



DSPACE

<https://dspace.org/>

Effect of accounting information systems on service delivery in public secondary schools in Kericho County, Kenya

Bii, Bernard

2022-02

university of kabianga

<http://ir-library.kabianga.ac.ke/handle/123456789/347>

**EFFECT OF ACCOUNTING INFORMATION SYSTEMS ON SERVICE DELIVERY IN
PUBLIC SECONDARY SCHOOLS IN KERICHO COUNTY, KENYA**

BENARD BII

**A Thesis Submitted to the Board of Graduate Studies in Partial Fulfillment of
the Requirements for the Conferment of the Degree of Master of Business
Administration (Accounting Option) of the University of Kabianga**

UNIVERSITY OF KABIANGA

FEBRUARY, 2022



DECLARATION AND APPROVAL

Declaration

This thesis is my original work and has not been presented for the conferment of degree or for the award of a diploma in this or in any other university:

Signature..... Date.....

Benard Bii

MBA/A/047/18

Approval

This thesis is submitted for examination with our approval as University supervisors:

Signature..... Date.....

Dr. Willy Rugutt

Department of Accounting and Finance

University of Kabianga

Signature..... Date.....

Dr. Joseph Rotich

Department of Agricultural Biosystems, Economics and Horticulture

University of Kabianga



COPYRIGHT

All rights reserved. No part of this thesis may be reproduced, stored in retrieval system or transmitted in any form mechanical, photocopying, recording, or otherwise without prior permission from the author or the University of Kabianga.

© Benard Bii, 2022





DEDICATION

This thesis is dedicated to my family for their prayers, support, inspiration and encouragement during my academic journey and to my parents whose love, patience, understanding and support I treasure.



ACKNOWLEDGEMENT

I want to profoundly acknowledge and thank my research supervisors Dr. Willy Rugutt and Dr. Joseph Rotich for their guidance and encouragement towards my academic achievements and all the lecturers who have tutored me. I also appreciate my classmates, researcher assistants and the entire University of Kabianga staff for their support. I must offer special thanks to my family, I am blessed to be surrounded by supportive kin. Without them it would not have been easy to publicize my thoughts. Lastly, I pay great tribute to all others whom I have not named but whose contribution I cannot even imagine enumerating fully.



ABSTRACT

Accounting information systems are increasingly used and viewed as important in all spheres of operation including education where it has become valuable for storing and analyzing data in school financial management which includes budgetary allocations, expenditures, students' fees payment and general accounting. It is a government policy that all schools' operations be automated for easy management and despite considerable growth in the use of computers acquired by schools in Kenya in recent years, there has been little evaluation of their effectiveness on service delivery. The purpose of this study was to investigate the effects of accounting information systems and service delivery in public secondary schools in Kericho County, Kenya. The study specifically sought to; establish the effect of software use; staff competency; internal controls; and capacity building in accounting information systems on service delivery in public secondary schools in Kericho County. The study was guided by Technology Acceptance Theory. The study employed descriptive research design. The study targeted principals and school accountants of all the public secondary schools in Kericho County who totaled up to 400 where a sample size of 200 respondents was determined. Simple random sampling and stratified sampling technique was used to select respondents. The study used primary data which was collected using self-administered questionnaires. Quantitative data was analyzed using inferential statistics with the aid of SPSS version 23.0 while qualitative data was analyzed using descriptive statistics. Analyzed data was presented using tables and graphs. The findings shows that accounting information software use affect service delivery ($t = 8.072, p < 0.05$); staff competency affect service delivery ($t = 3.138, p < 0.05$); internal control does not affect service delivery ($t = 0.786, p > 0.05$); and that capacity building affect service delivery ($t = 9.627, p < 0.05$). There is need for training on use of accounting information system; segregation of duties be implemented so that users of the systems are monitored or evaluated based on every financial transaction and that capacity building be organized for workforce so that they give quality service. The findings of this study are used to develop the policy framework by the government, to be used to improve practice, to be used by other researchers in the relevant field and finally recommend possible measures to be taken by the Ministry of Education, school managers, school administrators and other interested stakeholders for effective use of accounting information system and that they form basis for future research. Further research can be done on the adoption of accounting information system on the management of secondary school funds.



TABLE OF CONTENTS

DECLARATION AND APPROVAL.....	ii
COPYRIGHT.....	iii
DEDICATION.....	iv
ACKNOWLEDGEMENT.....	v
ABSTRACT.....	vi
TABLE OF CONTENTS.....	vii
LIST OF TABLES.....	xi
LIST OF FIGURES.....	xii
LIST OF ABBREVIATIONS AND ACRONYMS.....	xiii
DEFINITION OF TERMS.....	xv
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Overview.....	1
1.2 Background of the Study.....	1
1.3 Statement of the Problem.....	8
1.4 General Objective.....	9
1.5 Specific Objectives.....	9
1.6 Research Hypotheses.....	9
1.7 Justification of the Study.....	10
1.8 Significance of the Study.....	11



1.9	Scope of the Study.....	11
1.10	Limitations of the Study.....	11
1.11	Assumptions of the Study.....	12
CHAPTER TWO.....		13
LITERATURE REVIEW.....		13
2.1	Introduction.....	13
2.2.1	Accounting information software use and service delivery.....	14
2.2.2	Staff competency in accounting information system and service delivery.....	20
2.2.3	Internal controls in accounting information system and service delivery.....	24
2.2.4	Capacity building in accounting information systems and service delivery.....	31
2.3	Theoretical Framework.....	33
2.3.1	Technology acceptance theory.....	33
2.4	Conceptual Framework.....	34
2.5	Identification of Knowledge Gap.....	35
CHAPTER THREE.....		37
RESEARCH METHODOLOGY.....		37
3.1	Introduction.....	37
3.2	Research Design.....	37
3.3	Location of the Study.....	37
3.4	Target Population.....	37
3.5	Sample Size and Sampling Procedures.....	38



3.6	Data Collection Instruments.....	40
3.6.1	Validity of the instrument.....	41
3.6.2	Reliability of the instrument.....	41
3.7	Data Collection Procedures.....	43
3.8	Data Analysis and Presentation.....	43
3.9	Ethical Considerations.....	46
CHAPTER FOUR.....		47
RESULTS AND DISCUSSION.....		47
4.1	Introduction.....	47
4.2	Response Rate.....	47
4.3	Distribution of Respondents Per Position Held.....	48
4.3.1	Questionnaires per respondents.....	48
4.3.2	Gender of respondents.....	50
4.3.3	Age of respondents.....	51
4.3.4	Respondents' level of education.....	52
4.3.5	School population.....	53
4.3.6	Work experience.....	54
4.4	Findings of Descriptive Statistics.....	55
4.4.1	Software use in accounting information system on service delivery.....	55
4.4.2	Accounting information system staff competencies on service delivery.....	60
4.4.3	Accounting information system internal control on service delivery.....	65



4.4.4	Capacity building in accounting information system on service delivery.....	71
4.4.5	Service delivery.....	76
4.5	Inferential Statistics.....	80
4.5.1	Pearson correlation analysis.....	80
4.5.2	Regression analysis.....	82
4.5.3	Coefficient of determination.....	83
4.6	Research Hypotheses.....	84
CHAPTER FIVE.....		86
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....		86
5.1	Introduction.....	86
5.2	Summary.....	86
5.2.1	Accounting information software use on service delivery.....	86
5.2.2	Staff competencies in accounting information system on service delivery.....	86
5.2.3	Internal control in accounting information system on service delivery	87
5.2.4	Capacity building in accounting information system on service delivery.....	88
5.2.5	Service delivery.....	88
5.3	Conclusions.....	89
5.4	Recommendations.....	89
5.5	Suggestions for Further Research.....	90
REFERENCES.....		91



APPENDICES	101
Appendix I: Questionnaire	101
Appendix II: Clearance Letter	108
Appendix III: Research Permit	109
Appendix III: Research Publication	110

LIST OF TABLES

Table 3.1: Target Population	38
Table 3.2: Sample Size	40
Table 3.3: Reliability Results	42
Table 3.4 Multi-collinearity Test Results	45
Table 4.1: Accounting Information Software Use on Service Delivery	56
Table 4.2: Staff Competencies in Accounting Information System on Service Delivery	60
Table 4.3: Internal Control in Accounting Information System on Service Delivery	66
Table 4.4: Capacity Building in Accounting Information System on Service Delivery	



Table 4.5:	Service Delivery.....	76
Table 4.6:	Correlations.....	81
Table 4.7:	Model Summary.....	82
Table 4.8	Coefficients ^a	83

LIST OF FIGURES

Figure 2.1:	Conceptual Framework.....	34
Figure 4.1:	Response Rate.....	48
Figure 4.2:	Respondents Distribution per position held.....	49
Figure 4.3:	Gender of Respondents.....	50
Figure 4.4:	Age of Respondents.....	51
Figure 4.5:	Level of Education of the respondent.....	52
Figure 4.6:	School Population.....	53
Figure 4.7:	Work Experience.....	54

LIST OF ABBREVIATIONS AND ACRONYMS

A.I.S	Accounting Information System
ANOVA	Analysis of Variance
B.O.M	Board of Management
CDE	County Director of Education
CDF	Constituency Development Fund
CFO	Chief Finance Officer
CFSK	Computers for Schools Kenya
COSO	Committee of Sponsoring Organizations



EMIS	Enterprise Management Information System
ERP	Enterprise Resource Planning
FM	Financial Management
FY	Financial Year
GL	General Ledger
G.O.K	Government of Kenya
ICT	Information, Communication Technology
IFMIS	Integrated Financial Management Information System
INTOSAI	International Organization of Supreme Audit Institutions
IRI	Interactive Radio Interaction
KESSP	Kenya Education Sector Support Programme
MIS	Management Information System
MOE	Ministry of Education
MOE PAC	Ministry of Education Public Accounting Committee
MOEST	Ministry of Education Science and Technology
NACOSTI	National Commission for Science, Technology and Innovation
PS	Principal Secretary
SFG	Strategic Financial Goals



SMEs	Small and Medium Enterprises
SPSS	Statistical Package for Social Sciences
TAM	Technology Acceptance Model
UNESCO	United Nations Educational, Scientific and Cultural Organization
VIF	Variance Inflation Factor

DEFINITION OF TERMS

Accounting information system is a software program that records business transactions and processes transactions within functional modules and provides the necessary information. It functions as an information accounting system, (Olha 2021). In the study it is a computer program which is used to manage financial transactions in an organization in order to enhance financial management.

Capacity building is the process of developing and strengthening the skills, instincts, abilities, processes and resources that organizations and communities need to survive, adapt, and thrive in a fast-changing world, (Barrett, 2013). In the study it is a



process for strengthening the management and governance of public secondary school so that it can effectively achieve its objectives and fulfill its mission.

Financial Management is the operational activity of a business that is responsible for obtaining and effectively utilizing the funds necessary for efficient operations, (Paramasivan, 2009). In the study it is the planning, performance evaluation, and coordination of financial activities in an organization so as to achieve intended goals.

Internal control are the mechanisms, rules, and procedures implemented by a company to ensure the integrity of financial and accounting information, promote accountability, and prevent fraud (Will, 2021). In the study it is a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance that information is reliable, accurate and timely of compliance with applicable laws, regulations, contracts, policies and procedures.

Public secondary school is a school that runs on public funds, usually government-imposed taxes (Kyle, 2005). In the study it refers to secondary schools managed by government using public funds and therefore has equal level in terms of funds.

Service delivery is as any contact with the public administration during which customers or citizens, residents or enterprises seek or provide data, handle their

affairs or fulfil their duties (Anuradha, 2010). In the study they are services delivered in an effective, predictable, reliable and customer-friendly manner to key stakeholders of public secondary school.

Staff competency is observable and measurable knowledge, skills, abilities and personal attributes that contribute to enhanced employee performance (Wong, 2020). In the study it refers to the combination of observable and measurable knowledge, skills, abilities and personal attributes that contribute to enhanced employee performance and ultimately result in organizational success.



CHAPTER ONE

INTRODUCTION

1.1 Overview

This chapter covers the background of the study, statement of the problem, objectives of the study, research questions, and justification of the study, scope, limitations and assumptions of the study.

1.2 Background of the Study

An Accounting Information System (AIS) is a set of interdependent activities, documents, and technology designed to collect, process, and report information for decision-making purposes (Hurt 2013). The efficient integration of accounting applications enhances the flexibility of information generation, improves the quality of the financial report produced, and provides timely and reliable information to support planning and decision making within the organization (Roberts and Strikes 2011, Ladan Shagari, Shamsudeen & Abdullah, Akilah & Mat Saat, Rafeah 2016). Successful implementations of AIS in organizations have impacted positively the methods of data collection, processing, and dissemination of the information to the intended user(s) (Dameri, Garelli, & Ricciardi, 2013).

Moreover, AIS is believed not just to improve the effectiveness and efficiency of business processes and reduce cost but also to provide reliable real-time data on



demand, facilitating global knowledge and new reporting tools, as well as the integration and collaboration between areas of risk and business operations (Bruno, Iacoviello, & Lazzini, 2015). Considering the nature of IS today, rarely is AIS distinguished separately from IS Gelinas, Dull, and Wheeler (2012), Mancini, Dameri, and Bonollo (2015), opined that the integration of IS and AIS influences the quality and quantity of information available to support decision making. The connection between these two elements at the operational level affects not only the technical aspects of the system, it is also capable of showing its overall effects on the accountability processes of organizations. Thus, accounting information systems are an important component in enhancing service delivery (Bruno *et al.*, 2015).

Bentley, Cao, and Lehaney (2013), found out that low data quality, a lack of system specification, a lack of communication within the system, inflexibility of the systems, and poor system management were causes of IS ineffectiveness (failure). In addition, Kanungo, Duda, and Srinivas (1999), indicated that facilitating information retrieval, improving product and services quality, and minimizing errors in system functional areas have a significant influence on IS effectiveness. Furthermore, the study revealed that improving system integration is the most influential factor that leads to the AIS effectiveness.

Gorla *et al.*'s (2010), and Hien *et al.*'s (2014), studies indicated that information quality, system quality, and service quality have a significant influence on AIS effectiveness. Basel, Bakar, and Omar (2016), stressed that these three factors



were the key ingredients for AIS effectiveness in banks. Thus, AIS is considered an essential managerial decision-making tool capable of handling accounting-related information of an institution. Furthermore, most studies have investigated IS effectiveness at the technical level by examining one or two of the success measures (information and system quality). However, evaluation of AIS effectiveness would be incomplete without the inclusion of service quality measures, (Bonollo, Lazzine, and Merli 2015).

An accounting information system offers managers transaction processing services, reporting, and information for effective decision-making purposes. As explained by Hall (2010), AIS comprises three main subsystems: the transaction processing system that supports organizations in recording of daily business activities and produces reports to various users for decision making; the general ledger/financial reporting systems that assists organizations in producing traditional financial statements that include income statements of cash flow, balance sheets, and other reports mandated by law; and the management reporting system that provides special-purposes information (reports) to internal managers for effective decision making.

The transaction processing system is central to the overall function of the IS by converting economic events into financial transactions. These are the basic business systems that serve the operational level of a given organization (Abdelhak and Dalel 2009). The transaction processing system is further classified into three subsystems known as cycles: the expenditure, the revenue,



and the conversion cycles. These cycles exist in all types of organizations irrespective of their focus. Although each cycle performs different functions and supports different objectives, they share the same characteristics about the recording and storing of financial transaction and provide information to users in support of their daily routine activities.

Also, these three cycles generate the require data through which management information (reports) and financial statements are produced (Hall, 2010). The general ledger and financial reporting systems are two closely related subsystems, which are often used interchangeably. Nonetheless, because of their interdependency in processing business transactions, they are considered as a single integrated system. The general ledger is a hub that is connected to the other systems of the organization through spokes of information flows while transaction cycles process separate events that are recorded in special journals and subsidiary accounts.

These transaction flows are summarized into the general ledger system and become sources of input for the management reporting and financial reporting system (Hall, 2010). The financial reporting system measures and reports the financial resources position of the organization and the changes in those resources. This is referred to as non-discretionary reporting because the law requires it, and the management has the responsibility to provide stewardship information to external parties to allow them to evaluate organizational performance over the period and make comparisons between different



organizations (Hall, 2010).

Accounting information system provides internal financial information for managers to enable them to manage the business efficiently and effectively. Abdelhak and Dalel (2009), claimed that managers need this information to monitor the status of internal operation and the organization's relationships with the external environment.

Management reporting is often referring to as discretionary reporting because it is not required by law and the organization can select what type of information to produce as well as how to present it. The reports may be in the form of a paper document or a digital image displayed on a computer terminal. The report may express information in numerical graphics or in a verbal form or in a combination of both. Management reporting systems direct management attention to any problems in a timely manner. Hence, management reporting is an important component of an organization's internal control structure (Hall, 2010).

Today, most countries include ICT integration, either in the national policies or in the laws pertaining to the education sector. For example, Australia has set goals for schools in relation to ICT development. The Government wants students to leave schools as confident, creative and productive users of new technologies on society. The same trend is seen in Indonesia, Malaysia, Uzbekistan, Vietnam and others, where the national governments set goals for ICT integration in education



(UNESCO, 2012). In Asia and the Pacific, including emerging countries, teachers in primary, secondary and tertiary levels are being trained in the use of ICTs in education with varying degree of scope. Most of the training programmes carry general objectives aimed at developing awareness, knowledge and skills in either the use of computers per se, or the integration of computers into teaching and learning (UNESCO, 2012). The key determinant for the realization of desired outcomes and success in public schools is the school principal hence he/she is seen as critical by all stakeholders.

Obiora (2010) observed that the twenty-first century principal faces numerous challenges emanating from the technology. Information and Communication Technology (ICT) are increasingly used and viewed as important in all spheres of operation including education. This requires effective and dynamic school management (Obiora, 2010).

A glance at African public secondary schools reveals the widespread utilization of ICT. Examples of the countries that have widely implemented ICT integration in schools include Rwanda, Uganda and Ghana. However, research evidence on utilization of accounting information systems in schools is scanty. Baylor and Ritchie (2012), argue that regardless of the amount of technology and its sophistication, technology will not be used unless school principal have the skills, knowledge and attitudes necessary to infuse it into accounting information systems.

The use of accounting information systems in Kenyan school differ from one



county to the other due to a number of factors including academic, economic, political, and cultural levels of development. In support of this position Ngugi (2012) noted that ICTs has become valuable for storing and analyzing data in school financial management which includes budgetary allocations, expenditures, students' fees payment and general accounting.

Kenya recognizes the many ways in which information and communication technologies (ICTs) can be used to support and improve the delivery of quality education for all Kenyans. These options are as per the educational priorities outlined in Sessional Paper No. 1 of 2005 and the Kenya Education Sector Support Programme (KESSP) document and which include: Quality Teaching and Learning through ICT; ICTs in teacher training colleges; ICT for in-service teacher training; Interactive Radio Interaction (IRI) for in-service teacher training and open and distance learning among others. Despite the attendant benefits of use of ICT in education, and the Government's recognition of the potential of ICT to enhancing development, Kenya's involvement in the ICT revolution in education is still low (GoK, 2010).

According to Blandford and Ann (2007), the computerization of accounting system helps in maintaining the records accurately, systematically and timely. Such systems can help track money owed to the school, generate receipts for all money collected, authorize valid payments; provide accurate, up-to date accounting information on budgets commitment and actual expenditure and produce financial statements and statements needed by schools to meet their



statutory obligations.

Financial cost of ICT integration in education relates to the acquisition of computers, training of personnel, hiring of personnel, maintenance of equipment and utility costs, electricity and service provider costs such as internet services. Oloo (2009), states that most schools acquire computers either through donation or school fund. Most of the donations are from nongovernmental organizations and enterprise like Computer for Schools Kenya (CFSK) funds and internally generated incomes by the school management for buying computers. In this regard, the study seeks to investigate accounting information system and service delivery in public secondary schools in Kericho County, Kenya.

1.3 Statement of the Problem

While most countries have reported up to 41% of use of accounting information systems in school management and in teaching/learning, the utilization of accounting information system in service delivery is not optimal in Kenya despite the huge amounts of money invested in secondary school education (Ministry of Education, 2012). According to the Ministry of Education (2018), approximately 10% of public secondary schools with computers are able to use them in managing their day to day accounting operations. The government has also put in efforts to supply computers, accounting information systems, train teachers in some schools and mobilize support from development partners. According to the Kericho County Education Office (2020), majority of the 200 public secondary schools in the County have accounting information systems used in school



management but most of them still offer poor service delivery. Accounting information systems are increasingly used and viewed as important in all spheres of operation including education where it has become valuable for storing and analyzing data in school financial management which includes budgetary allocations, expenditures, students' fees payment and general accounting but this is not the case in public secondary schools in Kericho. Most of the public secondary schools in Kericho County have not automated their operations for easy managements and despite considerable growth in the use of computers acquired by schools in Kenya in recent years leading to poor service delivery. This study therefore sought to investigate the effect of accounting information systems on service delivery of public secondary schools in Kericho County, Kenya.

1.4 General Objective

The main objective of the study was to investigate the effect of accounting information systems and service delivery in public secondary schools in Kericho County, Kenya.

1.5 Specific Objectives

The study specifically sought to;

- i. Establish the effect of accounting information software use on service delivery in public secondary schools in Kericho County,
- ii. Examine the effect of staff competency in accounting information systems on service delivery in public secondary schools in Kericho County,



- iii. Establish the effect of internal controls in accounting information systems on service delivery in public secondary schools in Kericho County,
- iv. Determine the effect of capacity building in accounting information systems on service delivery in public secondary schools in Kericho County.

1.6 Research Hypotheses

The following hypotheses were tested at 0.05 Alpha level;

H₀1: There is statistical significant effect of accounting information software use on service delivery in public secondary schools in Kericho County.

H₀2: There is statistical significant effect of staff competency in accounting information systems on service delivery in public secondary schools in Kericho County.

H₀3: There is no statistical significant effect of internal controls in accounting information systems on service delivery in public secondary schools in Kericho County.

H₀4: There is statistical significant effect of capacity building in accounting information systems on service delivery in public secondary schools in Kericho County.

1.7 Justification of the Study

Several accounting information systems have been utilized by public secondary



schools in Kenya with a view of making effective utilization of public resources. Despite the milestones achieved in the school management, there are still problems experienced in the public secondary schools with escalating cases of financial misappropriations, corruption and tussle principals, parents and ministry of education being reported most frequently. These problems among many prompted the researcher to undertake a study to determine the real issues that the accounting information systems have not addressed or implemented with a view of providing solutions that may enhance the service delivery in public secondary schools in Kenya.

It is only through research that the loopholes in the accounting information systems can be identified by getting the opinions, beliefs and ideologies of the various stakeholders involved in the utilization of financial management information systems. The study on the relationship between accounting information systems and service delivery in public secondary schools is timely and relevant given the new concept of digitization in Kenya.

1.8 Significance of the Study

This study sought to investigate the effect of accounting information system in service delivery in public secondary schools in Kericho County. The findings of this study may be used to recommend possible measures to be taken by the Ministry of Education, school managers, school administrators and other interested stakeholders for effective use of accounting information system. Data and information obtained in the study is expected to provide valuable



information to various education stakeholders such as County Directors of education and other officials involved in policy making processes so as to develop guidelines on accounting information system so as to ensure that there is effective service delivery in public secondary schools. Findings obtained from the study forms basis for future research.

1.9 Scope of the Study

The study involves public secondary while private schools were not covered because public schools are funded by government. It was narrowed to Kericho County and may slightly be different in other counties in terms of service delivery. The study was undertaken between the months of July and September 2021.

1.10 Limitations of the Study

The study targeted public secondary schools in Kericho County and was confined to the effectiveness of utilization of accounting information systems on service delivery only. The study was limited to the study variables which were software use, staff competency, internal control and capacity building.

1.11 Assumptions of the Study

The study was premised on the following assumptions, that secondary schools' principals were conversant with the various uses of accounting information systems in enhancing administration and management, public secondary schools had the required capacity to support the use of accounting information system in enhancing service delivery, it was assumed that the theoretical foundation of the



study was an accurate reflection of the phenomena being studied and that the respondents co-operated and give honest answers.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter presents literature review on accounting information systems and service delivery in public secondary schools, theoretical framework, conceptual framework and identification of knowledge gap from reviewed literature.

2.2 Review of Related Literature

Mugi and Jagongo (2018), did a research that examine the effect of accounting information systems on service delivery. Data was extracted from public institution of higher learning in Nairobi City County using questionnaire using a sample of 96 employees. Accounting Information System and service delivery relationship were established through multiple linear regression. Control environment, information and communication, control activities, risk assessment was found to have significant effect on service delivery. The study recommended improvement to be done in accountability of organizational resource. This study focused on service delivery in public secondary schools.

Mutai, Simiyu, and Sakwa (2018), established the influence of accounting information systems practices on service delivery of County Government in Kenya. The study used descriptive research design where 10 Counties were investigated.



The findings showed that internal control practice which included control activities, control environment and internal audits had high significant influence on performance of County Government. Internal control assisted the county to meet revenue target and optimal service delivery. The counties had reliable finance team who were of high integrity and that employees complied with government policies, procedures and applicable laws and regulation hence evaluation was efficient and effectiveness. The study concluded that County Government achieved there objective since it had invested in effective internal control system that improved on service delivery. The study's variable were internal audit, control environment and control activities.

2.2.1 Accounting information software use and service delivery

Accounting information systems have been developed to assist in service delivery through customized management information systems (MIS) which have been used to enhance financial transactions in schools. The exact nature of accounting information systems and service delivery varies from school to school in light of local circumstances. The accounting manager in secondary schools implement finance policies, process financial and monitor budget on daily basis as well as relieving the head teacher from the necessity of having to carry out some other financial and resource management tasks. Victoria (2002), asserted that ICT can provide means for communicating accounting information to the administration to help them with decision making and service delivery.

Lately, Vitez (2010) reviewed that paper ledgers, manual spreadsheets and hand-



written financial statements have all been translated into computer systems that can quickly present individual transactions into financial reports. Accounting information systems follow the same logic of journal, ledgers, reports and statements in a manual system. Computerize systems simply consolidate posting functions and other basic tasks into a "behind the scenes" system. Companies can also generate reports and financial statements easier, allowing for better performance management reviews.

Marivic (2009) described accounting information systems as a method or scheme by which financial information on business transactions are recorded, organized, summarized, analyzed, interpreted and communicated to stakeholders through the use of computers and computer based systems such as accounting packages.

Baren (2010) Accounting information systems are important to businesses in various ways. The use of computers is time-saving for businesses and all financial information for the business is well organized, using accounting information systems saves companies time and money. The use of a computer makes inputting accounting information simple. Transactions are entered into the system and the system processes and posts transactions accordingly. Accounting information systems reduce staff time preparing accounts and reduce audit expenses as records are neat, up-to-date and accurate. Better use is made of resources and time; cash flow should improve through better debt collection and inventory control. More importantly, the system helps present financial reports on time to aid in the economic decision making process of external users.



Accounting information systems enables businesses to stay organized. When information is entered into the system, it makes finding the information easy. Employees can look up any financial information whenever it is needed (Baren 2010). There is less room for errors as only one accounting entry is needed for each transaction rather than two (or three) for a manual system. The accounting records are automatically updated and so account balances (e.g. customer accounts) will always be up-to-date.

Storing information is vital to a business. After information is entered into the system, the information is stored indefinitely. Companies perform backups on the system regularly to avoid losing any information. The introduction of Accounting information systems provides the ability to see the real-time state of the company's financial position. Accounting information systems allow companies to distribute financial information easily. Financial statements are printed directly from the system and are distributed internally and externally to those needing the information. Reports can be produced which will help management monitor and control the business, for example the aged debtors analysis will show which customer accounts are overdue, trial balance, trading and profit and loss account and balance sheet. In effect, Accounting information systems enable financial statements to be prepared and presented to meet the relevance and faithful representation criteria of financial statements (Baren 2010).

The informal systems of money transfer such as individuals carrying money on themselves or sending drivers and conductors are susceptible to highway



robberies and thefts (Kim et al., 2010). Other challenges associated with the formal and semi-formal systems, include delays and long queues, network limitations, insolvency of branches, unreliable communication and misdirected parcels. This situation has changed dramatically in the last few years with the introduction of mobile phone-based money transfer (MMT) services. The introduction of prepaid cards of low denominations and the fallen prices of mobile handsets have lead to a rapid spread of mobile phones in the developing countries (Orozco et al. 2007).

Four companies provide mobile phone services in Kenya. These include Safaricom, Airtel (formally Zain), YU and Orange (formally Telkom Kenya). Safaricom was the first company to provide mobile services and MMT services in Kenya. In partnership with the Commercial Bank of Africa and a micro-finance company, Faulu Kenya, Safaricom designed and tested a micro-payment platform called M-PESA in 2004. 'Pesa' means 'money' in Kiswahili and the prefix 'M' refers to the use of a mobile phone to facilitate banking transactions. M-PESA began by using Safaricom's airtime retailers (agents) to issue microloans that borrowers would repay at an interest rate reduced by eliminating the overhead conventional microloans carried. However, the skilled worker in Kenya soon began using the facility to transfer cash from working relatives in the city to their families in the rural areas (Hughes and Lonie, 2007). Consequently, M-PESA money transfer service was officially launched in March 2007 as a MMT service.

MMT service in Kenya is almost synonymous with M-PESA. Meanwhile, Airtel -



the second largest mobile phone company launched its MMT service called Airtel -Money (formally ZAP) in February 2009 while YU mobile phone company introduced its services named and YU-CASH in December 2009. Orange (formally Telcom and Posta) is the fourth and latest entrant to introduce its MMT service called Orange Money in November 2010 MMT operates in a very easy and simple way. MMT services allow customers to use their phone like a bank account and a debit card. These customers credit their accounts at a local authorized agent and can then transfer the money to another person's phone or use for different transactions such as making loan repayment, paying bills or redeeming it as cash. MMT is still at an early stage of development in Kenya but ahead of the world: it is designed to bring the economic advantages of having a savings and money transfer facility to those with small, irregular or cyclical incomes (Pulver, 2009).

Recent evidence suggests that there is an increase in penetration and use of MMT services in Kenya (Mason, 2007). In early 2011, Safaricom had an M-PESA subscription base of about 16 million and about 17,000 agents (outlets) countrywide (Central Bank of Kenya, 2011). Figures for the other MMT service players were not immediately available. This represents substantially more points of service than the combined number of bank branches (1063) and Automated Teller Machines (ATMs) (1979) (Central Bank of Kenya, 2010). Statistics from the Central Bank of Kenya indicate that Safaricom's MPESA users moved more than Ksh. 728 Billion (approximately \$8 Billion) in 2010 as compared to only Ksh. 50 Million by Orange-money (Central Bank of Kenya, 2010). This



amount was moved in the more than 306 Million transactions conducted in the service. The report further puts daily movement of cash to more than Ksh 2.3 Billion. Revenue from M-PESA in 2010 stood at Ksh 12 Billion, up from Ksh 8 Billion in 2009 (Central Bank of Kenya, 2010). M-PESA remains the most widely used method of mobile money transfer as evidenced by the number and value of transactions effected.

Using Accounting information systems saves companies time and money. The use of a computer makes inputting accounting information simple. Transactions are entered into the system and the system processes and posts transactions accordingly. Accounting information systems reduce staff time preparing accounts and reduce audit expenses as records are neat, up-to date and accurate. Better use is made of resources and time; cash flow should improve through better debt collection and inventory control. More importantly, the system helps present financial reports on time to aid in the economic decision-making process of external users (Marivic, 2009).

The use of financial software gives the bursar a good indication about the direction of the business for school and a means of comparing data with previous months, terms and years (Gbenga 2003). This gives a baseline for effective decision making, about how fees should be collected, how salaries should be paid and how to carry out other procurement services in the school. He stated that the use of ICT for accounting purposes needs a standard software installed on interlinked computers where all transactions can be automatically logged on the

computer to assist in fees payments, payrolls, procurements. A networked ICT environment with information systems can be used in the flow of data and information from one department to another in the school, for example from the bursar's office, to the principal's office which results into improved in service delivery, administrative and operational efficiency of the school. Samer and Sambamurthy (2006), contended that the absence of such systems in the school may result into the following problems; delays in decision making due to high cycle time in business transactions, high Inventory, poor utilization of accounting and other school resources and poor service delivery.

The development of a standard payroll computer system has made the bursar's role easy. Payroll is enumeration of employees receiving regular pay. A computerized payroll system has set of interdependent items and rules that stipulate the pay conditions of a given organization, such as salary structure, tax schedules, benefits and allowances, frequency and pay dates of an employee. A payroll system is used by an organization to process and pay the wages of employees. In a networked environment, all duties will be easier done automatically with the command from the bursar. From this point of view, it means that ICT will be important to those who are involved in all types of school finance management (Passey 1999). There have been very few studies into accounting aspects of ICT for managers in schools.



2.2.2 Staff competency in accounting information system and service delivery

According to Njonde and Kimanzi (2014), Public Financial Management (PFM) focuses on the management of public resources as per the budget guidelines process for and improved public accountability and good service delivery. Effective management of public resources means that the management will take into account the available resources and the impact they have on the society if well managed (Njoroge and Wanyoike 2016). Over the past few years, the investment patterns on ICT in educational systems have changed dramatically. However, the patterns of financial and procurement management have not necessarily paralleled this shift. The literature that exists often points to the fact that managers feel incompetent and shy off in using accounting information system in the management of finances in public secondary schools. As a result many clerical staff in schools handles financial statements manually, (Ian 2007).

According to Christine (2010), the exact nature of service delivery varies from school to school in light of local circumstances. The accounting manager in the school will take responsibility of implementing the finance policies of the school, financial processing and monitor the budget on daily basis as well as relieving the head teacher from the necessity of having to carry out some other accounting and resource management tasks. Victoria (2002), asserted that ICT can provide means for communicating accounting information to the governing body (administration) to help them with decision making. The use of accounting software, therefore, gives the bursar a good indication about the direction of the

business at school and a means of comparing data with previous months, terms and years, (Gbenga 2003). This gives a baseline for effective decision making, about how fees should be collected, how salaries should be paid and how to carry out other procurement services in the school. Gbenga (2003) also noted that the use of ICT for accounting purposes, needs a standard software installed on interlinked computers where all transactions can be automatically logged on the computer to assist in fees payments, payrolls, procurements.

According to Gbenga (2003), networked ICT environment with accounting information systems can be used in the flow of data and information from one department to another in the school, for example from the director of studies department to the head teacher's office, to the procurement department and finally to the registration department which results into improved administrative, service delivery and operational efficiency of the school. Kiptalam and Rodrigues (2010), contended that the absence of such systems in the school may result into the following problems, poor service delivery, delays in decision making due to high cycle time in business transactions, high Inventory, poor utilization of accounting and other school resources.

According to Kiptalam and Rodrigues (2010), development of a standard payroll computer system has made the bursar's role easy. Payroll is a list of employees receiving regular pay. A computerized payroll system includes a defined set of interdependent items and rules that stipulate the pay conditions of a given organization, such as salary structure, tax schedules, benefits and allowances,



frequency and pay dates of an employee. A payroll system can be defined as a computer system used by an organization to process and pay the wages of employees. In a networked environment, all duties will be easier done automatically with the command from the bursar.

The introduction of uses of accounting information management system means that for all those who manage schools, it is likely to have an impact now or in the very near future. From this point of view, it means that accounting information systems will be important to those who are involved in all types of school finance management. There were constructive developments in many schools' use of accounting information systems in administration. One of the most evident was the increasing development in the secondary sector of information management systems to track and record pupil progress (Salomon 2010). A number of schools have begun to use electronic systems to record accounting transactions through their locally developed systems. They use them for accounting transactions of the school, that is, online procurements and properly manage school finances. To develop effective management, or even to understand 'good' management, means that the context, vision, purpose, planning methods, approaches, strategies, tactics and monitoring mechanisms all at least need to be understood within the context of effective use of ICT in the management of secondary schools (Schiller 2013).

According to Blandford (2017), the computerization of accounts system helps in maintaining the records accurately, systematically and timely. Such systems can



help track money owed to the school, generate receipts for all money collected, authorize valid payments; provide accurate, up-to date accounting information on budgets commitment and actual expenditure and produce financial statements and statements needed by schools to meet their statutory obligations.

Syombua (2013), asserted that there should be accounting control systems that determine how to use available resources optimally to produce quality results. Indeed, these gaps in accounting for funds has seen the government mounting training programmes for the school management team on the use of ICT in management. He further observed that electronic accounting (e-accounting) makes it possible for transactions to be captured, measured, recognized and reported electronically.

Oyier, Odundo, Ganira and Wangui (2015) study on Electronic Management Information System (EMIS) use in management of private schools in Nairobi showed the use of EMIS in accounts, payroll and budgeting resulted in managing daily transactions easily through record keeping in journals, ledgers and cashbook which made the accounting analysis in terms of writing balance sheets, trail balances, trading accounts and profit and loss accounts more effective. Staff competency in accounting information systems would simplify schools' workflow and transaction processes thus impacting positively on overall management of the school hence better service delivery.

2.2.3 Internal controls in accounting information system and service delivery

According to Kaplan (2008), internal control is a procedure that is sanctioned by an organization's board of management. It is planned in a way such that it can offer assurance in line with the realization of organizations objectives in the effectiveness and efficiency of its activities, dependability of the accounting and management reporting mechanisms, compliance with appropriate and applicable regulations and guidelines, and ability to adequately preserve the reputation of the organization. The main purpose of internal control mechanisms is to regulate accounting transactions within the organizations.

According to the International Organization of Supreme Audit Institutions (INTOSAI 2016), an organization consists of five interconnected elements; control environment, control activities, risk assessment, information and communication and monitoring. Control Environment ensures the availability of systems and structures that support the realization of the main objectives of the System of Internal Control; Risk assessment entails identifying the risk, risk evaluation, comparing it with the risk appetite of the organization; and coming up with responses to deal with the risk. Control Activities consist of the procedures, guidelines, measures, and schemes connecting to the reliability of accounting reporting (Thuy 2017).

According to DiNapoli (2017), Information and communication involve communication to all stakeholders such as employees, line ministries, and management who need the information so that they can make various



organizational decisions while monitoring is the procedure involved in the examining the quality indicators of a system's performance in a given period. These involve implementation of continuous and ongoing monitoring activities, routine assessments or a combination of both continuous monitoring and periodic assessment of performance. A monitoring plan must be developed well in advance to ensure it captures key objectives and indicators of the expected performance such that any monitoring will be checking against expected performance.

In a study by Frazer (2012), who investigated the influence of internal control on the operational activities of USA small restaurants. This study focused on determining the perception of internal control systems by restaurants and the how organization's assets are protected, the segregation of duties, and how they verify their transactions. A sample of 270 restaurants was selected through random sampling. Findings from this study confirmed that internal control, based on rational choice theories, the COSO integrated theoretical framework, and communication theories has a positive impact on the profitability and resilience to survival of small restaurants.

It was also evident from the study that restaurants' internal control system is effective in monitoring the operating activities as 28 compared to the Committee of Sponsoring Organization Treadway Commission (COSO) internal control integrated framework.

In view of this, there recommendations that this study be replicated with the



introduction of profitability ratios such as profit margin and or return on assets (Frazer, 2012). A study by Amaka (2012), indicated that internal control demonstrates the level of management performance and forms a major ingredient towards the growth and effectiveness of the organization among bottling companies in Nigeria. The study further indicated that it is very difficult for accounting management systems to operate in an organization without internal control systems and that unless the board and senior management are committed to provision of a well-planned internal control system, true and fair presentation of financial statement may never be realized in the organization.

Ejoh and Ejom (2014), sought to determine the impact internal audit function had on financial performance of tertiary institutions in Nigeria. Cross River State College of Education was used as a case study to determine the relationship between internal audit function and financial performance in Tertiary Institutions in Nigeria. The study revealed that the top management were the ones mainly responsible for all activities initiated in the College. The study revealed that the internal audit department of Cross River College was poorly staffed, were not independent in their operations. Therefore, implying they were not effective because of understaffing and control by the college management. The audit model in the college was highly flawed. There was no any significant effect of internal audit function on the financial performance of the college. In view of these, the study recommended that the college should recruit adequate and qualified personnel to work in the audit unit if the college is expecting the audit



unit to deliver effectively and efficiently on its mandate.

Additionally, qualified and experienced personnel should be hired to head the audit department. The results of Yang and Koo (2011), revealed that as much as internal controls adaptability positively influenced internal controls efficacy and operating performance, internal controls efficacy equally influenced operating performance among listed companies though partially in various sectors in Taiwan.

The findings of the study by Ndamenenu (2011), revealed that internal control was used as a measure put in place by the banks in Ghana to enhance compliance. This study reported that internal audit unit was not part of branch operations, however, it significantly contributed to the monitoring of the organizations internal control policy compliance whilst management assesses risk within the organization. Internal control therefore supports the organization to monitor the utilizations of its accounting resources to ensure it meets basic requirements either set by the organization or the government to ensure a sound accounting status.

A study by Attom (2014) investigated various cash management techniques by micro and small-scale Enterprises at Kasoa in the central region of Ghana. The study aimed to establish the cash management practices which have been adopted by the micro and small-scale enterprises in the Kasoa area. Specifically, the study wanted to know the cash management techniques in micro and small-scale enterprises; to unearth the cash controls which have been adopted by small



SMEs and formulate strategies which can be used to proper sound cash management practices by micro and small-scale enterprises. A survey of approximately 305 micro and small-scale ventures were used in the study.

Attom (2014), reported that 21 percent of the SMEs prepared cash budget while only 25 percent kept proper accounts. It was also revealed that only 26 percent of the SMEs tracked their cash payments, that 36.52 percent of the micro and SMEs kept track of their cash receipts; while majority SMEs (77.78 percent) did not adopt any cash control processes. It was evident that a few SME operators (22 percent) who had in place some form of cash control measures adhered to them.

In view of these; Attom (2014), recommended that the MSEs should liaise with financial institutions so that they are able to utilize existing opportunities to their benefit. Such opportunities include the option of having separate bank accounts that can support prudent management of bank account operations that necessitate the acquisition of financial assistance inform of loan, bank overdrafts from the financial institutions; owners of SMEs should be ready to strictly implement cash control measures including daily cash counts, banking among others; and finally, that financial institutions and the Business Advisory centres under the National Board for Small Scale Industries (NBSSI) should work together to develop and implement partnership strategies and measures that 31 will enhance efficient cash management among through adoption of effective cash management techniques. Partnership strategies may include routine joint training workshops and seminars for owners of MSEs on different cash



management aspects such as record keeping and the supply of safe and portable money boxes to MSEs.

Byanguye (2011), investigated the effectiveness of internal control systems in achieving value for money in school facilities grant, a case of Kamuli District Local Government. This study sought to assess the effectiveness of Internal Control Systems in achieving Value for Money in SFG projects in Local Governments. The respondents of the study were the elected and appointed staff, staff from the Office of the Auditor General, members of the District Public Accounts Committee and the School Managers for the schools that received SFG project by the Financial Year (FY) 2007/2008. Findings revealed that Control Environment, Control Activities, Risk Assessment, Information and Communication and Monitoring, impacted positively on the value for Money.

The study further reported that a positive significant of the Control Environment, Control Activities, Risk Assessment, Information and Communication and Monitoring on the value for Money in Local Governments. Therefore, it was concluded that Internal Control Systems positively influenced the realization of value for money. Local governments should therefore review their internal control systems on a continuous basis. Additionally, the internal control systems should always be operational to ensure enhanced and continuous realization of value for money.

Munene (2013), investigated the effects of internal controls on financial performance of technical training institutions in Kenya. The study used stratified



sampling technique by selecting 37 Technical Training Institutions in Kenya and registered by the Ministry of Higher Education. The findings of the study realized that institutions have an effective internal control system as supported by supervision, clear separation of roles, training, and commitment of management. However, the study lamented that poor auditing of technical institutions in remote areas posed hindrances to effective implementation of internal controls. It was recommended that recruitment should be based on qualifications and work experience. Additionally, it should be based on the staff needs of the audit units in the various technical training institutions. The study also recommends that Technical Training institutions in Kenya should implement knowledge/information management system in this institution so as to enable all parties within the institution to access and utilize the official information freely.

Similar sentiments were shared by Mwakimasinde, Odhiambo and Byaruhanga (2014), who found out that internal control system led to enhanced financial performance among Sugarcane out grower companies in Kenya. Nyakundi *at al.* (2014), sought to determine the impact of internal control systems on financial performance of SMEs in Kisumu City, Kenya. It further sought to unearth the relationship between internal control systems and return on investment; and determine the level of an entrepreneur's training on internal control systems and its influence on the organization's performance. The study used a sample of 117 respondents selected through stratified sampling. Within each stratum, convenience sampling was used to select individual respondents. The study



revealed that internal control systems had a positive significant effect on the financial performance of SMEs. However, the study lamented that there are lack of proper internal audit hinders effective implementation of internal controls among the MSEs. The study also observed that inadequate financial resources led to irregular audit activities and this led to inefficiency of the internal control systems. As far as the business entrepreneurs' skills in internal control systems is concerned, the study found out that the entrepreneurs were incompetent although they are the ones who make most of the decisions of the SMEs. The study concluded that there is need to equip the entrepreneurs with adequate and relevant skills on ICSs (Nyakundi *et al.* 2014).

2.2.4 Capacity building in accounting information systems and service delivery

Capacity building concerns the extent to which accounting managers become conversant on how to effectively utilize accounting information systems in their day to day operations. In this view, Abbott (2003), explains that training received should influence their ability to manage school finances. Similarly, Totnall, Visscher and Finegan (2009), maintain that accountants' literacy is developed through basic learning of computer skills and some principles of computer operations. Capacity Building will helps accountants to gain skills on effective accounts management and record keeping (Abbott 2003). This enables the accountants/bursars to use accounting information systems and acquire knowledge to understand trends associated with it and its applications.

Okeyo (2013), principals should be trained to enable them to acquire the skills

needed for effective use accounting information systems. Okeyo suggests that training should include use of accounting information systems in day to day transactions and school operations. This will equip them with skills that enable them to use and integrated for accounts management purposes. Capable accountants, in this context, refer to those who know how to learn, are creative, have a high degree of self-efficacy, can apply competencies in novel as well as familiar situations, and work well with others (Okeyo 2013). Further, Bamigboye *et al.* (2013), explain that lack of accounting information systems skill is the single largest barrier to use in accounting information systems in secondary schools. Initial accounting training in colleges should incorporate necessary systems training, and staff development should be developed for serving accountants. Therefore, compulsory training should be enforced for all school accountants, that is, accounting information systems components should become integral part of management of school financial resources (Lucey 2010).

In addition, regular workshops and seminars should be organized for serving school accountants to keep them abreast of developments in the field of accounting systems as they relate to accounts management. These arguments are in tandem with the recommendation for refresher training for the accountants and school managers since it knowledge and skills are gotten through in-service training and capacity building workshops and it helps principal to be confident in use of accounting system tools in daily school financial management practices (Kinuthia 2012).



Sandholtz and Reilly (2004), explains how accountants who acquired knowledge and skills on use of accounting systems led to increased levels of financial management in schools. Lau and Sim (2008), argue that the accounting system technical support serves as a motivation for school bursars to integrating accounting systems in administering school finances. This is because a well-trained technical support team provides guidance on the use of accounting systems, not only to the accountant, but also to the teachers and students and other stakeholders.

2.3 Theoretical Framework

These section covers theoretical review related to the variables under investigation. The study employed Technology Acceptance Theory to explain the linkage between the study variables.

2.3.1 Technology acceptance theory

Technological Acceptance Model was developed in 1989 by Davis. The theory clarifies the way clients embrace/acknowledge and utilize an innovation. The theory that once a user is given additional invention, certain components sway their selection of how and when they will employ it. This integrates its obvious handiness and seen helpfulness. Different variables like clients, contenders, monetary components and outside impacts from providers are not taken in by

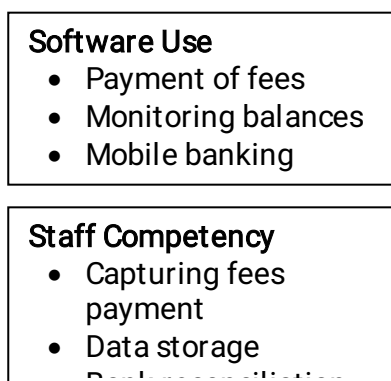


(van Akkeren and Harker 2003). Technology Acceptance Model (TAM) is also used to explain adoption of innovation by individuals. The main purpose of TAM is to explain the determinants of end computer acceptance and to explain a broad range of end user behavior across computing technology, while also being both economically and theoretically justified (Davis 1996). TAM assesses use of IT based on the influence of two main variables, namely (1) perceived ease of use and perceived usefulness (2) user's attitude, behavioral intention and actual system usage behavior. In relations to the study, lack of user acceptance is a significant impediment to the success of new information systems. In fact, users are often unwilling to use information systems which, if used, would result in improved performance especially in accounts management in public secondary schools.

2.4 Conceptual Framework

A conceptual framework refers to a set of comprehensive concepts and ideologies extracted from taken from a particular area of study and forms as guidelines in following presentations. It is believed that it assist the researcher during his/her investigation. Goetz and LeCompte (2009), thought conceptual framework as important in helping the researcher track his research.

Independent Variables



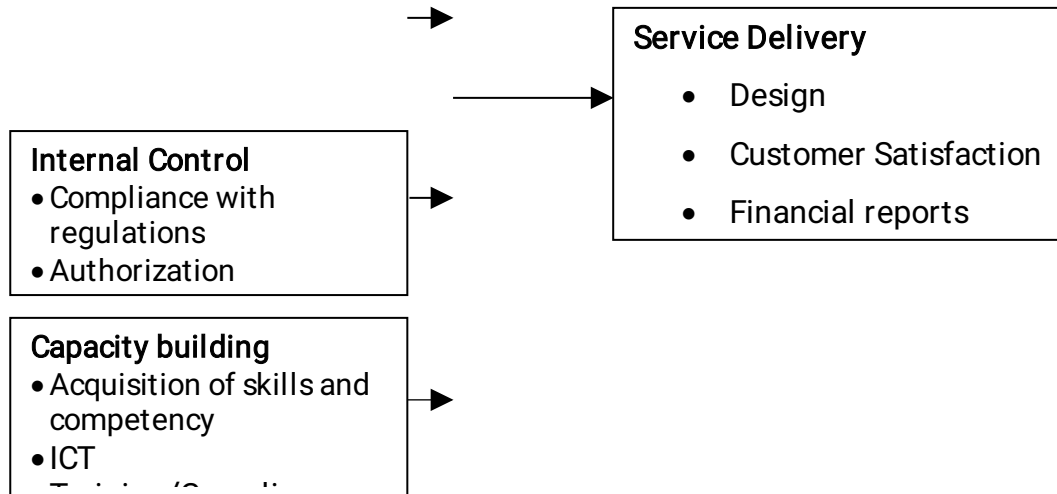


Figure 2.1: Conceptual Framework

Source: Researcher (2021)

In the study, effective accounting information system which is the independent variable entails software usage, staff competency, internal control and capacity building so as to ensure that customers get better service (independent variables). The intervening variable in the study was government policy.

2.5 Identification of Knowledge Gap

Muraleetharan (2013), who researched on control activities and performance of an organization did the research in Sri Lanka. The current research will be done in Kericho County, Kenya. This is similar to Katusiime, Mabonga, Kirabo, and Sunday (2018), that was done in Uganda based on control environment and control activities on financial performance. In another Nigeria research Ejoh and Ejom used correlation and Z-statistics in testing hypothesis the current study will use regression and correlation in inferential statistic based on data collected in

Kenya. Nyaboke (2017), did investigation in supermarket there is need to investigate the effect of accounting information use on service delivery in secondary schools within Kericho County. Kisanyanya (2018), focused on financial performance of public institution of higher learning in Vihiga County while the current study focussed on financial management of secondary school in Kericho. Palfi and Boşa-Avram conducted an empirical review on information and communication as part of internal control system there is need to investigate based on primary data to ascertain the concept in the ground.

Lagat, Okelo, and Terer (2016), investigated on internal control system on financial management in Baringo County Government based on the results there existed laxity in information and communication as well as control activities.

There is need to also assess the education sector to determine what is ailing the secondary education from achieving its mandate. In Yudianti and Suryandari (2015), study internal control and risk management were the main variables which were measured against good governance. The study was also done in Indonesia there was need to investigate further on Kenya context on internal control practice where risk management is part of the variables.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents research design, location of the study, target population, the sampling procedure and sample size of the study, data collection instruments, reliability and validity, data collection procedure, data analysis and ethical issues in research.

3.2 Research Design

The research design adopted by the study was cross-sectional research design. Hoffman and Sandelands (2005), defined cross – sectional reserach design as a method of collecting information by interviewing or administering a questionnaire to a sample of individuals. The choice of this design was appropriate for the study since it utilized a questionnaire as a tool of data



collection.

3.3 Location of the Study

Kericho County is in South Rift region bordering Bomet, Nyanza, Nandi and Nakuru counties. According to Kericho County Education Office (2020) there are 200 public Public secondary schools in Kericho County who have electricity and ICT infrastructure.

3.4 Target Population

Target population is the set of elements, items or objects or individuals with similar identity characteristics (Mugenda and Mugenda 2003). Further, Neuman (2000), defines the target populations as the set of observable identities in elements, households, persons or events that have been put under investigation or research by the study. According to Kericho County Education Office (2020), there are 200 public secondary schools in Kericho County. The study targeted 200 principals and 200 school accountants of all the public secondary schools in Kericho County, Kenya which translates to a target population of 400.

Table 3.1:

Target Population

Category	Population Frequency
Principals	200
School accountants	200

Total	400
-------	-----

Source: Kericho County Education Office (2021)

3.5 Sample Size and Sampling Procedures

Both simple random sampling and stratified sampling techniques were used. This means that every individual within each stratum in the target population had an equal chance of being selected. According to Cooper and Schindler (2011), stratified sampling refers to the process of dividing the population into homogeneous sub-groups and the taking samples from each of those sub-groups (strata) for analysis. The sample population was stratified into two groups namely; principals and school accountants so as to enable the gathering of data and clustering of results. Simple random sampling was adopted because the population constituted a homogeneous group (Kothari 2009).

The sample consisted of 200 respondents who were randomly selected from the target population of 400 using Israel (2009) model of determining a sample from a given target population shown below;

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

Where n is the sample size, N is the population size, and e is the level of precision.

Therefore:

$$n = \frac{400}{1 + 400(0.05)^2}$$

This yielded 200 respondents for the study.

Table 3.2:

Sample Size		
Category	Target Population	Sample Size
Principals	200	100
School accountants	200	100
Total	400	200

Source: Researcher (2021)

3.6 Data Collection Instruments

This study used primary data which was collected using self-administered questionnaires. The advantages of using a self-administered questionnaire were that more information was obtained from many respondents in a relatively short time (Mugenda and Mugenda 2003). Questionnaires are identical; the stimulus provided is identical in all cases. Anonymity of respondents was guaranteed ensuring they did not influence the validity of the responses particularly when research of a sensitive nature is undertaken. It avoids non response from postal questionnaires. This was alongside an introduction letter for the respondents before answering the questionnaires. The questionnaire had two sections with the first containing demographic information that was filled and the second part containing the study objectives with relevant questions for information on utilization of ICT and financial management in public secondary schools.

3.6.1 Validity of the instrument

Validity is considered as the extent to which research instrument measures what was under investigation (Mutai 2003). As argued by Mugenda and Mugenda (2003), the data collection instrument is considered valid if it is able to give accurate results through well designed questionnaire items. In this case, supervisor input was invited by the researcher in order to enhance the validity of the instrument. Clarity and correctness were sought through content analysis. A self-esteem questionnaire was assessed by measuring other traits known where strong correlation between the scores for self-esteem and associated traits

would indicate high construct validity. A pilot study was conducted to measure the validity of the research instrument and the results accurately predict the later outcome of the study, this indicated that the survey had high criterion validity.

3.6.2 Reliability of the instrument

Reliability is concerned with the extent to which a research instrument yields the same results or data on repeated trials (Mugenda and Mugenda 2003). Reliability of the instrument was done so as to estimate the degree to which a measurement is free of errors. The pilot study was undertaken in 10 public secondary schools in Bomet County using a sample of 20 respondents. The researcher pretested the questionnaire to the pilot sample. The instrument was administered once to avoid familiarity with the items. These respondents did not participate in the main study. Pre-testing was conducted to check the structure of the questionnaires in terms of the sequence, meaning and ambiguity of questions. It was done in order to ensure the reliability of the research instrument before actual study. After the piloting of the instrument, any errors that were identified was corrected, any ambiguous questions were reframed and the content revised accordingly.

The Cronbach's Alpha coefficient was computed as follows:

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}$$

Where:

α -Cronbach's Alpha coefficient

N -is equal to the number of items

C-bar is the average inter-item covariance among the items

V-bar equals the average variance.

According to Mugenda and Mugenda (2003), the instruments are reliable if the reliability coefficient is above 0.7. In the study, the reliability was interpreted using the threshold table below:

Table 3.3:

Reliability Results

Variable	No of Items	Reliability value
Use of accounting information system	7	0.857
Staff competencies	6	0.795
Internal control	6	0.895
Capacity building	7	0.836
Service delivery	5	0.889
Average	31	0.873

Source: Research Data (2021)

3.7 Data Collection Procedures

After the validity and reliability of the instruments are done, the researcher proceeded to the field. A permission letter to carry out the study in the area was

sought from the Ministry of Education and the County Director of Education (CDE). The letters helped the researcher to access the schools and brief the principals on the purpose of the study. The questionnaires were administered by the researcher where the respondents were given a span of one week to respond to the questionnaire. After one day the researcher collected the questionnaires for data analysis.

Privacy of the research participants was guaranteed by using the information collected for academic purposes only. This was alongside an introduction letter for the respondents before answering the questionnaires.

3.8 Data Analysis and Presentation

According to Mugenda and Mugenda (1999), data analysis means categorizing, ordering, manipulating and summarizing of data to obtain answers to research questions. The data collected was checked to ascertain that it is complete. It was then organized and summarized by the researcher. SPSS version 23.0 was used to compute various statistics. (Orodho 2005). Data analysis was carried out to enable the researcher to link theory with reality by testing the research hypothesis and finding answers to the study. The study was expected to generate qualitative data with regards to demographic characteristics of the population such as distribution of the respondents by age, education and experience. This was analyzed using descriptive data analysis techniques such as frequency distribution tables, mean, and mode based on each of the research objectives. The study also generate quantitative data since the study used numeric measures



to evaluate the aspects under investigation. In quantitative analysis, data was statistically analyzed so that the meaning is inferred. Before analyzing the feedback from the respondents, the questionnaires were checked to ascertain if they were fully and accurately filled. The data was then coded and checked for errors and omissions. Quantitative data was analyzed using inferential statistics specifically correlation analysis, regression analysis and ANOVA test analysis. All data was analyzed at a level of significance of 95% or $\alpha=0.05$ and the degrees of freedom depending on the particular case determined. This value ($\alpha=0.05$) was chosen because the sample size was adopted from the figures calculated on the basis of 0.95 level of confidence.

The study adopted a multiple regression model for the estimation of the variables under investigation. The model is fundamental in giving the connections of the variables through pertinent coefficients. The model was as follows:

$$Y=\alpha+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\epsilon$$

Where: Y is the accounting information systems; β is the slope; α is the constant or autonomous service delivery whereas, X being a set of Accounting information systems to be measured against service delivery; X_1 as software use; X_2 as staff competencies; X_3 as internal control; X_4 as capacity building and ϵ is error term or residual value.

Tests for multi-collinearity were carried out because in severe cases of perfect

correlations between predictor variables, multi-collinearity can imply that a unique least squares solution to a regression analysis cannot be computed (Field, 2009). Multi-collinearity inflates the standard errors and confidence intervals leading to unstable estimates of the coefficients for individual predictors. Multi-collinearity was assessed in this study using the Variance Inflation Factor and tolerance.

Table 3.4

Multi-collinearity Test Results

Variables	Tolerance	VIF
accounting information system use	0.767	1.099
Staff competencies	0.876	1.760
Internal control	0.765	1.212
Capacity building	0.868	2.072

Source: Research Data (2021)

The results of the tests of multi-collinearity are presented in Table 3.4 where Collinearity statistics indicated a Variance Inflation Factor (VIF) < 5 and Tolerance > 0.2, an indication that the variables were not highly correlated, hence no existence of Multi-collinearity. This is an indication of the suitability of the variables for multiple regression. The cut off for VIF is 10 and should a variable have had anything over and above 10 it should have been dropped.

3.9 Ethical Considerations

In the study ethical issues was considered crucial hence was observed. The respondents were given introductory letter which showed the researcher's crucial information and intention of carrying out the study. This was supported by letter from NACOSTI giving permission to carryout data collection. The research participants' information was highly confidential.



CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents results of the findings and its discussions based on the objectives that the study sought to achieve. It provides the response rate, general background information of the respondents and descriptive analysis of the study variables. The chapter describes the results of statistical analysis to test the hypotheses and presents the discussions of the results from the findings.

4.2 Response Rate

Response rate is described as the percentage of respondents who attended to a survey. It is the extent to which the final data sets include all sampled members and is calculated as the number of respondents with whom interviews are completed and divided by the total number of respondents of the entire sample including none respondents (Orodho 2003). The study sought to collect data from 200 respondents and a total of 177 responses were received translating to a response rate of 88.5% indicating that the results of this study are reliable. The high response rate was attributed to the fact that most of the questions were semi-structured making it easy for the respondents to fill in the questionnaires. Furthermore, the questionnaires were delivered and collected by hand and hence there was a close contact and follow-up with the respondents.

Kothari (2004), presupposes that a response rate of 50% is average, 60-70% is



adequate while above 70% is considered to be excellent response rate. This response rate was therefore, considered excellent representative of the respondents to provide information for analysis and generate valid conclusions.

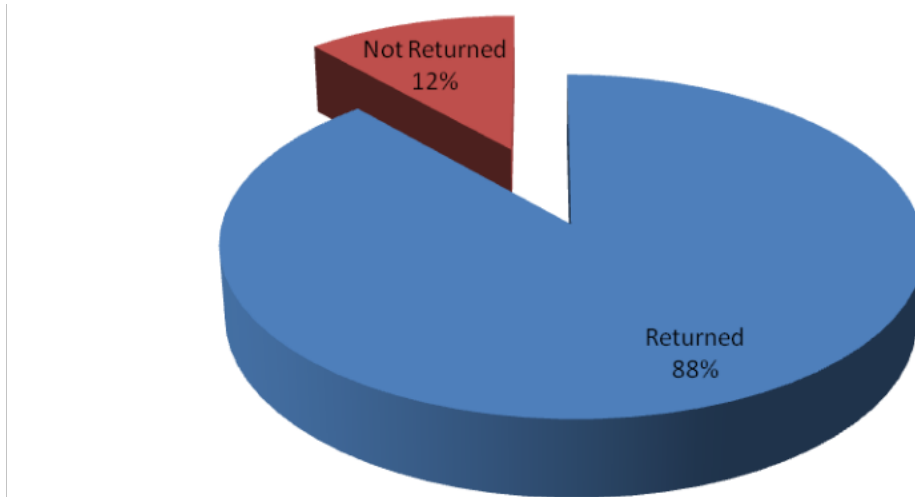


Figure 4.1: Response Rate

Source: Researcher (2021)

4.3 Distribution of respondents per position held

Responses on the general information of respondents are discussed below.

4.3.1 Questionnaires per respondents

Respondents were asked to indicate the position they were in and the response were as per Figure 4.2.

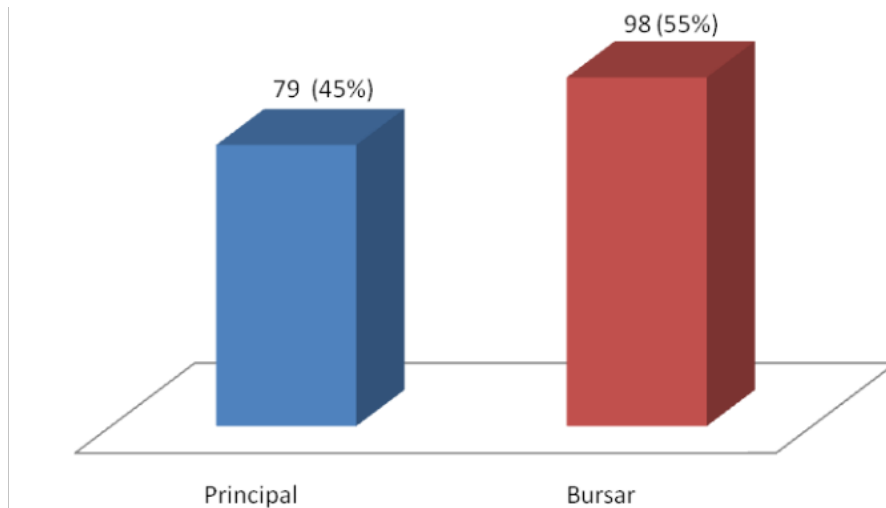


Figure 4.2: Respondents Distribution per position held

Source: Researcher (2021)

Figure 4.2 shows the distribution frequency of questionnaire used for analysis with respect to public secondary schools in Kericho County. The biggest numbers of respondents who were 55% was from school bursars who were 98 staff while

school principals who responded to the study were 79 representing 45% of all the response. This frequency shows that the results could be generalized on the two accounting levels as the numbers of contributory respondents are adequate in terms of percentage contribution for the analysis of the research study. From the above description, it was revealed that the majority of the respondents in this study are those directly responsible for the implementation of the accounting information system. Therefore, their responses are deemed to reflect what actually takes place in the institution.

4.3.2 Gender of respondents

Respondents were asked to indicate their gender; this was very significant in establishing the inclusivity of both male and female respondents for study to exclude gender biasness. Figure 4.3 shows the distribution of respondents from different genders.

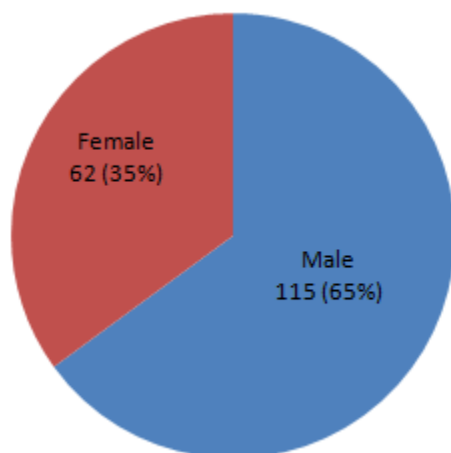


Figure 4.3: Gender of Respondents

Source: Researcher (2021)

From the Figure 4.3, high response rate with a value of 65% comes from male respondents who were 115 while 35% were female staff who were 62 respondents. This implies that there was no gender biasness in data collection and that secondary schools in Kericho County had implemented the two third gender rule as stipulated in the Constitution of Kenya (2010). The information on the gender of respondents helped the researcher to technically balance the resourceful contributions of both parties, male and female gender.

4.3.3 Age of respondents

Respondents were asked to indicate their ages and the response are as per Figure 4.4 on Age of the Respondents.

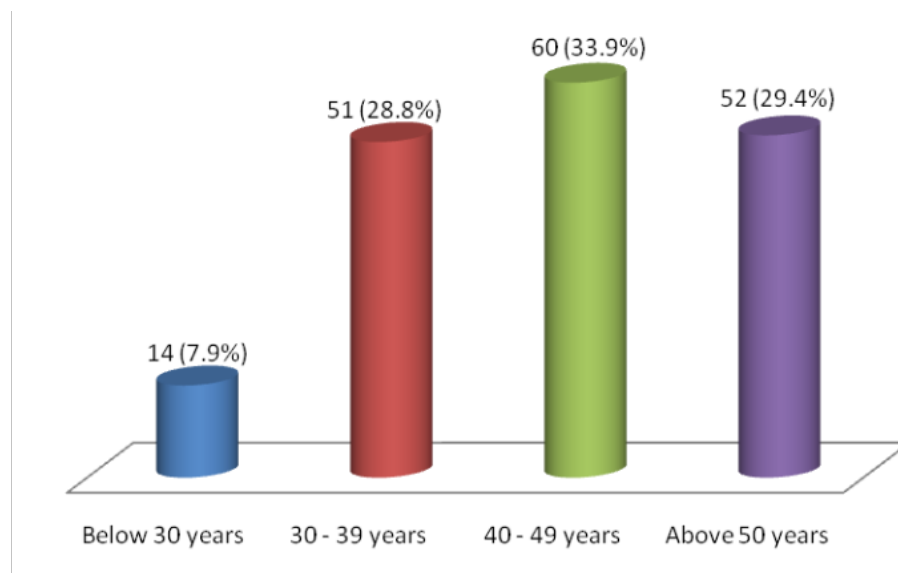


Figure 4.4: Age of Respondents

Source: Researcher (2021)

Figure 4.4 shows the contribution of respondents from different age groups. It was seen that majority of the respondents are from ages between 40 to 49 years contributing to 33.9% of the overall response and were 60 respondents. Respondents who were above 50 years were 52 representing 29.4%; those who were between ages 30 to 39 years were 51 representing 28.8% while those who were below 30 years were 14 representing 7.9%.

High response rate from senior age employees from secondary schools in Kericho County shows that the secondary schools have experienced persons working at managerial positions to ensure effectiveness of accounting information system in improvement of service delivery in secondary schools.

4.3.4 Respondents' level of education

The respondents were asked about their level of education in order to determine whether they understood the accounting information systems and its effect on service delivery of the secondary schools they work for and the response are as per Figure 4.5.

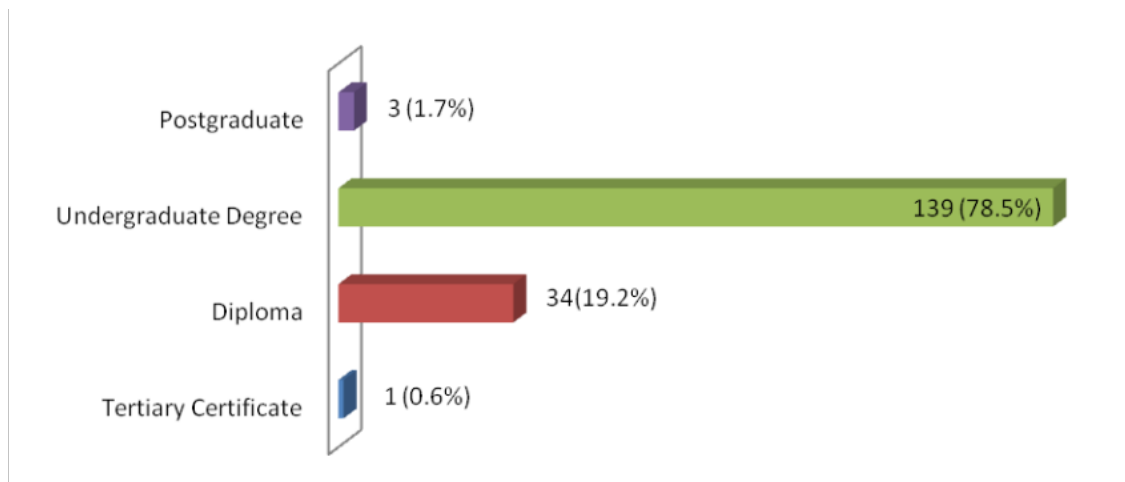


Figure 4.5: Level of Education of the respondent

Source: Field data, 2021

Figure 4.5 shows the contribution of respondents with different educational backgrounds. Highest rate of respondents had bachelor's qualification with 78.5% since they were 139 respondents. Respondents who had Diploma qualification were 34 representing 19.2% of all the respondents; those who had Postgraduate qualifications were 3 representing 1.7% while those who had tertiary Certificate was 1 representing 0.6%.

Considering the respondents' level of education it was deduced that respondents have the understanding of the accounting information system towards enhancing service delivery.

4.3.5 School population

The study sought to establish the population of public secondary schools in Kericho County who forms the beneficiary of quality service being delivered using accounting information system. The responses are as per Figure 4.6.

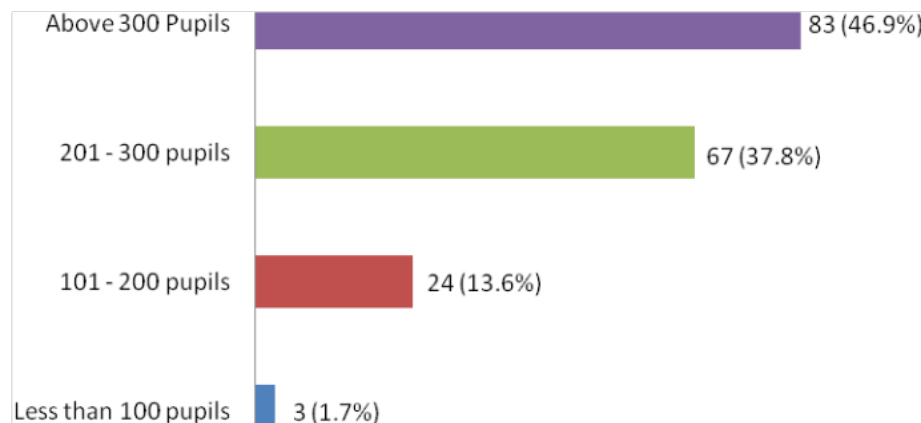


Figure 4.6: School Population

Source: Researcher (2021)

Figure 4.6 show that 46.9% of the respondents who were 83 had pupils population who were more than 300; respondents who noted that their school had population of between 201 and 300 pupils were 67 representing 37.8%; respondents who noted that their schools which had 101 to 200 pupils population were 24 representing 13.6% while respondents who noted that their schools which had less than 100 pupils were 3 representing 1.7% .

This shows that data was collected from school which had pupils who are the key stakeholder and beneficiary of better service delivery and therefore the information is reliable in determining the effectiveness of accounting information system on service delivery.

4.3.6 Work experience

The respondents were requested to indicate the period in which they had been in service in order to establish whether the effect of accounting information systems on service delivery had any relationship with the duration that the respondent had been in service.

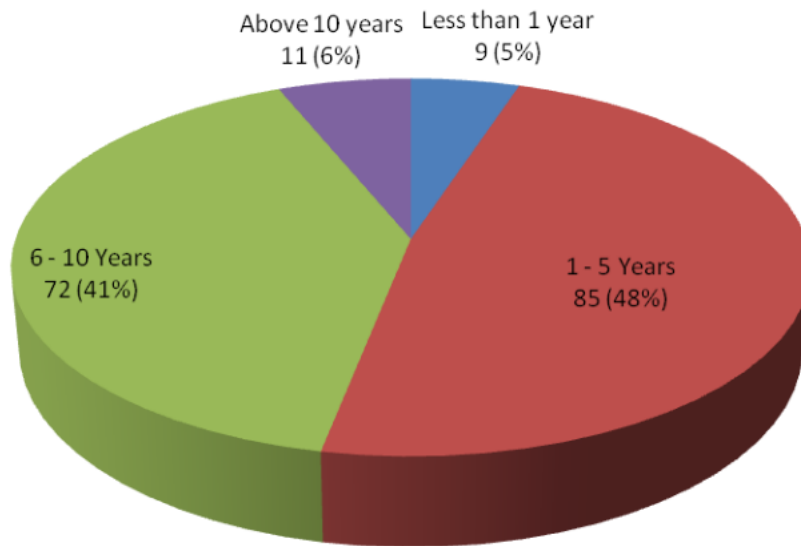


Figure 4.7: Work Experience

Source: Researcher (2021)

Figure 4.7 shows that majority of the respondents 85 (48%) have worked for their secondary school for between 1 and 5 years; respondents who have worked for their schools for between 6 to 10 years were 72 (41%); those who had worked for

their secondary school for more than 10 years were 11 (6%) while those who had worked for less than one year were 9 (5%). This is an indication that most of the respondents have a thorough understanding of accounting information system in ensuring better service delivery. Therefore, the information obtained from them was highly reliable and sufficient for data analysis for the study.

4.4 Findings of Descriptive Statistics

Descriptive statistics was sought to describe the main features of a collection of quantitative data and the findings are presented based on the study variables.

4.4.1 Software use in accounting information system on service delivery

The first objective was to establish the effect of software use in accounting information system on service delivery in public secondary schools in Kericho County. Respondents were asked to respond on the extent they agreed with the statements on accounting information system use and their responses were on a Likert scale where SA was Strongly Agree, A was Agree, U was Undecided, D was Disagree and SD was Strongly Disagree. Their responses are presented in Table 4.1.

Table 4.1: Accounting Information Software Use on Service Delivery

Accounting Information System	SD	D	U	A	SA
My school uses accounting software to receipt fee payment	20 (11.3%)	16 (9.0%)	7 (4.0%)	113 (63.8%)	21 (11.9%)
The school uses accounting software to record fee payment	19 (10.7%)	26 (14.7%)	5 (2.8%)	113 (63.8%)	14 (7.9%)
School accounting software is used to raise payment vouchers	35 (19.8%)	19 (10.7%)	7 (4.0%)	86 (48.6%)	30 (16.9%)
Accounting software used in our school generate financial reports effectively	39 (22.0%)	21 (11.9%)	7 (4.0%)	79 (44.6%)	31 (17.5%)
Our school accounting software provide good financial data storage	14 (7.9%)	35 (19.8%)	10 (5.6%)	81 (45.8%)	37 (20.9%)
Accounting software in use have enabled our school manage its finances well	27 (15.3%)	23 (13.0%)	7 (4.0%)	84 (47.5%)	36 (20.3%)
Technology is a challenge to most school fund managers	20 (11.3%)	23 (13.0%)	14 (7.9%)	83 (46.9%)	37 (20.9%)

Source: Field data, 2021



Table 4.1 reveals that majority of respondents who were 113 representing 63.8% agreed together with 21 respondents representing 11.9% who strongly agree that their schools uses accounting software to receipt fee payment. Respondents who were 20 representing 11.3% strongly disagreed as well as 16 respondents representing 11.3% who disagreed that that their schools uses accounting software to receipt fee payment. Respondents who were 7 representing 4.0% were undecided.

Majority of the secondary school uses accounting software to record fee payment. This was according to majority of the respondents who were 113 representing 63.8% who agreed together with 14 respondents representing 7.9% who strongly agreed to it. Respondents who were 26 representing 14.7% disagreed together with 19 respondents representing 10.7% who strongly disagreed that their secondary school uses accounting software to record fee payment while 5 respondents representing 2.8% were undecided.

School accounting software was used to raise payment vouchers. This was as per the response of majority of the respondents who were 86 representing 48.6% who agreed so do 30 respondents representing 16.9% who strongly agreed. Respondents who were 35 representing 19.8% strongly disagreed together with 19 respondents representing 10.7% who disagreed that school accounting software was used to raise payment vouchers. Respondents who were 7 representing 4.0% were undecided.

Majority of the respondents who were 79 representing 44.6% agreed as well as



31 respondents representing 17.5% strongly agreed that accounting software used in their school generate financial reports effectively.

Respondents who were 39 representing 22.0% strongly disagreed together with 21 respondents representing 11.9% disagreed while respondent who were 7 representing 4.0% was undecided.

Respondents who were 81 representing 45.8% agreed as well as 37 respondents representing 20.9% strongly agreed that school accounting software provide then with good financial data storage. Respondents who were 35 representing 19.8% disagreed as well as 14 respondents representing 7.9% strongly disagreed that school accounting software provide then with good financial data storage. Respondents who were 10 representing 5.6% were undecided.

Majority of respondent who were 84 representing 47.5% agreed together with 36 respondents representing 20.3% strongly agreed that accounting software in use in their school had enabled them manage their finances well. Respondents who were 27 representing 15.3% strongly disagreed so do 23 respondents representing 13.0% disagreed that accounting software in use in their school had enabled them manage their finances well. Respondents who were 7 representing 4.0% were undecided.

Technology is a challenge to most school fund managers since majority of respondents who were 83 representing 46.9% agreed together with 37 respondents representing 20.9% strongly agreed. Respondents who were 23



representing 13.0% disagreed together with 20 respondents representing 11.3% strongly disagreed while 14 respondents representing 7.9% were undecided.

This implies that schools use accounting information software to receipt fee payment; record fees payments; raise payment vouchers; generate financial reports and provide good financial data storage. Accounting information system had enabled secondary school to manage its finances well but technology was a challenge to most school fund managers.

Accounting information system helped secondary school with decision making and service delivery since the schools use accounting information software to; receipt fee payment; record fees payments; raise payment vouchers; generate financial reports and provide good financial data storage. This concurs with Victoria (2002), who asserts that accounting information software has been developed to assist in service delivery through customized management information systems (MIS) used to enhance financial transactions in schools.

The findings concurs with Gbenga (2003), who noted that the use of financial software gives bursar good indication about the direction of the business for school and a means of comparing data with previous months, terms and years since the software had enabled secondary school to manage its finances well. Technology was a challenge to most school fund managers thus this had hindered them not offer better service as noted by Samer and Sambamurthy



(2006), who contended that the absence of such systems in school may result in delays in decision making due to high cycle time in business transactions as well as poor utilization of accounting and other school resources and poor service delivery.

4.4.2 Accounting information system staff competencies on service delivery

The second objective of the study was to examine the effect of accounting information system staff competency on service delivery in public secondary schools in Kericho County. Respondents were asked to indicate the extent to which they agreed with the statements on staff competencies and their responses were on a Likert scale where SA means you strongly Agree, A - Agree, N - Neutral, D - Disagree and SD – Strongly Disagree with the statement. Their responses are presented in Table 4.2.

Table 4.2: Staff Competencies in Accounting Information System on Service Delivery

Staff Competencies	SD	D	N	A	SA
Our school often offer training to its staff on use of technology so as to improve on service delivery	20 (16.4%)	112 (63.3%)	7 (4.0%)	9 (5.1%)	20 (11.2%)
Accountants and all school staff have relevant computer skills so as to offer quality service to its clients effectively using technology	19 (10.7%)	125 (70.6%)	0 (0.0%)	18 (10.2%)	15 (8.5%)
Staff in my school have been trained in accounting	34 (19.2%)	99 (55.9%)	1 (0.6%)	35 (19.8%)	8 (4.5%)

information system and this has helps improve on service delivery to school customers

Errors and differences in records are easily reconciled on time by bursar with the help of accounting system	39 (22.0%)	84 (47.5%)	1 (0.6%)	41 (23.2%)	12 (6.8%)
--	---------------	---------------	-------------	---------------	--------------

Lack of technological training skills to school financial managers leads to mismanagement of the school funds	6 (3.4%)	27 (15.3%)	3 (1.7%)	104 (58.8%)	37 (20.9%)
---	-------------	---------------	-------------	----------------	---------------

My school offers training skills opportunities to its employee so as to improve on their use of ICT.	33 (18.6%)	102 (57.6%)	7 (4.0%)	27 (15.3%)	8 (4.5%)
--	---------------	----------------	-------------	---------------	-------------

Source: **Researcher (2021)**

According to Table 4.2, majority of the respondents who were 112 representing 63.3% disagreed together with 20 respondents representing 16.4% who strongly disagreed that their school often offer training to its staff on use of technology so as to improve on service delivery. Respondents who were 9 representing 5.1% agreed as well as 20 respondents representing 11.2% strongly agreed that that their school often offer training to its staff on use of technology so as to improve on service delivery. Respondents who were 7 representing 4.0% were undecided.

Majority of the respondents who were 125 representing 70.6%) disagreed as well as 19 respondents representing 10.7% strongly disagreed that accountant and all school staff has relevant computer skills so as to offer quality service to its clients effectively using technology. the respondents who were 18 representing

10.2% agreed together with 15 respondents representing 8.5% strongly agreed that that accountant and all school staff has relevant computer skills so as to offer quality service to its clients effectively using technology.

Staffs in majority of schools have not been trained in accounting information system and this has affected on service delivery to school customers, this was as per the response of majority of the respondents who were 99 represented by 55.9% who disagreed as well as 34 respondents representing 19.2% who strongly disagreed. The respondents who agreed that staffs in their school have been trained in accounting information system and the training has improved on service delivery to school customers were 35 representing 19.8% together with 8 respondents who strongly agreed while 1 respondents representing 0.6% was undecided.

Majority of respondents who were 84 representing 47.5% disagreed while 39 respondents representing 22.0% strongly disagreed that error and differences in records are easily reconciled on time by bursar with the help of accounting system. The respondents who were 41 representing 23.2% agreed together with 12 respondents representing 6.8% strongly agreed that errors and differences in records are easily reconciled on time by bursar with the help of accounting system. Respondents who were 3 representing 1.7% were undecided.

Majority of the respondents who were 104 representing 58.8% agreed together with 37 respondents representing 20.9% who strongly agreed that lack of technological training skills to school financial managers leads to



mismanagement of the school funds. Respondents who were 27 representing 15.3% as disagreed well as 6 respondents represented by 3.4% strongly disagreed that lack of technological training skills to school financial managers leads to mismanagement of the school funds. Respondents who were 3 representing 1.7% were undecided.

Most of the respondents who were 102 representing 57.6% disagreed together with 33 respondents representing 18.6% strongly disagreed that their school offers training skills opportunities to its employee so as to improve on their use of ICT. The respondents who were 27 representing 15.3% agreed together with 8 respondents representing 4.5% who strongly agreed that their school offers training skills opportunities to its employee so as to improve on their use of ICT. Respondents who were 7 representing 4.0% were undecided.

This implies that secondary school really offer training to its staff on use of technology and this could have improve on service delivery; accountants and all school staff do not have relevant adequate computer skills necessary to offer quality service to their clients effectively using technology; staff in most of the school have not been trained in accounting information system and this has not help improve on service delivery to school customers; errors and differences in records are not easily reconciled on time by bursar with the help of accounting system; lack of technological training skills to school financial managers has leads to mismanagement of the school funds and that secondary school does not offers training skills opportunities to its employee so as to improve on their use

of ICT.

Effective management of public resources as postulated by Njoroge and Wanyoike (2016), means that the management will take into account the available resources and the impact they have on the society. This requires staff to be competent in use of technology which was not the case in secondary school since they really offer training to its staff on use of technology. As noted by Njonde and Kimanzi (2014), Public Financial Management (PFM) focuses on the management of public resources as per the budget guidelines process for and improved public accountability and good service delivery, this will not be possible in public secondary schools since accountants and all school staff did not have relevant adequate computer skills necessary to offer quality service to their clients effectively using technology since managers feel incompetent and shy off in using accounting information software in the management of finances in public secondary schools and as a result many clerical staff in schools handles financial statements manually, (Ian, 2007).

The accounting manager in the school take responsibility of implementing the finance policies of the school, financial processing and monitor the budget on daily basis as well as relieving the head teacher from the necessity of having to carry out some other accounting and resource management tasks. This is not the case in public secondary school since staff in most of the school has not been trained in accounting information software and this has not help improve on service delivery to school customers as per Victoria (2002), who asserted that



accounting information software can provide means for communicating accounting information to the governing body (administration) to help with decision making.

Errors and differences in records are not easily reconciled on time by bursar with the help of accounting system and this does not give a baseline for effective decision making, about how fees should be collected, how salaries should be paid and how to carry out other procurement services in the school thus this gap in accounting for funds has seen the government mounting training programmes for the school management team on the use of ICT in management as noted by Syombua (2013). Networked ICT environment with accounting information software can be used in the flow of data and information from one department to another in the school, for example from the director of studies department to the head teacher's office, to the procurement department and finally to the registration department which results into improved administrative, service delivery and operational efficiency of the school as proposed by Christine (2010).

Lack of technological training skills to school financial managers has led to mismanagement of the school funds and that secondary school does not offer training skills opportunities to its employee so as to improve on their use of ICT. This concurs with Kiptalam and Rodrigues (2010), who contended that the absence of training in use of systems in the school may result into poor service delivery. This negates Blandford (2017), who noted that computerization of accounts system helps in maintaining the records accurately, systematically and



timely. Such systems can help track money owed to the school, generate receipts for all money collected, authorize valid payments; provide accurate, up-to date accounting information on budgets commitment and actual expenditure and produce financial statements and statements needed by schools to meet their statutory obligations.

4.4.3 Accounting information system internal control on service delivery

The third objective was to analyze the effect of accounting information system internal controls on service delivery in public secondary schools in Kericho County. Respondents were asked to respond on the extent to which they agree with the statements on internal control, where their response were on a Likert scale where SD meant Strongly Disagree, D - Disagree, U - Undecided, A - Agree and SA strongly Agree with the statement. The responses are as per table 4.3.

Table 4.3: Internal Control in Accounting Information System on Service Delivery

Internal Control	SD	D	U	A	SA
Internal control systems have been strengthened in using accounting information	32 (18.1%)	121 (68.4%)	3 (1.7%)	17 (9.6%)	4 (2.3%)

system					
There is compliance with internal control systems in public secondary schools accounting information system	42 (23.7%)	98 (55.4%)	5 (2.9%)	20 (11.3%)	12 (6.8%)
Financial transactions through the accounting information systems in public secondary schools are approved by authorized persons	44 (24.9%)	111 (62.7%)	2 (1.1%)	17 (9.6%)	3 (1.7%)
There is segregation of duties under accounting systems used public secondary schools	37 (20.9%)	115 (65.0%)	1 (0.6%)	20 (11.3%)	4 (2.3%)
Internal control systems have enhanced monitoring and evaluation of financial transactions in schools	37 (20.9%)	106 (59.9%)	2 (1.1%)	24 (13.6%)	8 (4.5%)
Accounting Information Systems have close relationship with service delivery of public secondary schools	18 (10.2%)	11 (6.2%)	1 (0.6%)	91 (51.4%)	56 (31.6%)

Source: **Researcher (2021)**

Table 4.3 reveals that internal control systems have not been strengthened in using accounting information system since majority of the respondents who were 121 representing 68.4% disagreed as well as 32 respondents representing 18.1% who strongly disagreed. The respondents who were 17 representing 9.6% agreed together with 4 respondents representing 2.3% who strongly agreed that internal control systems have been strengthened in using accounting information system. Respondents who were undecided were 3 representing 1.7%.

Majority of the respondents who were 98 representing 55.4% disagreed as well as 42 respondents representing 23.7% strongly disagreed that there was compliance with internal control systems in public secondary schools accounting information system. Respondents who were 20 representing 11.3% agreed together with 12 respondents representing 6.8% who strongly agreed that there was compliance with internal control systems in public secondary schools accounting information system. Respondents who were 5 representing 2.9% were undecided.

Most of the respondents who were 111 representing 62.7% disagreed while 44 respondents representing 24.9% who strongly disagreed that financial transactions through the accounting information systems in public secondary schools are approved by authorized persons. Respondents who were 17 representing 9.6% agreed as where as 3 respondents who represented 1.7% strongly agreed that financial transactions through the accounting information systems in public secondary schools are approved by authorized persons while 2

respondents representing 1.1% were undecided.

There was segregation of duties under accounting systems used public secondary schools, this was untrue according to majority of respondents who were 115 representing 65.0% who disagreed and 37 respondents representing 20.9% who strongly disagreed. Respondents who were 20 representing 11.3% agreed so do 4 respondents representing 2.3% who strongly agreed that there was segregation of duties under accounting systems used public secondary schools; one respondent representing 0.6% was undecided.

Majority of the respondents who were 106 representing 59.9% disagreed together with 37 respondents representing 20.9% strongly disagreed that internal control systems have enhanced monitoring and evaluation of financial transactions in schools. Respondents who were 24 representing 13.6% agreed together with 8 respondents representing 4.5% strongly agreed that internal control systems have enhanced monitoring and evaluation of financial transactions in schools while 2 respondents representing 1.1% were undecided.

Accounting information systems had close relationship with service delivery of public secondary schools; this was true since majority of the respondents who were 91 representing 51.4% agreed together with 56 respondents representing 31.6% who strongly agreed. Respondents who were 11 representing 6.2% together with 18 respondents representing 10.2% agreed that accounting information systems have close relationship with service delivery of public secondary schools. Respondents who were undecided were 1 representing 0.6%



were undecided.

This implies that that internal control systems need to be strengthened while using accounting information system; there was no compliance with internal control systems in public secondary schools while working using accounting information system; financial transactions through the accounting information systems in public secondary schools were not approved by authorized persons; there was no segregation of duties under accounting systems used public secondary schools; internal control systems need to enhanced monitoring and evaluation of financial transactions in schools and that accounting information systems had close relationship with service delivery of public secondary schools.

Internal control is a procedure that is sanctioned by an organization's board of management and need to be strengthened while using accounting information system. This concurs with Kaplan (2008), who noted that the main purpose of internal control mechanisms is to regulate accounting transactions within the organizations and should be planned in such a way that it can offer assurance in line with the realization of organizations objectives in the effectiveness and efficiency of its activities, dependability of the accounting and management reporting mechanisms, compliance with appropriate and applicable regulations and guidelines, and ability to adequately preserve the reputation of the organization.

There was no compliance with internal control systems in public secondary schools while working using accounting information system this does not



conform with International Organization of Supreme Audit Institutions (INTOSAI, 2016), which state that an organizations consist of five interconnected elements; control environment, control activities, risk assessment, information and communication and monitoring. Control Environment ensures the availability of systems and structures that support the realization of the main objectives of the System of Internal Control; Risk assessment entails identifying the risk, risk evaluation, comparing it with the risk appetite of the organization; and coming up with responses to deal with the risk. It also does not agree with Thuy (2017), who noted that control Activities consist of the procedures, guidelines, measures, and schemes connecting to the reliability of accounting reporting.

Financial transactions through the accounting information systems in public secondary schools were not approved by authorized persons; there was no segregation of duties under accounting systems used public secondary schools. This is contrary to DiNapoli (2017), who emphasized that a monitoring plan must be developed well in advance to ensure it captures key objectives and indicators of the expected performance such that any monitoring will be checking against expected performance.

The findings of the study that internal control systems need to enhanced monitoring and evaluation of financial transactions in schools concurs with Amaka (2012), who indicated that internal control demonstrates the level of management performance and forms a major ingredient towards the growth and effectiveness of the organization and that it is very difficult for accounting



management systems to operate in an organization without internal control systems.

The finding that accounting information systems had close relationship with service delivery of public secondary schools concurs with Frazer (2012), who confirmed that internal control has a positive impact on the profitability and resilience. It also concurs with Yang and Koo (2011), who revealed that as much as internal controls adaptability positively influenced internal controls efficacy and operating performance, internal controls efficacy equally influenced operating performance.

4.4.4 Capacity building in accounting information system on service delivery

The fourth objective was to analyze the effect of accounting information system internal controls on service delivery in public secondary schools in Kericho County. Respondents were asked to indicate the extent to which they agree with the statements on Internal Control, where SD – Strongly Disagree, D – Disagree, A - Agree, U - Undecided, SA - Strongly Agree and with the statement. Their responses are as per table 4.4.

Table 4.4: Capacity Building in Accounting Information System on Service Delivery

Capacity Building	SD	D	U	A	SA
There is capacity building programmes for accounting staff in public secondary schools	31 (17.5%)	118 (66.7%)	2 (1.1%)	14 (7.9%)	12 (6.8%)

Seminars are effective in enhancing the performance of accounting staff	44 (24.9%)	16 (9.0%)	1 (0.6%)	112 (63.3%)	4 (2.3%)
The school most often facilitate training of accounting staff	42 (23.7%)	101 (57.1%)	0 (0.0%)	21 (11.9%)	13 (7.4%)
Accounting staff are ICT compliant in respect to financial systems	57 (32.2%)	92 (52.0%)	1 (0.6%)	18 (10.2%)	9 (5.1%)
Capacity building mechanisms should be improved in public secondary schools	34 (19.2%)	19 (10.7%)	2 (1.1%)	108 (61.0%)	14 (7.9%)
Capacity building is directly related to service delivery of public secondary schools	44 (24.9%)	14 (7.9%)	3 (1.7%)	83 (46.9%)	33 (18.8%)

Source: Researcher (2021)

Table 4.4 reveals that majority of the respondents who were 118 representing 66.7% disagreed together with 31 respondents representing 17.5% who strongly disagreed that there was capacity building programmes for accounting staff in public secondary schools. Respondents who were 14 representing 7.9% agreed together with 12 respondents who strongly agreed that there was capacity building programmes for accounting staff in public secondary schools. Respondents who were undecided were 2 representing 1.1%.

Majority of the respondents who were 112 representing 63.3% agreed together with 4 respondents representing 2.3% who strongly agreed that seminars are

effective in enhancing the performance of accounting staff. The respondents who were 44 representing 24.9% strongly disagreed as well as 16 respondents representing 9.0% who disagreed that seminars are effective in enhancing the performance of accounting staff while 1 respondent representing 0.6% was undecided.

Majority of the respondents who were 101 representing 57.1% disagreed as well as 42 respondents representing 23.7% who strongly disagreed that their school most often facilitates training of accounting staff. The respondents who were 21 representing 11.9% agreed together with 13 respondents representing 7.4% strongly disagreed that their school most often facilitates training of accounting staff.

Most of the respondents who were 92 representing 52.0% disagreed together with 57 respondents representing 32.2% who strongly disagreed that accounting staff are ICT compliant in respect to financial systems. Respondents who were 18 representing 10.2% agreed together with 9 respondents representing 5.1% who strongly agreed that accounting staff are ICT compliant in respect to financial systems while 1 respondent representing 0.6% were undecided.

Capacity building mechanisms should be improved in public secondary schools; this is as per the response of the majority of the respondents who were 108 representing 61.0% together with 14 respondents representing 7.9% who strongly agreed. Respondents who were 34 representing 19.2% strongly disagreed together with 19 respondents representing 10.7% disagreed that

capacity building mechanisms should be improved in public secondary schools while 2 respondent representing 1.1% were undecided.

Capacity building is directly related to service delivery of public secondary schools; this is as per the response of majority of the respondents who were 83 representing 46.9% who agreed together with 33 respondents representing 18.8% who strongly agreed. Respondents who were 44 representing 24.9% strongly agreed as well as 14 respondents representing 7.9% disagreed while 3 respondents representing 1.7% were undecided.

This implies that there were no capacity building programmes organized for accounting staff in public secondary schools; seminars were thought to be effective in enhancing the performance of accounting staff; public secondary school did not facilitate training of accounting staff; accounting staff were not ICT compliant in respect to financial systems; capacity building mechanisms need to be improved in public secondary schools and that capacity building was directly related to service delivery of public secondary schools.

The study findings that there were no capacity building programmes organized for accounting staff in public secondary schools negate Abbott (2003) finding who explained that training should influence the ability to manage school finances. Accountants' literacy is developed through basic learning of computer skills and some principles of computer operations as postulated by Totnall,

Visscher and Finegan (2009), who maintained that capacity building concerns the extent to which accounting managers become conversant on how to effectively utilize accounting information systems in their day to day operations since it will helps them to gain skills on effective accounts management and record keeping (Abbott, 2003). This will enable the accountants/bursars to use accounting information systems and acquire knowledge to understand trends associated with it and its applications.

Seminars were thought to be effective in enhancing the performance of accounting staff but public secondary school did not facilitate training of accounting staff. This concurs with Okeyo (2013), who recommended that principals should be trained to enable them to acquire the skills needed for effective use accounting information systems. Okeyo suggests that training should include use of accounting information systems in day to day transactions and school operations. This will equip them with skills that enable them to use and integrated for accounts management purposes. Capable accountants, in this context, refer to those who know how to learn, are creative, have a high degree of self-efficacy, can apply competencies in novel as well as familiar situations, and work well with others (Okeyo 2013).

The findings indicated that accounting staff were not ICT compliant in respect to financial systems. This concurs with Bamigboye *et al.* (2013), who explain that lack of accounting information systems skill is the single largest barrier to use in accounting information systems in secondary schools. There is need therefore to



make mandatory for all school accountants to undergo training in an accounting system for them to manage school financial resources prudently as proposed by Lucey (2010). There is need to improve on capacity building mechanisms in public secondary schools through regular workshops and seminars organized for serving school accountants to keep them abreast of developments in the field of accounting systems as they relate to accounts management. This is in tandem with the recommendation by Kinuthia (2012), on refresher training for the accountants and school managers since knowledge and skills are gotten through in-service training and capacity building workshops and it helps principals to be confident in use of accounting system tools in daily school financial management practices. The findings revealed that capacity building was directly related to service delivery of public secondary schools. This concurs with Sandholtz and Reilly (2004), who explain that accountants who acquired knowledge and skills on use of accounting systems led to increased levels of financial management in schools. It also agrees with Lau and Sim (2008), who argues that accounting system technical support serves as a motivation for school bursars to integrate accounting systems in administering school finances. This is because a well-trained technical support team provides guidance on the use of accounting systems, not only to the accountant, but also to the teachers and students and other stakeholders on use of accounting information software's.

4.4.5 Service delivery

The dependent variable was service delivery and respondents were asked to indicate the extent to which they agreed or disagreed with the statements on Service delivery in their school. Their responses were on a Likert scale where SD was Strongly Disagree, D was Disagree, U was Undecided, A was Agree, SA was Strongly Agree. Their responses are as per Table 4.5.

Table 4.5: Service Delivery

Service Delivery	SD	D	U	A	SA
The school has competent accounting staff who has contributed to better service delivery	20 (11.3%)	91 (51.4%)	14 (7.9%)	15 (8.5%)	37 (20.9%)
My school has a lean, effective, efficient and highly motivated workforce which help in offering better service	16 (9.0%)	101 (57.1%)	15 (8.5%)	17 (9.6%)	28 (15.8%)
There is a friendly work environment in my school hence I am able to provide effective and efficient service	25 (14.1%)	87 (49.2%)	16 (9.0%)	23 (13.0%)	26 (14.7%)
There is transparency in utilization of funds in my school and this has lead to quality service delivery	33 (18.6%)	89 (50.3%)	11 (6.2%)	22 (12.4%)	22 (12.4%)
In my school, there are opportunities for staff to continuously improve their skill	41 (23.2%)	79 (44.6%)	14 (7.9%)	22 (12.4%)	21 (11.9%)

which is critical for offering quality service to our clients.

Source: **Researcher (2021)**

Table 4.5 reveals that majority of the respondents who were 91 representing 51.4% disagreed as well as 20 respondents representing 11.3% who strongly disagreed that school has competent accounting staff who has contributed to better service delivery. Respondents who were 15 representing 8.5% agreed as well as 37 respondents representing 20.9% who strongly agreed that school has competent accounting staffs who have contributed to better service delivery. Respondents who were undecided were 14 representing 7.9%.

Majority of the respondents who were 101 representing 57.1% disagreed as well as 16 respondents representing 9.0% who strongly disagreed that their school had a lean, effective, efficient and highly motivated workforce which helps in offering better service. Respondents who were 28 representing 15.8% strongly agreed as well as 17 respondents representing 9.6% who agreed that their school had a lean, effective, efficient and highly motivated workforce which helps in offering better service. Respondents who were 15 representing 8.5% were undecided.

Most of the respondents who were 87 representing 49.2% disagreed as well as 25 respondents representing 14.1% who strongly disagreed that there was a friendly work environment in my school hence they were able to provide effective and efficient service. Respondents who were 23 representing 13.0%

agreed as well as 26 respondent representing 14.7% who strongly agreed that there was a friendly work environment in my school hence they were able to provide effective and efficient service. Respondents who were 11 representing 6.2% were undecided.

Majority of the respondents who were 89 representing 50.3% disagreed as well as 33 respondents representing 18.6% who strongly disagreed that there was transparency in utilization of funds in my school and this has lead to quality service delivery. The respondents who were 22 representing 12.4% agreed and the same number of respondents strongly agreed that there was transparency in utilization of funds in my school and this has lead to quality service delivery while 11 respondents representing 6.2% were undecided.

Majority of the respondents who were 79 representing 44.6% disagreed as well as 41 respondents representing 23.2% who strongly disagreed that there were opportunities for staff to continuously improve their skill which was critical for offering quality service to our clients. the respondents who were 22 representing 12.4% agreed as well as 21 respondents representing 11.9% who strongly agreed that there were opportunities for staff to continuously improve their skill which was critical for offering quality service to our clients while 14 respondents were undecided.

This implies that secondary school does not have competent accounting staff who can contributed to better service delivery; secondary schools does not have lean, effective, efficient and highly motivated workforce who can help in offering



better service; the work environment in secondary school were not friendly hence respondents could not provide effective and efficient service; there was no transparency in utilization of funds in secondary school and this lead to poor service delivery and that secondary schools did not provide opportunities for staff to continuously improve their skill which was critical for offering quality service to their clients.

The findings indicated that most secondary school did not have competent accounting staff who can contribute to better service delivery. This concurs with Bamigboye *et al.* (2013), who explain that lack of accounting information systems skill is the single largest barrier to use in accounting information systems in secondary schools. The findings showed that secondary schools did not have lean, effective, efficient and highly motivated workforce who can help in offering better service. This concurs with Sandholtz and Reilly (2004), who explain that accountants who acquired knowledge and skills on use of accounting systems led to increased levels of financial management in schools and that school accountants to undergo training in an accounting system for them to management school financial resources prudently as proposed by Lucey (2010).

The work environment in secondary school was not friendly hence respondents could not provide effective and efficient service. This is in agreement with the recommendations by Lau and Sim (2008), who noted that accounting information software technical support serves as a motivation for school bursars to integrating accounting systems in administering school finances and this will

ensure that there is transparency in utilization of funds in secondary school hence improve service delivery.

The findings indicated that secondary schools did not provide opportunities for staff to continuously improve their skill which was critical for offering quality service to their clients hence as per the recommendations of Kinuthia (2012), there is need for refresher training for the accountants and school managers through in-service training and capacity building workshops so that they get acquainted on the use of accounting information software.

4.5 Inferential Statistics

This study applied correlations and multiple regressions analysis to determine the predictive power of the effects of accounting information systems and service delivery in public secondary schools in Kericho County, Kenya.

4.5.1 Pearson correlation analysis

Correlation between variables is a measure of how well the variables are linearly related. The correlation coefficients results are between -1 and 1. A result of -1 means that there is a perfect negative correlation between the two values, while a result of 1 means that there is a perfect positive correlation between the two variables. Result of 0 means that there is no correlation between the two variables (Gujarat, 2004).

Pearson correlation coefficient was used to examine correlation between Accounting Information System Use, Staff Competency, Internal Controls,

Capacity Building and their effect on Service Delivery. The analysis is shown in the Table 4.6.

Table 4.6: Correlations

		SU	SC	IC	CB	SD
SU	Pearson Correlation	1				
	Sig. (2-tailed)					
SC	Pearson Correlation	.195**	1			
	Sig. (2-tailed)	.009				
IC	Pearson Correlation	.194**	.394**	1		
	Sig. (2-tailed)	.010	.000			
CB	Pearson Correlation	.010	.221**	.439**	1	
	Sig. (2-tailed)	.890	.003	.000		
SD	Pearson Correlation	.455**	.122	.141	.540**	1
	Sig. (2-tailed)	.000	.107	.062	.000	

****.** Correlation is significant at the 0.01 level (2-tailed), N = 177

SU = Software Use, SC= Staff Competency, IC = Internal Controls, CB = Capacity Building, SD = Service Delivery

Source: **Researcher (2021)**

As shown in Table 4.6 there was a strong positive relationship between accounting information software use and service delivery since it had a Pearson Correlation of ($r=0.455$, $p = 0.001$), staff competency had a significant positive relationship with service delivery since it had a Person Correlation of ($r = 0.122$, $p = 0.107$), internal controls had a non significant positive relationship with service delivery since it had a Person Correlation of ($r=0.141$, $P < 0.062$) and capacity building had a positive significant relationship with service delivery since it had a Person Correlation of ($r=0.054$, $P < 0.001$). The correlation between the independent variables suggests the existence of multicollinearity.

4.5.2 Regression analysis

Regression analysis is the statistical technique that identifies the relationship between two or more quantitative variables: a dependent variable, whose value is to be predicted, and an independent or explanatory variable (or variables), about which knowledge is available. The technique is used to find the equation that represents the relationship between the variables. Multiple regressions provide an equation that predicts one variable from two or more independent variables (Bryman and Bell (2015).

Anderson *et al.* (2002), spelt out the importance of examining the significance of



each independent variable in predicting the dependent variable. The unstandardized coefficient value of Beta was used to determine whether each of the individual independent variable was significant in the overall model. The researcher conducted a multiple regression analysis so as to test relationship between independent on dependent variables and the results are as per Table 4.7.

Table 4.7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.729 ^a	.531	.520	.43027

a. Predictors: (Constant), CB, CIS, SC, IC

Source: Researcher (2021)

The results in Table 4.7 indicate that the adoption of accounting information system had a joint significant effect on service delivery in secondary schools in Kericho County as shown by R value of 0.729. The R squared of 0.531 shows that the independent variables accounted for 53.1% of the variance on service delivery in secondary schools in Kericho County while 46.9% are explained by other variables outside the study.

4.5.3 Coefficient of determination

Coefficient of determination was generated to explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable

(service delivery) that is explained by all the four independent variables (accounting information software use, staff competency, internal controls, capacity building).

Table 4.8

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.702	.250		2.812	.005
1 AISU	.315	.039	.435	8.072	.000
SC	.232	.074	.180	3.138	.002
IC	.058	.074	.049	.786	.433
CB	.650	.068	.563	9.627	.000

a. Dependent Variable: SD

Source: Researcher (2021)

From the findings in Table 4.8, the study found that holding accounting information system use, staff competency, internal controls, and capacity building constant, service delivery will be 0.702. The study also found that a unit increase in accounting information system use will increase in service delivery by 0.315. Further it was established by the study that a unit increase in staff

competency will lead to an increase in service delivery by 0.232, it was also found that a unit increase in internal controls will lead to an increase in service delivery by a factor of 0.058 and a unit increase in capacity building will lead to an increase in service delivery by a factor of 0.650.

The study multiple regression models now becomes:

$$SD = 0.702 + 0.315AISU + 0.232SC + 0.058IC + 0.650CB$$

Where; SD is Service Delivery; AISU is Accounting Information Software Use, SC is Staff Competency, IC is Internal Controls, and CB is Capacity Building. This implies that capacity building had a higher influence on service delivery in secondary schools in Kericho County; this was followed by accounting information system use then followed by Staff Competency and lastly Internal Controls.

4.6 Research Hypotheses

From the results of coefficient of determination in Table 4.8, **H₀1**: There is statistical significant effect of accounting information software use on service delivery in public secondary schools in Kericho County. The findings shows that accounting information system use affect service delivery ($t = 8.072$, $p < 0.05$) hence we accept the hypothesis.

H₀2: There is statistical significant effect of staff competency in accounting information systems on service delivery in public secondary schools in Kericho County. The findings reveals that staff competency affect service delivery ($t = 3.138$, $p < 0.05$) thus the hypothesis is accepted. **H₀3**: There is no statistical

significant effect of internal controls in accounting information systems on service delivery in public secondary schools in Kericho County. The findings shows that internal control does not affect service delivery ($t = 0.786$, $p > 0.05$) hence we accept the hypothesis. **H₀₄**: There is statistical significant effect of capacity building in accounting information systems on service delivery in public secondary schools in Kericho County. The results reveals that capacity building affect service delivery ($t = 9.627$, $p < 0.05$), the hypothesis is thus accepted.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives the summary of the research findings that were obtained from the study that was anchored on specific objectives, conclusions that were made, the recommendations that were drawn, and finally, the suggested areas for further research.

5.2 Summary

The main objective of the study was to investigate the effects of accounting information systems and service delivery in public secondary schools in Kericho County, Kenya. The study variables were accounting information system use; staff competency; internal controls; and capacity building.

5.2.1 Accounting information software use on service delivery

The first objective was to establish the effect of accounting information software use on service delivery in public secondary schools in Kericho County. The findings showed that schools use accounting information software to receipt fee payment; record fees payments; raise payment vouchers; generate financial reports and provide good financial data storage. Accounting information software use had enabled secondary school to manage its finances well but technology was a challenge to most school fund managers.



5.2.2 Staff competencies in accounting information system on service delivery

The second objective of the study was to examine the effect of staff competency in accounting information system on service delivery in public secondary schools in Kericho County. The findings revealed that secondary school does not offer training to its staff on use of technology; accountants and all school staff do not have relevant adequate computer skills necessary to offer quality service to their clients effectively using technology; staff in most of the school have not been trained in accounting information system and this has not help improve on service delivery to school customers; errors and differences in records are not easily reconciled on time by bursar with the help of accounting system; lack of technological training skills to school financial managers has leads to mismanagement of the school funds and that secondary school does not offers training skills opportunities to its employee so as to improve on their use of accounting information system.

5.2.3 Internal control in accounting information system on service delivery

The third objective was to analyze the effect of internal controls in accounting information system on service delivery in public secondary schools in Kericho County. The findings reveals that internal control systems was not available when using accounting information system; there was no compliance with internal control systems in public secondary schools while using accounting information system; financial transactions through the accounting information systems in public secondary schools were not approved by authorized persons;

there was no segregation of duties under accounting systems used public secondary schools; internal control systems of financial transactions in schools were not monitored or evaluated and that accounting information system had close relationship with service delivery of public secondary schools.

5.2.4 Capacity building in accounting information system on service delivery

The fourth objective was to analyze the effect of capacity building in accounting information system on service delivery in public secondary schools in Kericho County. The study findings revealed that there were no capacity building programmes organized for accounting staff in public secondary schools; seminars which were thought to be effective in enhancing the performance of accounting staff had not been organized; public secondary school did not facilitate training of accounting staff; accounting staff were not ICT compliant in respect to accounting information systems; capacity building mechanisms were not there in public secondary schools and that capacity building was directly related to service delivery of public secondary schools.

5.2.5 Service delivery

The findings on the dependent variable revealed that secondary schools does not have competent accounting staff who can contribute to better service delivery; secondary schools does not have lean, effective, efficient and highly motivated workforce who can help in offering better service; the work environment in secondary school were not friendly hence respondents could not provide

effective and efficient service; there was no transparency in utilization of funds in secondary school and this lead to poor service delivery and that secondary schools did not provide opportunities for staff to continuously improve their skill which was critical for offering quality service to their clients.

5.3 Conclusions

The following conclusions are made based on the study findings; Secondary school uses accounting information software to receipt fee payment; record fees payments; raise payment vouchers; generate financial reports and provide good financial data storage, since it will enable them to manage their finances well.

Secondary school does not offer training to its staff on use of technology since they did not have relevant adequate computer skills; staff in most of the school are not trained in accounting information system hence they cannot reconciled errors and differences in records which has leads to mismanagement of the school funds. Internal control systems have not been implemented in the accounting information system used by secondary schools and this has led to financial transactions through the systems not approved by authorized persons. Accounting systems used by public secondary schools does not have segregation of duties and that financial transactions were not monitored or evaluated.

Secondary school have not organized capacity building programmes; training and seminars for accounting staff facilitate of accounting staff. Secondary school

does not have; competent, lean, effective, efficient and highly motivated accounting staff and that the work environment is not friendly.

5.4 Recommendations

The study recommend that secondary schools need to adopt the use of accounting information software in its day to day operations. There is need for training of staff on use of accounting information system so that they can easily reconcile records hence reduces on mismanagement of the school funds.

Financial transactions through the systems need to be approved by authorized persons and that segregation of duties be implemented so that users of the systems are monitored or evaluated based on every financial transaction. Secondary school need to organize capacity building programmes; training and seminars for accounting staff so as to have; competent, lean, effective, efficient and highly motivated workforce who will give quality service.

5.5 Suggestions for Further Research

This study investigated the effect of accounting information systems and service delivery in public secondary schools. Further research can be done on the adoption of accounting information system on the management of secondary school funds.



REFERENCES

- Abbott, J. (2003). Does Employee Satisfaction Matter? A study to determine whether low employee morale affects customer satisfaction and profits in the business-to-business sector. *Journal of Communication Management*. Vol(issue)
- Adomi, E. & Kpangban, E. (2010). Application of ICTs in Nigerian Secondary Schools. *Library Philosophy and Practice*. 2010.
- Amaka, C. P. (2012). The Impact of Internal Control System on the Financial Management of an Organization (A Case Study Of The Nigeria Bottling Company Plc, Enugu). Unpublished *Master's Thesis*. Faculty of Management and Social Sciences Caritas University.
- Anuradha J. (2010) Service delivery. Review of impact and effectiveness of transparency and accountability Initiatives. Institute of Development Studies
- Bamigboye, O. & Bankole, O. and And, B. (2013). Teachers' attitude and competence towards the use of ICT resources: A case study of University



Of Agriculture Lecturers, Abeokuta Ogun State, Nigeria. *The Information manager*. 13, 10-15.

Baylor, A. & Ritchie, D. (2002). What factors facilitate teacher skill, teacher morale, and perceived student learning in technology-using classrooms?. *Computers and Education*. 39. 395-414. 10.1016/S0360-1315(02)00075-1.

Barrett, S., Kincaid, D. March, A. 2013. Building Coaching Capacity. Presented at the 2013 PBIS leadership forum.

Blandford, C & Ann F. S. (2007). Challenges of evaluating the information visualisation experience.. 167-170. 10.1145/1531407.1531451.

Bruno, E., Iacoviello, G., & Lazzini, A. (2015). The adequacy of information systems for supporting the asset quality review process in banks. Evidence from an Italian Case study. *Lecture notes in information systems and organisation*, 59-75.

Byanguye, M, (2007). The effectiveness of internal control system in achieving value for money in School facilities grant; a case of Kamuli District Local Government. Makerere University.

Christine, N. (2010). Effects of internal controls on financial performance in public secondary schools. *Strategic journal of business and change management*.

Cooper and Schindler, (2011). Sampling techniques *journal on business education*



Management

- Dameri, R., Garelli, R., & Ricciardi, F. (2013). The didactic challenge of accounting information systems and ERPs for business schools: A proposal for the Italian universities. *Lecture notes in information systems and organisation*, 337-349.
- Davis, F. (1996). A Critical assessment of potential measurement biases in the Technology Acceptance Model; three experiments. *International Journal of Human Computer studies*, 45(1), 14-45.
- Dnaboli G, (2017) Influence of internal control practices on performance of Public secondary schools in Kenya *Business Journal on Management*
- Dzinodu, C. (2002). *A Blue prints for developing national ICT policy in Africa*. Nairobi.
- Ejoh M. & Ejom H. (2014). Impacts of internal audits on financial performance, in tertiary institutions.
- Ethridge, D.E. (2004). Research methodology in applied economics: *John Wiley and Sons Publishers*
- Frazer, L. (2012). The Effect of internal control on the operating activities of small restaurants. *Journal of Business and Economics Research (JBER)*. 10. 10.19030/jber.v10i6.7027.
- Gbenga B, 2003 Use Of ICT and its effects on accounting information system in



education sector in Kenya

GoK. (2010). *National ICT Policy*. Government printers. Nairobi, Kenya.

Horngren, P., & Foster, W. (2013). "Technology integration in education in developing Countries: Guidelines to Policy Makers". . *International Education Journal [Electronic]*.

Ian, K. (2017). The influence of IT: perspectives from five Australian schools. *Journal of Computer Assisted Learning* .

INTOSAI, (2014), International organization of supreme audit institutions, Internal control systems in an organization.

Israel (2009) Determining Sample Size. *University of Florida Cooperative Extension Service, Institute of Food and Agriculture Sciences*, EDIS, Florida.

Kaplan, C. (2008), Internal control procedures and organisation Board of Management.

Katitia, M. D., Tanui, E. & Oruta, F. (2019). Determining the extent of ICT implementation and use in financial management of secondary schools in Kajiado County, Kenya. *Editon Cons. J. Bus. Manag. Stud.*, 1(1), 18-27.

Katusiime, M. & Kirabo, S. (2018) that was done in Uganda based on control environment and control activities on fiancial performance.

Kerlinger, F. (1986). *Foundations of behavior research (3rd ed.)*. New York: Holt,Rinehart, and Winston.

- Khan, H., Hassan, M., & Clement, K. (2012). Barriers to the introduction of ICT into education in developing countries. *The Example of Bangladesh International Journal of Instruction* , 5 (2) 61-80.
- Kinuthia, E. (2012). *Challenges of information and communications technology (ict) integrated in secondary education: a case of Nakuru County, Kenya*. Unpublished M.ED Thesis.
- Kiptalam, G., & Rodrigues, A. (2010). Internet Utilization; a case of connected rural and urban public secondary schools in Kenya, International. *Journal of Computing and ICT Research*. 4 (1), 49-63.
- Kisanyanya, G. (2018). Financial performance of public institution of higher learning in Vihiga County.
- Kyle, (2005). What Is a Public School? Examples of definitions. Education commission of the states (ECS).
- Laaria, M. (2013). Leadership challenges in the implementation of ICT in public secondary schools, Kenya. *Journal of education and learning* , 2(1) 32-43.
- Ladan Shagari, Shamsudeen & Abdullah, Akilah & Mat Saat, Rafeah. (2016). The influence of system quality and information quality on accounting information system (ais) effectiveness in Nigerian banks. *International post graduate business journal*. 7. 58-74.
- Lagat, F. Okelo, K. & Terer, D. (2016). Internal control system on financial



management in Baringo County Government.

Lucey, M. (2010). *Teacher Characteristics, contextual factors, and how these affect the pedagogical use of ICT. In N. Law, W.J. Pelgrum, and T.,*

Mahhanu, P. & Kamper, J. (2012). ICT usage in Higher education”,*International Technology and Education and Development Conference.*

Mangesi, K. (2010). *A comparative study of approaches to ICT policy formulation an implementation in Ghana and South Africa (Unpublished master’s thesis).*South Africa: University of Kwa-Zulu Natal.

Metzar, S. & Miranda, J. (2001), Functions of information technology in budgeting, proceedings of the international conference in Bilbao, Spain,

Mikre, F. (2011). The Roles of Information Communication Technologies in Education. *Review Article with Emphasis to the Computer and Internet .*

MOE (2017), Government Policy on Financial Management of Public schools, Government Printers, Nairobi.

Mugenda, O. M., & Mugenda, A. G. (2003). *Research Methods: Qualitative and Quantitative Approaches.* Nairob: ACTS Press.

Mugi S and Jagongo L,(2018) Use of ICT in Accounting Information System

Muhunyo, B. M. & Jagongo, A. O. (2018). Effect of internal control systems on financial performance of public institutions of higher learning in Nairobi City County, Kenya. *International Academic Journal of Human Resource*



and Business Administration, 3(2), 273-287

Munene, L. (2013). Effects of Internal Controls on Financial Performance in Technical Training Institutes. *Strategic Journal of Business and Change Management*, 1 (2)

Mungai, M. (2011). *Challenge, Education, ICT in Schools*. Japan.: Hokkaido University.

Muraleetharan, S. (2013). Control activities and performance of Public secondary schools research in Sri Lanka.

Murphy, D., & Gunter, G. (2014). *Technology Integration: The Importance of Administrative Support Educational Media International*.

Mutai, K. (2003). (2003) *Training of Teachers before being promoted to be Education Administrators*. . Nairob: Nation Media Group.

Mutai, Simiyu & Sakwa, L. (2018). Influence of internal control practices on performance of Public secondary schools in Kenya.

Musheer, Z. (2018). ICT as a catalyst for teaching-learning process: A meta-analysis study. 3.

Mwakimasinde, Odhiambo and Braruhanga, (2014) Munene, L. (2013). Effects of Internal Controls on Financial Performance in secondary schools. *Strategic Journal of Business Management*.

Neuman, W. (2000). Social Research Methods: Qualitative and Quantitative



Approaches. 10.2307/3211488.

Ndamenenu, K (2011). Effects of Internal Controls on Financial Performance in Technical Training Institutes. *Strategic Journal of Business and Change Management*.

Ngugi P. (2012) Investigation into the extent of the use of ICT in education management in public secondary schools in Naivasha.

Njonde and Kimanzi(2014) Determining **Sample Size**. University of Florida Cooperative Extension Service, Institute of Food and Agriculture Sciences. Business Journal on Management.

Nyakundi, S. (2014). Effect of Internal Controls on Financial Performance of Small and Medium Enterprises in Nairobi County
<http://erepo.usiu.ac.ke/11732/5245>.

Obiora, N. (2010). Use of information communication technology in teaching and learning processes in secondary schools in Rachuonyo South District, Homa-Bay County, Kenya, Unpublished Master Thesis.

Onguko B., Sara H., David H., Enos K.A, Susan N., Azra N. & Leonard W. (2010), Developing the Use of Information and Communication Technology to Enhance Teaching and Learning in East African Schools: *Review of the Literature Developing use of ICT to enhance teaching and learning in East African schools: a review of the literature*.

- Olha P., Galyna L., Oksana V. & Nataliia S.(2021). Accounting Software in Modern Business. *Advances in Science, Technology and Engineering Systems Journal*. 6(1), 862-870.
- Orodho, J. (2005). Data Analysis, summerizing of data to obtain answers to research questions. Nairobi: Masola Publishers.
- Oso, W. Y. & Onen, D. (2005). A General Guideto Writing Research Proposal and Reports. A book for beginning Researchers, (2nd ed.).Makerere University press. Kampala, Uganda.
- Oyier, O. & Ganira W. (2015), Influence of Use of Education Management Information System (Emis).
- Paramasivan C. (2009). Financial Management. New Age International.
- Rogers, E. (1995). *Diffusion of innovations (5th edition)*. New York: The Free Press.
- Salomon, G. (2010). Technology and pedagogy: why don't we see the promised revolution? *Educational technology*,42 (1), 71-75.
- Schiller, J. (2013). *The Elementary School Principal as a Change Facilitator in ICT Integration*.
- Sharma, S. (2018). ICT in Education: Catalyst for Effective Teaching-Learning. 10.13140/RG.2.2.34044.64641.
- Syombua, F. (2013). Factors Influencing Utilization of Information and Communication Technology in Public secondary schools in Kitui Central



District, Kitui County.

Susan C. (2015), An Investigation of the Relationship of ICT Training of Principals in ICT integration in Management Public Secondary Schools: A case of Nairobi County, Kenya, *Journal of Education and Practice* www.iiste.org ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) 6, (18).

Technopedia, (2021) Cellular Phone. Accessed on 17th May 2021.

Thuy, H. (2007). The importance of internal control in financial reporting and safeguarding plan assets.

Victoria, E. (2012). *Use of ICT for Financial Information*. Los Angeles: San Jose Inv.

UNESCO. (2012). *Teacher Training on ICT use in Education in Asia and the Pacific: Overview from Selected Countries*. Bangkok. UNESCO.

William, J. & Tavneet, S. (2010). *The Economics of M-PESA; A World Bank Report*. Georgetown University.

Will K. (2021), Internal Controls
<https://www.investopedia.com/terms/i/internalcontrols.asp>. Accessed on 8th October 2021.

Wong, S.-C. (2020). Competency Definitions, Development and Assessment: A Brief Review. *International Journal of Academic Research in Progressive Education and Development*, 9(3), 95–114.

Yang, J. & Koo, N. (2011). Effects of the Quality of Internal Control. Retrieved from



Yudianti, V. & Suryandari, D. (2015). Internal control and risk management on good governance.

Ziraba, A. (2012). *The role of information and communication Technology in the management of selected public secondary schools in central Uganda* . Makerere University.

APPENDICES

Appendix I: Questionnaire

I am an MBA Student of University of Kabianga undertaking a research on **"Effect Accounting Information Systems and Service Delivery in Public Secondary Schools in Kericho County, Kenya**. The study is for academic purpose only and information provided will be kept private and confidential and will be used for academic purposes. Please don't write your name anywhere in the questionnaire. Tick on the box or fill in the black space provided to the best of your knowledge.

Kindly fill or tick where appropriate.

Section A: General Information



1. What is your gender?

Male [] Female []

2. Kindly indicate your age;

Below 30 Years [] 30 – 39 [] 40 – 49 [] 50 and above []

3. What is your level of education?

KCSE [] Tertiary certificate [] Diploma [] Undergraduate degree []
Masters []

4. What is your position in this school?

Principal [] Bursar []

5. How long have you worked in this school:

Less than 1 years [], 1 – 5 Years [], 6 – 10 Years [], above
10 years []

6. What is the population of your school?

Less Than 100 Pupils [], 101 – 200 Pupils [] , 201 - 300 Pupils [] Over 300
Pupil []

Section B: Accounting Information Software

To what extent do you agree with the following statements on accounting information system. Tick appropriately where 5 is Strongly Agree, 4 is Agree, 3 is Undecided, 2 is Disagree and 1 is Strongly Disagree.



	Accounting Information Software	1	4	3	4	5
1.	My school uses accounting software to receipt fee payment					
2.	The school uses accounting software to record fee payment					
3.	School accounting software is used to raise payment vouchers					
4.	Accounting software used in our school generate financial reports effectively					
5.	Our school accounting software provide good financial data storage					
6.	Accounting software in use have enabled our school manage its finances well					
7.	Technology is a challenge to most school fund managers					

Section E: Staff Competencies

Tick appropriately the extent to which you agree with the following statements on staff competencies, where SA means you strongly Agree, A - Agree, N -



Neutral, D - Disagree and SD – Strongly Disagree with the statement.

Staff Competencies	SA	A	N	D	SD
14. Our school often offer training to its staff on use of technology so as to improve on service delivery					
15. Accountants and all school staff have relevant computer skills so as to offer quality service to its clients effectively using technology					
16. Staff in my school have been trained in accounting information system and this has helps improve on service delivery to school customers					
17. Errors and differences in records are easily reconciled on time by bursar with the help of accounting system					
18. Lack of technological training skills to school financial managers leads to mismanagement of the school funds					
19. My school offers training skills opportunities to its employee so as to improve on their use of					

ICT.					
------	--	--	--	--	--

Section F: Internal Control

Tick appropriately the extent to which you agree with the following statements on Internal Control, where SA means you strongly Agree, A - Agree, N - Neutral, D - Disagree and SD – Strongly Disagree with the statement.

	Internal Control	5	4	3	2	1
1.	Internal control systems have been strengthened in using accounting information system					
2.	There is compliance with internal control systems in public secondary schools accounting information system					
3.	Financial transactions through the accounting information systems in public secondary schools are approved by authorized persons					
4.	There is segregation of duties under accounting systems used public secondary schools					
5.	Internal control systems have enhanced monitoring and evaluation of financial transactions in schools					

6.	Accounting information system have close relationship with service delivery of public secondary schools					
----	---	--	--	--	--	--

Section G: Capacity Building

Tick appropriately the extent to which you agree with the following statements on Internal Control, where SA means you strongly Agree, A - Agree, N - Neutral, D - Disagree and SD – Strongly Disagree with the statement.

	Capacity Building	5	4	3	2	1
1.	There is capacity building programmes for accounting staff in public secondary schools					
2.	Seminars are effective in enhancing the performance of accounting staff					
3.	The school most often facilitate training of accounting staff					
4.	Accounting staff are ICT compliant in respect to financial systems					
5.	Capacity building mechanisms should be improved in public secondary schools					
6.	Capacity building is directly related to service delivery					



	of public secondary schools					
--	-----------------------------	--	--	--	--	--

Section H: Service Delivery

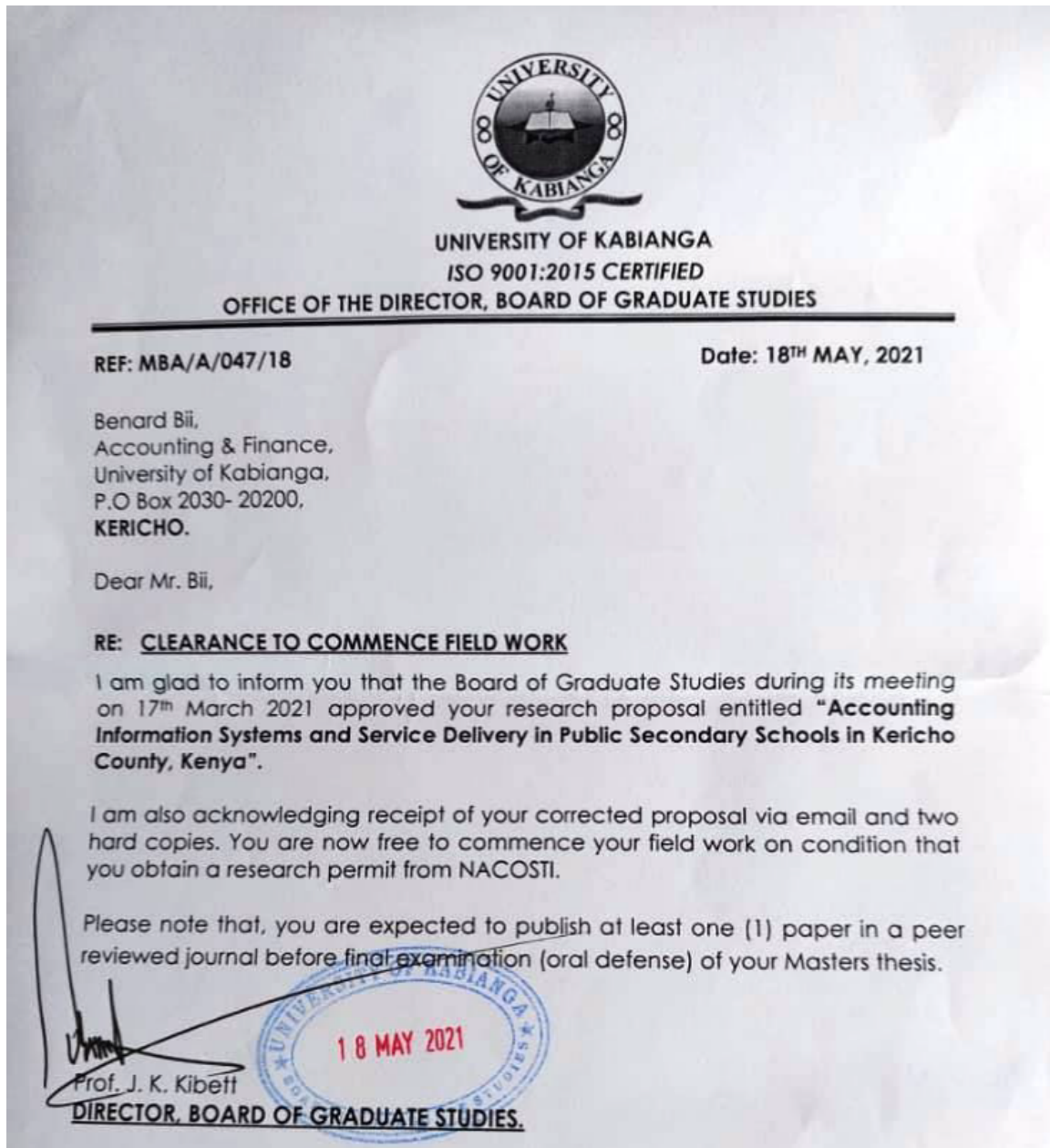
Please indicate the extent to which you agree or disagree with the following statements on Service delivery in your school. Answer by ticking (✓) only one answer in each case. Use the scale of 1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Undecided*, 4 = *Agree*, 5 = *Strongly Agree*

Service Delivery	1	2	3	4	5
7. The school have competent accounting staff who has contributed to better service delivery					
8. My school has a lean, effective, efficient and highly motivated workforce which help in offering better service					
9. There is a friendly work environment in my school hence I am able to provide effective and efficient service					
10. There is transparency in utilization of funds in my school and this has lead to quality service delivery					
11. In my school, there are opportunities for staff to continuously improve their skill which is critical for					

offering quality service to our clients.					
--	--	--	--	--	--

Thank You

Appendix II: Clearance Letter



Aappendix III: Research Permit



Appendix III: Research Publication

