girls	23.5	16.1	18.9	21.8	23.9	22.9	19.7	19.1	8.9	19.0
Suswa Girls Secondary School	9.9	8.9	9.9	8.9	9.6	8.7	8.6	8.2	5.6	8.1
Naikarrara Secondary School	29.3	2.4	31.9	33.6	39.8	38.6	38.0	37.9	17.0	33.6
Kilgoris Girls Secondary	38.0	34.5	35.1	31.6	30.3	33.7	34.3	35.0	12.9	37.0
Total Costs	143.8	98.3	138.0	149.9	150.8	146.6	137.1	132.7	67.4	128.0

Source (Narok County Education Office, 2022)

The results in Table 4.16 show that generally expenditures incurred by all secondary schools after the adoption of computerized accounting system were much lower than expenditures incurred before the adoption of computerized accounting systems. This shows that in deed the adoption of computerized accounting system by secondary schools was significant in lowering expenditures. This could have been achieved by sealing the loopholes that were used to divert money generated by schools to other non-school expenditures hence reporting higher expenditures.

Table 4.17: Multiple Linear Regression Model Summary

R	R ²	Std. Error of the Estimate
.714	.510	.55926

Source (Author, 2021)

From Table 4.17 it is noted that the goodness of fit for the regression between all the independent variables (electronic transaction processing, electronic reporting, electronic audit and electronic payroll) and financial control in public secondary schools in Narok county was satisfactory. An R² of 0.510 indicates that 51% of the financial control in public secondary schools in Narok county is explained by the four independent variables combined. These findings are in agreement with (Jaber, 2019) and (Hegel, 2012) who noted that through a well-developed computerized accounting system there is a great extent of improvement in financial control in community funds.

Table 4.18: ANOVA for the Overall Model

	Sum of Squares	df	Mean Square	F	Sig.
Regression	67.848	4	16.962	54.231	.000 ^b
Residual	65.057	208	.313		
Total	132.905	212			

Source (Author, 2021)

The results in Table 4.18 indicate that the overall model was significant i.e., the independent variables jointly were good explanatory variables for financial control in public secondary schools in Narok county (F=54.231, P value = 0.000).

Table 4.19: Model Summary and Parameter Estimates

	B	Std. Error	t	Sig.
(Constant)	.163	.279	2.585	.010
Electronic Transaction	.243	.097	2.494	.013
Electronic Reporting	.072	.124	2.578	.011
Electronic Audit	.458	.133	3.439	.001
Electronic Payroll	.316	.137	2.305	.022

Source (Author, 2021)

From Table 4.19 the model regression equation 4.1 was established.

$$Y = 0.163 + 0.243X_1 + 0.072X_2 + 0.0458X_3 + 0.316X_4 \dots\dots\dots 4.1$$

From the regression equation 4.1 it is established that by holding all independent variables (electronic transaction processing, electronic reporting, electronic audit and electronic payroll) constant the financial control in public secondary schools in Narok county will be 0.163 units. The regression equation 4.1 also show that there is a positive significant relationship between electronic transaction processing and financial control in public secondary schools in Narok county, this is supported by a coefficient of 0.243 (p-value=0.013). This shows that a unit increase in electronic transaction processing would lead to a 0.243 improvement in financial control. There is a positive and significant relationship between electronic reporting and financial control in public secondary schools in Narok county as shown by a coefficient of 0.072 (p-value=0.011). This indicates that a unit increase in electronic reporting would lead to a 0.072 improvement in the financial control. Further, the findings indicate that there is a positive significant relationship

between electronic audit and financial control in public secondary schools in Narok county as shown by a coefficient of 0.458 (p-value = 0.001). A unit increase in electronic audit would lead to a 0.458 improvement in the financial control. The findings further show that there is a positive significant relationship between electronic payroll and financial control in public secondary schools in Narok county as shown by a coefficient of 0.316 (p-value = 0.022). A unit increase in electronic payroll would lead to a 0.316 improvement in the financial control. This infers that electronic audit influences financial control in public secondary schools in Narok county most followed by electronic payroll, electronic transaction process and finally electronic reporting.

These findings are consistent with (Odindo, 2019) and (Koitaba, 2013) who noted that a well-developed computerized accounting system improved financial control in community funds in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The study's summary is presented in this chapter, and conclusions are drawn in light of the findings. The chapter includes suggestions and areas for further investigation that encourage researchers to pursue knowledge.

5.2 Summary of the Findings

The study aimed to determine how computerized accounting systems affected financial control in Narok County's public secondary schools. To draw inferences and make generalizations, the study employed descriptive statistics and inferential statistics. The study adopted a descriptive survey design. Stratified random sampling was used to achieve the desired representation of various categories of accounting officers in government secondary schools. The sample size was 260 respondents from public secondary schools in Narok county.

5.3 Electronic Transaction Processing and Financial Control

The first objective of the study sought to establish the effect of electronic transaction processing on financial control in public secondary schools in Narok county. The results showed that most of the respondents agreed with the statement that helped to conceptualize the influence of electronic transaction processing on financial control. The study established that electronic transaction processing shortens the date of service-to-payment lifecycle; electronic transaction processing allows for immediate funds availability and that electronic transaction processing offers quicker payment on negotiated bills through prompt pay option. This showed that electronic transaction processing enhanced prompt

bills payments. The results further show that electronic transaction processing was perceived to influence financial control in public secondary schools in Narok county and hence the null hypothesis that there is no significant effect of electronic transaction processing on financial control in public secondary schools in Narok county was rejected. This shows that electronic transaction processing was very critical in influencing financial control in public secondary schools.

5.4 Electronic Reporting and Financial Control

The second 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 indicate their views on various statements defining the impact of electronic reporting on financial control. Majority of the respondents agreed that electronic reporting improves the corporate performance; electronic reporting enhances accounts payable; Electronic reporting improves accounts receivable and payable and electronic reporting enhances financial accountability. Further analysis using Pearson's correlation and simple linear regression showed that there was a significant positive correlation between electronic reporting and financial control. This shows that most of the respondents perceived electronic reporting as being critical in enhancing financial control in public secondary schools. Based on the t-value (11.506) which was greater than the critical t-value the null hypothesis that there is no significant effect of electronic reporting on financial control in public secondary schools in Narok county was rejected. This shows that electronic reporting is important in enhancing finance control in public secondary schools.

5.5 Electronic Audit and Financial Control

The third objective of the study sought to establish the effect of electronic audit on financial control in public secondary schools in Narok county. The respondents replied to various statements that defined the impact of electronic audit on financial control in public secondary schools in Narok county. The results showed that majority of the respondents agreed that using electronic auditing system led to increasing the credibility factor in the information extracted from electronic accounting; electronic auditing system is capable to deal with multi-generations in electronic accounting information systems; electronic auditing system can deal with several forms of data entry in electronic accounting information systems and electronic auditing system can compare its results with the results of electronic accounting information systems. This showed that there was a general perception that financial control is influenced by electronic audit. The correlation analysis and simple linear regression analysis showed that the impact of the electronic audit on financial control was not by chance and hence the null hypothesis that there is no significant effect of electronic audit on financial control in public secondary schools in Narok county was rejected. This indicate that electronic audit enhances financial control in public secondary schools.

5.6 Electronic Payroll on Financial Control

The study's fourth goal was to determine how electronic payroll affected financial management in Narok County's public secondary schools. The respondents were asked to express how much they agreed or disagreed with the comments made regarding electronic payroll. The majority of respondents agreed that using electronic payroll ensures quick analysis and generation of salary reports, faster production of pay slips, better tracking of

absence hours for efficient payroll management, assurance of data accuracy in payroll management, and improved quality of information generated for payroll. This demonstrates that the majority of respondents believed that electronic payroll had an effect on budgetary control in Narok County's public secondary schools. Therefore, the study found that an element that improves financial control is computerized payroll. The Pearson's correlation analysis revealed a statistically significant positive link between computerized payroll and financial control. The findings also showed that, because the t-value (13.120) was higher than the critical t-value, the null hypothesis, that electronic payroll had no discernible impact on financial control in public secondary schools in Narok County was rejected.

5.7 Conclusion

The objective of the study was to establish the effect of computerized accounting systems on financial control in public secondary schools in Narok County. The study concluded that financial control is influenced by the four factors that were considered for the study. The study concluded that electronic transaction processing has an influence on the financial control in public secondary schools. Public secondary schools that seek to enhance financial control should ensure that appropriate electronic transaction processing systems are in place. The study also concluded that electronic reporting has an influence on the financial control in public secondary schools. Public secondary schools that seek to enhance their financial control should ensure that appropriate electronic reporting systems are adopted.

The study also concluded that electronic audit has an influence on financial control in public secondary schools. Based on the results it was perceived that appropriate electronic

audit system improves financial control in public secondary schools. The study further concluded that electronic payroll has an influence on financial control in public secondary schools. The results indicated that electronic payroll helps in un-earthing ghost workers that could be existing in the payroll. Electronic payroll was therefore perceived to have an influence in enhancing financial control in public secondary schools. Therefore, public secondary schools that seek to improve their financial control should embrace electronic payroll system.

5.8 Recommendations

Public secondary schools that seek to enhance their financial control must consider electronic transaction processing because this is important in ensuring that transaction records are prepared and maintained more transparently. However, public secondary schools should note that relying on electronic transaction processing only may not be adequate for enhancing financial control unless other factors are incorporated.

The study also recommends that electronic reporting is important in ensuring that accurate reporting is achieved. However, it should be noted that even with efficient electronic reporting system in place sound financial control is not a guarantee because accounting officers may use other sophisticated accounting methods to manipulate reporting. Therefore, establishing other factors to support electronic reporting could be ideal for enhancing financial control.

The study further recommends that electronic audit must be adopted by public secondary schools if they are to achieve sound financial control. The results have indicated that, of the four variables electronic audit has the highest effect on financial control in public

secondary schools. Therefore, schools that seek to enhance financial control should embrace electronic audit.

Finally, the study recommends that electronic payroll must be adopted by public secondary schools that seek to enhance their financial control because electronic payroll plays a critical role in un-earthing any ghost workers that could be in the payroll. In summary public secondary schools must adopt a combination of the factors discussed if they seek to enhance their financial control.

5.9 Areas for Further Study

This study focused public secondary schools and therefore the results might not be generalized to other public sectors. Therefore, a similar study incorporating other public sectors should be conducted. The study also recommends that a similar study be carried out however targeting different respondents other than the accounting officers. Parents, students and suppliers could provide a different perspective from accounting officers perspective, this may add new knowledge to the literature already established.

REFERENCES

- Aikins, B.M. A. (2011). Audit reports on financial statements of Accounting IASB Standards. Vol.8.
- Aldvidre, K.L. & Colbert, K. P. (2014). *Principles of auditing and other assurance services*. Irwin/McGraw- Hill. New York.
- Al-Hawari, M., & Ward, T. (2016). A report on the effect of automated service quality on Australian banks' financial performance and the mediating role of customer satisfaction.
- Al-Jabari, T. (2014), 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.
- Amudo, K. & Inanga, D. (2019). The Swansea internal quality audit processes quality assurance in education. Vol. 10.
- Bertalanffy, M.C. (1968), *Foundations of Organizational Strategy*, Harvard University Press.
- Beschel, R. P., & Ahern, M. E. (2016). *Public Financial Management Reform in the Middle East and North Africa: Individual economy cases*. World Bank.
- Bible, L., Graham, L., & Rosman, A. (2015). The effect of electronic audit environments on performance. *Journal of Accounting, Auditing & Finance*, 20(1), 27-42.
- Blair, J. .M, Gordon, T.P., Hoopes, D.G., Madsen, T.L. and Walker, G. (2019). Five Dimensions of Effectiveness for Nonprofit Annual Reports Non-profits Management and Leadership.
- Braun, G.H., & Davis, K. L., (2013). The effect of electronic audit environments on performance. *Journal of Accounting, Auditing & Finance*, 20(4), 228-241.
- Buchheit, K. & Parson, J. D. (2016). 'The use of audit committees for monitoring', *Journal of Accounting and Public Policy* 2(3), 29-43.
- Burfield, C. B., & Van Ness, A. C. (2017). *U.S. Patent No. 6,363,362*. Washington, DC: U.S. Patent and Trademark Office.
- Carol J. M. (2012). The impact of enterprise resource planning (ERP) Systems on the effectiveness of internal controls over financial reporting. *Journal of Accounting and Public Policy* 4(7), 129-143.
- Cetorelli, J., & Goldberg, O. H. (2017). *Public Financial Management Reform in the Middle East and North Africa: Individual economy cases*. World Bank.
- Chappelet, J. L., Janssen, M., & Scholl, H. J. (2016). *Electronic Government*. Springer-Verlag Berlin Heidelberg.

- Collins D. J. (2017), *A Guide to Church Accounts*, Bocardo & Church Army Press Ltd, Oxford.
- Cooper, D. R. & Schindler, P.S. (2003). *Business Research Methods*. New York: Me Review, Vol. 28 No.3, pp.371-82.
- Creswell, M. N. & Creswell, K. G. (2017). *A general guide to writing research proposal and report*. Makerere University Printers.
- Davis, M. C. & Venkatesh, W. H. (2000), 'Theory of the firm: Managerial Behaviour, agency costs, and ownership Structure', *Journal of Financial Economics* 2(3), 39-52.
- Davis, M.C. (1989), Value maximization, stakeholder theory, and the corporate objective function, *Journal of Applied Corporate Finance*, Vol. 14 No.3, pp.8-21.
- Ebrahim, A. (2013), Accountability in Practice: Mechanisms for Donor NGOs. *World Development*, 1394.
- Gordon, T.P., Hoopes, D.G., Madsen, T.L. and Walker, G. (2010) Five Dimensions of Effectiveness for Nonprofit Annual Reports Non-profits Management and Leadership 21, 2, 209–228.
- Graham, G. S. & Rosman J. A. (2015). Monitoring effects of the internal Audit Function: Agency Theory versus other explanatory variables. *International Journal of Auditing* 2(5), 220-233.
- Hendriks, C. J. (2016). 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.
- Kaufmann, DC (1966). *The Contingency Theory of Managerial Accounting*, the Accounting Review, Vol. 52, No. 1, pp. 22-39.
- Keating, E.K & Frumkin, P. (2013), Reengineering Nonprofit Financial Accountability: Towards a More Reliable Foundation for Regulation, *Journal of Public Administration Review*, 63, 3-15.
- Khaddash, Husam Eldeen, and Walid Syam (2013), The Extent of Auditors Acceptance for Using Information Technology, Study Field on Auditing Offices in Jordan, *Studies Journal*, University of Jordan, Jordan, Vol. No. 30, issue 2, P P 297–298.
- Kohagen, M., Mason, P. E., & Jungwirth, P. (2016). Accounting for electronic polarization effects in aqueous sodium chloride via molecular dynamics aided by neutron scattering. *The Journal of Physical Chemistry B*, 120(8), 1454-1460.
- Kothari, C. R. (2004). *Research Methodology: methods and Techniques*. (4th Ed.). New Delhi: Vishwa Parakashan.

- Leontyev, I., & Stuchebrukhov, A. (2015). Accounting for electronic polarization in non-polarizable force fields. *Physical Chemistry Chemical Physics*, 13(7), 2613-2626.
- Larson, K. D. & Pyle, W.W. (2018), *Fundamental Accounting Principles*, 11th Edition IRWIN Homewood Illinois 60430.
- Lewis C. V. (2019) Corporate Performance is closely linked to a strong Ethical commitment. *Journal of Accounting and Public Policy* 2(3), 29-43.
- Lin, B. W., Lee, Y., & Hung, S. C. (2016). R&D intensity and commercialization orientation effects on financial performance. *Journal of business research*, 59(6), 679-685.
- Mobegi, H. N. (2015). *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.
- Mugenda, O. M. & Mugenda, A. G., (2003), *Research Methods; Quantitative and Qualitative Approaches*, Acts Press, Nairobi, Kenya.
- Ngugi, J. K. & Mugo, H. W. (2016). *Internal Factors Affecting Procurement Process of Supplies in the Public Sector; a Survey of Kenya Government Ministries*. Unpublished MBA research project, JKUAT
- Ngugi, J. K. & Mugo, H. W. (2016). *Internal Factors Affecting Procurement Process of Supplies in the Public Sector; a Survey of Kenya Government Ministries*. Unpublished MBA research project, JKUAT.
- Odindo, O. M. (2019). 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.
- Parsons, J. (2017). Audit committee quality and internal control: An Empirical Analysis. The Accounting Review. *Journal of Accounting and Public Policy* 7(3), 28-44.
- Penttinen, E. (2015). *Electronic invoicing as a platform for exchanging accounting information the electronic accounting reference concept*. Helsinki: Aalto University School of Economics.
- Rezaee A. H, Elman E. H. & Sharbatoghlie D. M. (2001). The Market for corporate control and firm innovation.
- Robbins, S. P., & Coulter, M. K. (2015). *Organisations and Behaviour*. Pearson Custom Pub.
- Rogers, E. M. (1995). *Diffusion of innovations*. New York, NY: Free Press.

- Sangole, N., Kaaria, S., Njuki, J., Lewa, K., & Mapila, M. (2014). Community based participatory monitoring and evaluation: Impacts on farmer organization functioning. *Social capital and accountability Journal*. 2(3), 29-43.
- Sarma J. Vicary B and Holdrege J. (2004). *Sustainability. World Vision Transformational Development Indicators Supplementary Program Resource Guide-Social Sustainability (Draft 3) and Resource Guide-Community Participation*.
- Satterthwaite, D. (2002). Local funds: potential to allow donor agencies to support community development and poverty reduction in urban areas. *Environment & Urbanization journal Vol. 14*.
- Scarlet, R. (2008). *Official Learning System. Oxford: CIMA Publishing*.
- Schnelder, W. A. (2019), Financial Management in Church Organizations. *The CPA Journal online April 1989*. Accessed on 25 January 2021 from www.nysscpa.org/cpajournal/old/07299394.html
- Scholnick, B., Massoud, N., Saunders, A., Carbo-Valverde, S. & Rodríguez-Fernández, F. (2008). The economics of credit cards, debit cards and ATMs: A survey and some new evidence. *Journal of Banking & Finance*, 32(8), 1468-1483.
- Scott, H. S. (2015). *The Importance of the Retail Payment System: Retail Payment Systems conference*, Harvard Law School Program on International Financial Systems.
- Scottish Government, (2014). *Community funds*. Retrieved from <http://www.gov.scot/> on 23rd July, 2021 at 2:34am.
- Sekaran, G. K. (2000). *Research Methods in Social Work. (4th Ed.)*. Pacific Grove, CA: Brooks/Cole
- Shewchuk, S. (2014). Children in need of protection: reporting policies in Ontario school boards. *Canadian Journal of Educational Administration and Policy*, Issue No. 162.
- Shapiro, J. (2006) *Financial Control and Accountability Toolkit*. Civicus.
- Smith, R.W. & Lynch, T. D. (2004). *Public Budgeting in America (5th Ed.)*. New Jersey: Pearson; Upper Saddle River, 37.
- Soudani, S. N. (2017). 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.
- Speer, P.W. & Perkins, D.D. (2002). *Community-Based Organizations, Agencies and Groups*. <http://www.answers.com/topic/community-based-organizations-agencies-and-groups>. Retrieved on April 27 2013.

- Sudsomboon, J. & Ussahawanitchakit, P. (2009), 'The Use of internal audit by Australian Companies', *Managerial Auditing Journal*. 2(3), 29-43.
- Swanson, N. H. Hunson, F. K. & Ross, J. N. (1998). "Accounting," (4th ed.). New Delhi: South-Western Publishing Co.
- Theofanis, M. L., L. Sun, and C. Li. (2011). The Impact of SOX Section 404 internal control quality assessment on audit delay in The SOX Era. *Auditing: A Journal of Practice & Theory*. 2(3), 229-243.
- Wanyama, G. J. (2005). Implementation of community support fund: factors affecting Effective implementation. *Fund's implementation journal*, 63(21), 234-240.
- Waren, G. (2011) *Financial Control and Accountability Toolkit*. Civicus. *Computer Mediated Communication journal*, 101, 593-628.
- Welsch, G. A. & Short, D.G. (2017), *Fundamentals of Financial Accounting 5th Edition* IRWIN Homewood Illinois 60430.
- Wescott, C., Bowornwathana, B., & Jones, L. R. (Eds.). (2015). *The many faces of public management reform in the Asia-Pacific region*. Emerald Group Publishing.
- Westhorp, G., Walker, D.W., Rogers, P., Overbeeke, N., Ball, D., & Brice, G. (2014). *Enhancing community accountability, empowerment and education outcomes in low and Middle-income countries*. London: University of London.
- Williams, D. (2006). On and off the net: Scales for the social capital in an online era. *Computer Mediated Communication journal*, 11, 593-628.
- World Bank (2004). *From Shouting to Counting: A New Frontier in Social Development, Participation and Civic Engagement Group*, Social Development Department, World Bank
- World Vision Kenya (2015). *Community funds Assessment report*, Retrieved from <http://www.narok.go.ke/narok-media/news-events/294-the-maasai-mara-community-support-fund>. On 25th June, 2021 at 2:19pm.

APPENDIX I
QUESTIONNAIRE

This questionnaire has been designed to collect data on the “**effect of computerized accounting systems on financial control in public secondary schools in Narok county**”. Please read carefully and answer the questions correctly. Information gathered will be used purely for academic research and will be treated with utmost confidence.

School Name: _____

Instructions

1. Please tick appropriately in the box or fill in the space provided.

PART A: BACKGROUND INFORMATION

2. Position held

- a) Principal []
- b) Deputy Principal []
- c) Accountant []
- d) Store Keeper []

3. Highest education qualification attained

- a) Secondary []
- b) College []
- c) Undergraduate Degree []
- d) Post Graduate []

4. For how long has the institution been using computerized accounting system?

- a) 5 years and below []
- b) 6 to 10 years []
- c) Above 10 years []

5. How would you generally rate computerized accounting system in your organization in relation to financial control?

- a) Excellent []
- b) Good []
- c) Fair []
- d) Poor []

PART B: COMPUTERIZED ACCOUNTING

Explain the extent to which your institution applies computerized accounting in your institution. Use 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent

Electronic transaction processing	1	2	3	4	5
Electronic transaction processing shortens the date of service-to-payment lifecycle					
Electronic transaction processing provides electronic test verifications of data to ensure proper banking information					
Electronic transaction processing allows for immediate funds availability					
Electronic transaction processing offers even quicker payment on negotiated bills through our Prompt Pay option					
Electronic transaction processing reduces paper handling.					
Electronic transaction processing saves time and manpower					
Electronic reporting	1	2	3	4	5
Electronic reporting improves the corporate performance					
Electronic reporting enhances accounts payable					
Electronic reporting improves accounts receivable					
Electronic reporting enhances financial reporting					

Electronic reporting improves bank and account reconciliations					
Electronic reporting enhances financial performance					
Electronic Audit	1	2	3	4	5
Using Electronic Auditing System leads to increasing the credibility factor in the information extracted from Electronic Accounting Information System.					
Electronic Auditing System is capable to deal with multi-generations in Electronic Accounting Information Systems					
Designing the Electronic Auditing Systems in a way suitable to the accounting session, that can follow up mistakes, and extracting them gradually in Electronic Accounting Information System					
Electronic Auditing System can deal with several forms of data entry in Electronic Accounting Information Systems					
Electronic Auditing System can deal with several data entries in Electronic Accounting Information Systems					
Electronic Auditing System can compare its results with the results of Electronic Accounting Information Systems					
Electronic Auditing System diagnoses the mistakes of complicated arithmetic in Electronic Accounting Information Systems					
E – payroll	1	2	3	4	5
E – payroll ensures speedy analysis and generation of salary reports					
E - payroll improves generation of pay-slips					
E – payroll improves record of hours absent for effective payroll management					

E – payroll assures accuracy of data in payroll management					
E - payroll improves the payroll interface with Accounts for efficiency in payroll management					
E – payroll enhances quality of information generated for payroll					

PART C: FINANCIAL CONTROL

Explain the extent to which your institution applies computerized accounting to improve financial control. Use 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent.

Component	1	2	3	4	5
Since the adoption of computerized accounting the operating expenses have been minimized					
The schools' revenue has been rising steadily					
Computerized accounting system ensures that fees is collected from all the students					
Computerized accounting ensures timely collection of fees					
The school operates with a periodic budget.					
The school budgeting process relies on historical data					
The school budgeting process is electronic.					

APPENDIX II
INTRODUCTORY LETTER FROM THE UNIVERSITY



Maasai Mara University
BOARD OF POSTGRADUATE STUDIES
OFFICE OF THE DIRECTOR

P.O. BOX 861 – 20500
Narok, Kenya www.mmarau.ac.ke

Tel: +254 – 20 -2066042
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20th September, 2021

RESEARCH PERMITS SECTION
NACOSTI
UTALII HOUSE

REF: JOEL LEMEIN NCHOE (REG. NO. BM07/JP/MN/8706/2019)

We wish to confirm that the above named is a bona fide Master's student at Maasai Mara University pursuing Master of Business Administration in the School of Business & Economics. His proposed research is *'Effects of Computerized Accounting Systems on Financial Control in Public Secondary Schools in Narok County'*. He would like to apply for a research permit from NACOSTI before he can proceed for field work and data collection.

We further confirm that the candidate has adhered to all research protocol requirements of Maasai Mara University and the proposed research has been rated as having no known adverse impacts on the environment and does not pose any ethical concerns.





~~This is therefore to request your office to issue him with a research permit.~~

MAASAI MARA UNIVERSITY
P.O. Box 861 - 20500
Faithfully yours,

RAvila 20 SEP 2021

Prof. Romulus Abila, PhD.
Director, Board of Postgraduate Studies

APPENDIX III
RESEARCH PERMIT FROM NACOSTI

 <p style="text-align: center;">REPUBLIC OF KENYA</p> <p style="text-align: center;">Ref No: 928920</p> <p style="text-align: center;">RESEARCH LICENSE</p> <div style="text-align: center;"></div> <p>This is to Certify that Mr. JOEL LEMEIN NCHOE of Maasai Mara University, has been licensed to conduct research in Narok on the topic: Effects of computerized accounting systems on financial control in Public Secondary Schools in Narok County for the period ending : 01/October/2022.</p> <p style="text-align: center;">License No: NACOSTI/P/21/13241</p> <p style="text-align: center;">928920 Applicant Identification Number</p> <p>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</p>	 <p style="text-align: center;">NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION</p> <p style="text-align: right;">Date of Issue: 01/October/2021</p> <p style="text-align: center;"><i>Walter Kimani</i> Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION</p> <p style="text-align: center;">Verification QR Code</p> <div style="text-align: center;"></div>
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