“THE IMPACT OF ELECTRONIC ACCOUNTING SYSTEMS ON THE EFFICIENCY OF ACCOUNTANTS IN A DYNAMIC ENVIRONMENT IN PRIMARY SCHOOLS”

B1543756

A research project submitted to the Bindura University of Science Education in partial fulfilment of the requirement of the Bachelor of Accountancy (Honours) degree in the Department of Accountancy
RELEASE FORM

DISSERTATION TITLE: IMPACT OF ELECTRONIC ACCOUNTING SYSTEMS ON THE EFFICIENCY OF ACCOUNTANTS IN A DYNAMIC ENVIRONMENT IN PRIMARY SCHOOLS

STUDENT NO: B1543756

DEGREE TITLE: Bachelor of Accountancy (Honours) degree

Permission is hereby granted to the Bindura University Library to produce single copies of dissertation and to lend or sell such copies for private, scholarly or scientific research purpose only. The author reserves other publication rights and neither the dissertation nor extensive extracts from it may be printed or otherwise reproduced without the author’s written permission.

Signed ………………………………………
Dedication

To my lovely mother and sister, I love you. Also to me dear loving husband Richard, you are my bundle of joy.
ABSTRACT

The recording of financial transactions in manual accounting systems at the primary schools was through books of original entries but under the electronic accounting system the data content of such all such transactions were stored in a well-designed accounting database or software that could be reproduced quite fast. A sample of 45 respondents were interviewed. The finding revealed that there are several costs which have to be met in order to set up and run an electronic based accounting system and these include the fact that the school must be electrified, the computers must be procured at an initially higher cost and there is also need to train the users so that there is maximum benefit from the system. Other costs are related to acquisitions of licences for the software which is borne on a continuous basis as these licences expire and have to be renewed. In addition, the computers and the system need regular service and maintenance in order to ensure its regular effectiveness and this also costs money as specialists IT persons have to be engaged from time to time. The researcher recommends that the school administration must embrace the electronic accounting system by ensuring that the accountants get training on the use of computers and the application of the various software, databases as well as the actual accounting software. They must use the accounting system regularly and consistently to capture all transactions and not some of the transactions. They must safe guard the electronic based accounting system from vandalism, fraudulent use and unauthorized access. The administrator should identify the contributory factors behind the growth in the use of computers within primary schools for their accounting systems.
ACKNOWLEDGEMENTS

My heartfelt gratitude goes to my supervisor I would like to express my sincere gratitude for his firm support, guidance and encouragement during the course of study. His professional expertise, experience, suggestions and corrections were highly valuable and made this research possible. To the lectures of Bindura University of Science Education (Faculty of Commerce, especially the Accounting Department), I do really appreciate the knowledge and wisdom you managed to convey during the time of my study. I’m forever grateful to my one and only sister for her love, encouragement and support.

Special mention goes to all my fellow students and colleagues for their support and encouragement during my studies. I would also want to thank Chengetai for the unwavering support she provided.

To my mother, thank you for your support. May joy and peace be yours in abundance.

Above all, I thank the Lord Almighty for his grace, protection, strength and wisdom throughout the study.
# Table of Contents

Title page .................................................................................................................. i  
Approved form ........................................................................................................... ii  
Release form ............................................................................................................... iii  
Dedication .................................................................................................................... iv  
Abstract ......................................................................................................................... v  
Acknowledgements ....................................................................................................... vi  
Table of content .......................................................................................................... vii  
List of Tables ................................................................................................................ ix  
List of Figures ............................................................................................................... ix  

## CHAPTER 1

Introduction ..................................................................................................................... 1  
1. Background to the Study ......................................................................................... 1  
2. Statement of the Problem ....................................................................................... 5  
3. Purpose of the Study ............................................................................................... 5  
3.1 Research Objectives .............................................................................................. 6  
3.2 Research Questions .............................................................................................. 6  
4. Justification of the study ......................................................................................... 7  
5. Scope of the Study ................................................................................................... 7  
6. Research Assumptions ........................................................................................... 7  
7. Limitations to the research study ............................................................................ 8  
Summary ....................................................................................................................... 9  

## CHAPTER 2

LITERATURE REVIEW ................................................................................................. 10  
Introduction .................................................................................................................. 10  
2.2 Theoretical literature review ................................................................................. 13  
2.8 Empirical literature review ................................................................................. 21  
2.9 Summary ............................................................................................................... 26  

## CHAPTER III

RESEARCH METHODOLOGY ..................................................................................... 27  
Introduction .................................................................................................................. 27  
3.1 Research design .................................................................................................... 28
List of Tables

Table I: Various types of payments into Zimbabwean primary schools

Table 3.1: Population and Sampling Size

Table 4.1: Research Questionnaire Response Rate

Table 4.2: Age of Respondents to the Questionnaires

Table 4.3: Designation of Respondents

Table 4.4: Education Level of Respondents to the Questionnaires

Table 4.5: Gender of Respondents to the Questionnaires

Table 4.6: Years of Service with the Organisation

Table 4.8 KMO and Bartlett's Test

Table 4.9 Cronbach’s alpha Interpretation

Table :4.10 Case Processing Summary for reliability test

Table: 4.11. Reliability Statistics

Table 4.12 To understand the impact of the electronic based accounting systems on the efficiency of the accountants in selected primary schools within the Seke District

Table: 4.13 Correlations and Reliabilities-Macroeconomic environment and bank Performance

Table: 4.14 ANOVA

Table:4.15 Regression Analysis between Macroeconomic Environmental factors and bank performance

Table 4.16 Macroeconomic Environment impacts bank Performance

Table 5: Preferred features of the computer based accounting system by us

Table of Figures

Figure 1 Model of an accounting system .................................................................................. 11

Figure 2 Manual accounting system model ............................................................................. 22

Figure 3 Impact of electronic based accounting systems........................................................ 44

Figure 4 Macroeconomic environment ..................................................................................... 50
CHAPTER I

Introduction

The purpose of this research was to describe the efficiency of utilising an electronic accounting system and its impact on the accountant’s work within the selected primary schools. The proposal presents the background, statement of the problem, research objectives, questions and justification.

1. Background to the Research Study

It has been noted that, the qualitative features of any electronic based Accounting Information System can be sustained as long as there is an existing sound internal control system and within that electronic environment, the qualities of such realised internal controls do impact on operations and management which in turn influence the internal control system. For the primary schools, the internal control is performed to ensure the attainment of efficiency and effectiveness in attaining the set goals. According to Sajady et al (2008), the key role of any accounting information system must be to assign quantitative monetary value of economic transactions. In the end the electronic accounting system avails the financial reports which are the statement of financial performance, statement of financial position and finally the cash flow statement. Within this electronic environment, the system usually processes the input data and converts it into meaningful accounting information through the input, transformation and output phases which could be harnessed by several users from both internal and external environment (Marshal and Paul, 2015).

Generally speaking if the primary schools were able to improve their computerized mechanisms of internal controls as demanded by the electronic system, this would ensure reliability in terms of the school’s financial information transformation as well as improving the control measures for purposes of effectiveness and efficiency of the financial system. Once there is registered proper employment of the controls there would be better operational effectiveness and efficiency at the school which will ultimately yield improved financial information reliability. The school administration needs reliable financial information to be able to make decisions regarding the internal controls for the schools (Romney and Steinhart, 2015).
Whilst discussing other qualitative characteristics of accounting information, Dandago and Rufai (2014) indicate that this can also be sustained once there is a healthy internal control system for the school. These internal controls are critical and consist of procedures which are set up to secure assets, produce reliable accounting reports, aim to promote efficiency within the process as well as to persuade adherence to company guidelines. These internal controls are important as they allow the schools to achieve objectives for efficiency as well as for orderly conduct during the transactions processing, protecting the school assets through adherence to the school and Ministry’s administration policy, prevention of error and detection of error, prevention of fraud and detection of fraud and ensuring accuracy, completeness, reliability and timely preparation of accounting data. Once the schools have ensured the existence of good internal controls the school administration can then use such information with more reliability to sustain the running of the schools.

On the other hand if the internal financial control is weak, the school administration will fail to achieve its goal. In the same study by Dandago and Rufai (2014) it was also discovered that a number of different indicators of efficiency are required to be available in any accounting information system for such a system to be efficient, cost effective, good documentation, availability of proper security measures, independent internal and external audit trails, setting apart other activities from accounting, as well as having effective internal control.

An accounting information system for a primary school is considered as important organizational mechanism that is critical for helping the school administration make effective decisions for running those institutions. On the other hand, Haddad and Atmeh (2009) note that an effective accounting information system performs several key functions such as data collection, data maintenance, data information accounting systems and knowledge management, data control (including security) and information generation. Jawabrah and Alrabei (2012) defined efficiency as the optimal use of available resources in order to achieve value added in the organization’s value chain. Thus the efficiency means the achievement of the goals at the lowest possible cost (Sajady et al, 2008). While other researchers such as Haddad and Atmeh (2009) defined
effectiveness as the relationship between achieved goals and planned goals. In other words, it could be quantified as a ratio to show the effectiveness of an entity.

2. Statement of the Problem

- There have been numerous complaints in the manner and over the processes in which primary schools receive, document and account for the various payments made to the schools such as school levies, school fees, sports fees, uniform purchases, accommodation, laboratory, administration, student trips and smaller payments for civvies. There have been numerous instances in which auditors from the Ministry of Education would find the original books of entry in disarray and officials have been handed over to the police for failing to account for all the receipts. Primary schools in Mashonaland East within the Jonasi area of Seke District have had parents complaining that they were made to pay twice due to improper records by the schools. This problem was also compounded in the past few years when the Ministry of Education under Dr. L Dokora allowed the parents who did not have cash to pay to the schools in the form of goats and other valuable domestic animals. The introduction of electronic capturing and accounting systems has been in use by accountants in these primary schools for a couple of years now and have these really improved the efficiency of the accountants’ job within these dynamic environments?

3. Purpose of the Research

The purpose of the study is to analyse the change in efficiency using electronic systems, of the accountants in capturing, documenting and accounting for the various types of payments made into the schools.

3.1 Research Objectives

As part of the research study a number of objectives have been crafted to assist in directing the focus of the study in investigating the efficiency in the use of electronic accounting systems in primary school in the Seke District and the objectives which needed to be addressed are given below:

1. To identify the contributory factors behind the growth in the use of computers within primary schools for their accounting systems.

2. To isolate the implications of the different software products and their applications as adopted by the schools’ accounting systems.
3. To discuss the benefits which have accrued to the schools due to the use of the computerized system as compared to the manual system still in use in the accounting systems of the primary schools.

4. To identify the cost effects of operating such an electronic accounting system in a primary school.

3.2 Research Questions

The following listed research questions were of interest in the investigation on the accounting systems of primary schools in the study.

Main Research question

1. What has been the impact of electronic accounting system at the primary schools within the Seke District?

Specific Research Questions

2. What are the contributory factors behind the growth in the use of computers within primary schools to do the accounting systems?

3. What has been the impact of the different software products on the efficiency of the primary schools accounting systems?

4. Which benefits have accrued to the schools due to the use of the computerized system as compared to the manual system still in use in accounting systems in primary schools?

5. What are the cost effects of operating such a computerized accounting system in primary schools?

4. Justification of the study

The aim of the research was to delve deeper into the subject of efficiency for accountants in the advent of the use of electronic accounting systems in primary schools. The use of manual system is very labour intensive and is prone to making numerous material errors of commission and omission and therefore the moving over to an electronic based accounting system should be a welcome development by all interested stakeholders such as school administrators, SDA and government auditors,
parents and guardians of the pupils in the primary schools. Whilst there is need for an investment into creating a viable electronic accounting system, such initial apparent losses are outweighed by the gains and the numerous advantages which are accrued as the system is being used.

In addition the study would highlight key challenges and management requirements for changing over from manual to electronic based accounting systems. More so the research would be undertaken to close the knowledge gap in harnessing the electronic accounting systems in the primary schools which can result in rapid cost reduction and high accuracy in ensuring that the necessary data is captured, documented and processed and stored in much improved ways.

5. Scope of the Study
This research study focused on investigating the efficiency of electronic accounting systems in Seke District primary schools in which largely, the longitudinal perspective was adopted.

6. Research Assumptions
• A number of research assumptions were identified as important to the study which focused on investigating the efficiency of accountants in light of the use of electronic accounting systems as opposed to manual systems within the selected primary schools in the Seke District.

• The issue of accessibility was identified as important and it was assumed that it would be easily accessible to get the relevant longitudinal accounting information from the primary schools in the study in order to be able to make an assessment for the performance over those years

• It would be possible to administer the questionnaires and interviews on all identified respondents as determined by the sampling rules.

• There would be adequate cooperation from all the respondents and that such selected respondents would be willing to engage and share their information with the researcher.
7. Limitations to the research study

- As the research study got underway a number of limitations were identified as important and these included, the fact that the time allocated for the research was considered to be inadequate for conducting a fairly detailed longitudinal study in the assessment of the efficiency in accountants’ job on using the electronic accounting system. There were also issues to do with access to current and relevant literature as was considered critical to use current information and also in light of the fact that many libraries had not stocked with current resource material on electronic accounting systems which potentially could have stifled the research study.

- In order to deal with some of the issues identified above, a time table was created in order to set aside adequate time for the research study and the internet search engines such as Google Scholar and Encarta, would be employed to scout for relevant literature on electronic accounting systems.

8. Organisation of the Research Project

The whole research report consists of five chapters. Chapter 1 gives an introduction and the background to the research study. It also looks at the statement of the problem, research objectives, research questions, assumptions guiding the study, significance of the study, scope of the research, and limitations of the study on impact of electronic accounting systems on efficiency of the systems.

- Chapter 2 is a review of related literature and it looks at related literature municipal resource mobilization focusing on relevant theories, related empirical and conceptual studies on accounting systems.

- Chapter 3 is on research methodology and the following aspects are examined: the research design, the population, the sample and the sampling procedure. It also discusses the data gathering instruments. The validity and reliability of the instruments are discussed culminating in the discussion on the data collection procedures as well as data presentation.
• Chapter 4 of the research report is dedicated to the presentation, analysis and interpretation of the collected data from the respondents.

• Chapter 5 comprises of a summary of the study, drawing on some conclusions and ending with some recommendations.

9. Summary
Chapter one looked at the background of the study, statement of the problem, the research questions, and objectives of the study, significance of the study, assumptions, delimitation and limitations as well as definition of terms. Primary schools in Seke District are the subject of the research in terms of the improvement or otherwise of the accounting systems to positively impact on the efficiency of the system. The next chapter considers the review of related literature on accounting systems in terms of the applicable theory, empirical studies and conceptual framework.

CHAPTER II

LITERATURE REVIEW

Introduction
Hakim (2000) asserts that the purpose of literature review during research is to enable an extensive comprehension of what other researchers have indicated about the factors and issues of interest within the defined area of study. Creswell (1998) added that, armed with this knowledge the scholar would then be able to position their own research study among several other related researches. In this research theoretical and empirical data sources on the subject of impact of electronic accounting systems on the efficient performance of accountants in primary school settings has been investigated.

The shifting from manual accounting systems to electronic based systems has been documented significantly as a result of the great interest which rose in understanding the effects of information technology on accounting systems and related performances for the individuals such as accountants and their organizations. Marshal and Paul (2015) indicate that, in order to get ahead with this research it was important to source information on the subject from both primary and secondary sources which contain previous knowledge that has been made available in order to proffer solution to the problem under review.

Literature particularly from the first world reveal that in recent times, the usage of computers and other advanced technology have increasingly been taken on board in most practices including the accounting function. Before this became pervasive, the accountants were generally and vigorously involved in all accounting activities within the traditional methods which were in place. On a daily basis records had to be kept by persons, preparation of financial statements such as the statement of financial position and statement of comprehensive income were done manually by the accountant with the help of the accounts clerks and bookkeeper (Linus, 2012).

According to Francis (2013), the implication of technology has largely caused major alterations in organizations in as far as their accounting systems and organisational performance concerned, which in turn have created great concern and interest among many scholars of accounting systems. Accordingly therefore, accounting decisions and corresponding plans have to be made with consideration of computer-based systems in order for companies to stay relevant and competitive. Having indicated that, it is worthwhile to mention that computerized or electronic systems, have improved the functionality of accounting departments in many organizations. By so doing, Taiwo and Agwu (2016) show that there has been increased timeliness of accounting information which enable accountants to prepare reports and
operations analysis, which give a clear picture of current operations, useful to the management. Thus, records can be kept and tracked more effectively with the use of computerized systems increasing company efficiency and minimizing errors to ensure customer satisfaction.

2.1 Definition of Accounting System

An accounting system refers to the means, mechanisms, methods, principles, procedures and standards followed by an organization in recording and reporting business events and transactions. This system is made up of all the people and machines informed in accounting information. Dandago and Rufai (2014) refer to it as ‘an organized set of manual and computerized accounting methods, procedures, and controls established to gather, record, classify, analyse, summarize, interpret and present accurate and timely financial data for management decisions’ in line with the elements contained in the figure below.

An accounting system plays an important role as it is used to manage the income, expenses and funding of a business such as a primary school. In the olden days, accounting systems were commonly manual nature but now they are mostly computer-based.

A General Model of an accounting system
Elements of Accounting System

According to Nzomo (2013) there are six elements which are necessary to build up an accounting system and these elements are critical and make the system operate the manner it does because of these elements.

People – these are referred to as the system users, some get information out, some operate the machine to instruct it to process the inputted data and yet others ensure the proper functioning of such a system.

Procedure and Instructions – these are the methods for retrieving and processing data and act by guiding the people in interacting with the machine and interfacing with it.

Data – this is information relevant to the organization's business practices, which may be generated from either the internal or external sources.

Software – they are computer programs used to process data.

Information Technology Infrastructure – these are hardware used to operate the system.
**Internal Controls** – these necessarily include authorization and are therefore part of the security measures to protect sensitive data belonging to the organisation.

2.2 THEORETICAL LITERATURE REVIEW

2.2.1 Role of an accounting system and important factors

It has been reported by many accounting scholars that several entities companies appear to have grown out of their accounting systems. Whereas in the olden times the accounting systems were designed principally to monitor daily transactions and provide reports to external users on a monthly, quarterly, or annual basis. In the modern entities this set-up has changed and it is noticed that firms now require more information internally to the business in order to be able to make good decisions. As such these accounting systems are currently being used for both external reporting (financial accounting) and internal reporting (managerial accounting) within the business. Basically any accounting package must provide features that are important for managerial accounting (internally required finance information). It is also a fact that most scholars agree that no single accounting system would meet the needs of every organization and with that in mind, two important factors must be considered when choosing a system and these factors are considered for any successful establishment of an accounting system and these are (1) the size of the organization and (2) the information needs of the organization.

The size of the firm is important as the accounting software is designed to serve different-sized companies. The size of a firm is usually measured in units of sales revenue. Experts express varying opinions on what constitutes a small, midsized, or large company. Some believe that small companies have sales up to $10,000,000, midsized companies have sales up to $100,000,000, and large companies have sales greater than $100,000,000. Atypical primary school would roughly collect $100,000 per year. Regardless of the figures used, the goal is to find an accounting system that best meets the needs of the organization, and the size of the organization plays a big part in finding the best-fitting system.

In terms of the information which is needed by the firm and before selecting such an accounting system, a company must determine its accounting requirements. Some organizations simply need the equivalent of a check register, which provides easy tracking of expense codes as checks are issued and makes bank reconciliations a snap. Other organizations require more than a check register; they may demand a system that can create invoices, process payroll, and
track inventory. More complex organizations will want the ability to perform more advanced functions. Such organizations might need to customize reports (e.g., create an income statement by division or customer), modify input screens, send financial reports via e-mail, export reports to spreadsheet software such as Excel, and create reports with graphics (e.g., tables, pie charts, and line charts).

2.2.2 Types of Accounting System

There are various types of accounting system. The size of an organization, nature of business, extent of computerization and management style determine the choice of system. Jawabrah and Alrabei (2012) categorize these into three, namely:

- **Manual System**: this system refers to one where there is no computer involved in the accounting process. Financial transactions and reports are recorded and prepared manually. This is most common among small businesses. The accountants and relevant workers are involved in all the accounting processes which form a great work load on them. This method helps to save cost of acquiring computers and software programs.

- **Legacy System**: this system can be said to be an old-fashioned computerized system. It existed before information technology became so sophisticated and engulfing in the world. It has a purpose of storing old time information of organizations thereby serving as a back-up system. But due to its old nature, maintenance cost is high as hardware and software parts of this system have become obsolete.

- **Computerized System (Modern, Integrated It Systems)**: this is a system that makes use of computers and software programs for all accounting processes. There is little human effort from the accountant that is needed as the IT experts and specialists are most important to train the accountant to use the system efficiently. This system incurs cost on the business investing in the technical infrastructures. Computerized system is most common in large organizations, and in most organizations these days.

2.2.3 Functions of Accounting System

There are several functions which an accounting system must perform some of which are given below (Al-Hayari, 2013).

- Efficient and effective collection and storage of data.
• Appropriate classification and interpretation of financial information.
• To summarize and communication financial information to users for decision making.
• Ensuring control measures are put in place for consistency of the system.

The need, features, requirements, advantages, disadvantages and problems faced in computerized accounting system also need to be exposed in order to provide a better understanding of requirements.

2.2.4 The need for Computerized Accounting:

The need for computerized accounting arises from advantages of speed, accuracy and lower cost of handling the business transactions.

• Numerous Transactions

The computerized accounting system is capable of performing a large number of transactions with speed and accuracy.

• Instant Reporting

At the same time this system is also capable of offering quick and quality reporting because of its speed and accuracy which will enable decisions to be made quickly and on time.

• Reduction in Paper Work

Manual accounting system requires large storage space to keep accounting records/books, and vouchers/documents. The requirement of books and stationery and books of accounts along with vouchers and documents is directly dependent on the volume of transactions beyond certain point and ultimately helps to preserve the trees.

There is a dire need to reduce the paper work and dispense with large volume of books of account. This can be achieved with the help of computerized accounting system.

• Flexible Reporting

The reporting is flexible in computerized accounting system. It is capable of generating reports of any balance as when required and for any duration which is within the accounting period and this is what is expected in line with the dynamic and fast paced marketing environment.
• Accounting Queries

There are accounting queries which are inbuilt into the system, which are based on some external parameters. For example, a query relating to overdue customers’ accounts can be easily answered by using the structured query language [SQL] support of database technology in the computerized accounting system. Such an exercise would be quite difficult and expensive in manual accounting system.

• Online Facility

Computerized accounting system offers online facility to store and process transaction data so as to retrieve information to generate and view financial reports.

• Accuracy

The information and reports generated are accurate and quite reliable for decision-making. In manual accounting system, as many people do the job and the volume of transactions is quite large, such information and reports are likely to be distorted and unreliable and inaccurate.

• Security

This system is highly secured and the data and information can be kept confidential, when compared to manual accounting system.

• Scalability

The system can cope easily with the increase in the volume of business. It requires only additional data operators for storing additional vouchers.

2.2.5 Special Features of Computerized Accounting System:

(i) It leads to quick preparation of accounts and makes available the accounting statements and records on time.

(ii) It ensures control over accounting work and records.

(iii) Errors and mistakes would be at minimum in computerized accounting.
(iv) Maintenance of uniform accounting statements and records is possible.

(v) Easy access and reference of accounting information is possible.

(vii) Flexibility in maintaining accounts is possible.

(viii) It involves less clerical work and is very neat and more accurate.

(ix) It adapts to the current and future needs of the business.

(x) It generates real-time comprehensive MIS reports and ensures access to complete and critical information instantly.

2.3 Requirements of the Computerized Accounting System:

(i) Accounting Framework

A good accounting framework in terms of accounting principles, coding and grouping structure is a pre-condition. It is the application environment of the computer-ized accounting system.

(ii) Operating Procedure

A well-conceived and designed operating procedure blended with suitable operating environment is necessary to work with the computerized accounting system. The computer accounting is one of the database-oriented applications, wherein the transaction data is stored in well-organized database.

The user operates on such database using the required interface. And he takes the required reports by suitable transformations of stored data into information. Hence, it includes all the basic requirements of any database-oriented application in computers.

Advantages of Computerized Accounting:

(i) Better Quality Work

The accounts prepared with the use of computers are usually uniform, neat, accurate, and more legible than manual job.

(ii) Lower Operating Costs:
Computer is a labour and time saving devise. Hence, the volume of job handled with the help of computers results in economy and lower operating costs.

(iii) Improved Efficiency:
Computer brings speed and accuracy in preparing the records and accounts and thus, increases the efficiency of employees.

(iv) Facilitates Better Control
From the management point of view, greater control is possible and more information may be available with the use of computer in accounting. It ensures efficient performance in accounting work.

(v) Greater Accuracy
Computerized accounting ensures accuracy in accounting records and statements. It prevents clerical errors and omissions.

(vi) Relieve Monotony
Computerized accounting reduces the monotony of doing repetitive accounting jobs, which are tiresome and time consuming.

(vii) Facilitates Standardization
Computerized accounting facilitates standardization of accounting routines and procedures. Therefore, standardization in accounting is ensured.

(viii) Minimizing Mathematical Errors:
While doing mathematics with computers, errors are virtually eliminated unless the data is entered improperly in the first instance.

**Disadvantages of Computerized Accounting:**

(a) Reduction of Manpower

The introduction of computers in accounting work reduces the number of employees in an organization. Thus, it leads to greater amount of unemployment.
(b) High Cost

A small firm cannot install a computer accounting system because of its high installation and maintenance cost. To be more economical there should be large volume of work. If the system is not used to its full capacity, then it would be highly uneconomical.

(c) Require Special Skills

Computer system calls for highly specialized operators. The availability of such skilled personnel is very scarce and very costly.

(d) Other Problems

Frequent repair and power failure may affect the accounting work very much. Computers are prone to viruses. Often time’s people will assume the computer is doing things correctly and problems will go unchecked for long period of time.

2.4 Problems Faced In Computerized Accounting System

(a) User Training

The user, for using computer accounting software, needs to understand the concepts of the software. Hence, he should undergo proper training. A computer operator must learn the basics of computer, concepts of software, working with the operating system software [such as Windows/DOS] and the accounting software.

(b) System Dependency

Using a computer solution makes the user to depend fully on the computer system and necessitates the availability of computer at all times. If the system is not available [due to hardware failure or power cut], it would be difficult to verify the accounts.

(c) Hardware Requirements

A full-fledged computer system with a printer is required to operate the computerized accounting system. Most small organizations may not afford to have such facility with necessary software.

(d) System Failure
When there is a system crash [hard disk crash], there is high risk of losing the data available on the hard disk drive at any point of time. It would be highly painful, if the problem occurs at end of the financial year, when the financial statements should be ready.

(e) Backups and Prints

Backups of the data should be done regularly so that, when the data is lost, it can be restored from floppies [backups]. Regular print outs of the system information would be useful as manual records.

(f) Voucher Management

Accounting software allows easy alteration of data. If a voucher is wrongly placed in a wrong head, it would be very difficult to sort out and bring back the voucher. A good voucher management is very essential.

(g) Security

Additional security has to be provided because improper handling of the system [hardware/software] could be dangerous. Passwords, locks, etc., have to be set so that no unauthorized person can handle the system.

2.5 EMPIRICAL LITERATURE REVIEW

In the same study by Dandago and Rufai (2014) it was also discovered that a number of different indicators of efficiency are required to be available in any accounting information system for such a system to be efficient, cost effective, good documentation, availability of proper security measures, independent internal and external audit trails, setting apart other activities from accounting, as well as having effective internal control.

Marshal and Romney (2015) alleged that the internal controls perform the following important functions;

- *Preventive controls* - which deter problems before they arise
- *Detective control* - which discovers problems that are not prevented
• **Corrective control**- which identifies and correct problems as well as correct and recover from the resulting errors

• **General control**: controls designed to make sure an organization’s information system is stable and well managed. Examples would include security infrastructure, software acquisition, development and maintenance control.

• **Application controls**: Controls that prevent, detect, and correct transaction error and fraud in application programs. They are concern with accuracy and authorization of data captured, entered, processed, stored, transmitted to other system and reported.

An accounting information system for a primary school is considered as important organizational mechanism that is critical for helping the school administration make effective decisions for running those institutions.

On the other hand, Sajady et al (2008) notes that an effective accounting information system performs several key functions such as data collection, data maintenance, data information accounting systems and knowledge management, data control (including security) and information generation. Dandago and Rufai (2014) defined efficiency as the optimal use of available resources in order to achieve value added in the organization, value chain. Thus the efficiency means the achievement of the goals at the lowest possible cost. While other researchers such as Haddad and Atmeh (2009) defined effectiveness as the relationship between achieved goals and planned goals. In other words, it could be quantified as a ratio to show the effectiveness of an entity.

Within the primary schools’ environment, a number of factors have been identified which affect the accountant’s efficiency and effectiveness in accounting for the financial transactions at the school and these include availability of qualified human resources, software and hardware and data bases. With that in mind it is proper to consider that a good accounting information system must combine. Another scholar Hafnawi (2001) also stated that the accounting information system needed to possess some of the following features in order to be effective and efficient:

• Accurate
• Timely.
• Provide administration by necessary information to achieve control and evaluation of the economic activities.
• Provide administration by necessary information that helps them in planning.
• Provide administration by feedback
• Flexible to suit the environmental changes.

2.6 Use of Manual Accounting Systems
A manual system can be referred to as anything physically done or operated by the hand and the word manual is defined by Dictionary.com as, “anything that is done, operated, worked on by the hand or hands rather than by an electrical or electronic device” (Dictionary.com, 2013). In the context of the primary schools this concept means the manual process whereby the capturing, documenting and accounting for school transactions and related activities are received and recorded by handwriting without computerized or electronic supported devices.

The figure below serves to demonstrate the manual accounting system model designed by Rita et al (2012) as reported by Dandago and Rufai (2014).

2.7 Problems with Manual Accounting System

Within many primary schools particularly in rural areas there are several challenges associated with the use of manual capturing, documenting and accounting system and these include the ones identified below by Adjei (2013).

- The processing of customer information takes a very longer period of time to effect.
- By so doing the clients waste valuable time by joining and waiting in long queues at the schools for purposes of transacting.
- For a manual system, there is need to incur a huge labour cost for overheads.
- There are also numerous errors of commission and omission by the clerical stuff.
- The manual system used in the primary schools is very arbitrary and the officers can easily change and manipulate it to their own benefit.

Meigs et al (1998) define an electronic accounting system as one which utilizes computers to input, process, store and output of information pertaining to the accounting function in which all this is revealed in the form of financial reports. On the other hand Marivic (2009) denotes it to be means or way through which information relating to the finances of an entity are recorded, organised, summarized, analysed, interpreted and communicated to interested stakeholders also through the use of electronic means. After the computer programmes by the President in the past few years many primary schools have also subsequently introduced electronic accounting systems.


The role of this system is to ensure that all transactions that take place between those paying school fees or other payments as required and the school is immediately indicated in the school’s mainframe computer system for the necessary changes to be effected on the relevant child’s account. With these electronic accounting software packages in place the school must
be able to practically eradicate all the problems associated with the use of the manual system. In such instances it is easy to trace all the payments made with the school as well as detect any amounts still outstanding towards the school. The discipline of accounting plays a very critical function within any entity and to accomplish this, there are two possible types of accounting systems which can be employed and these are the manual and computerized systems. In the past the accounting roles were done by hand by competent professionals whereas in modern days there is a plethora of accounting software which can be harnessed to assist in generating and maintaining necessary accounting records. Whether one chooses to use an accountant to perform the accounting in a manual or electronic system depends upon a number of specific accounting needs and factors which include the cost and the ability of the accountants to use the electronic system.


Electronic accounting systems have shown to offer many advantages all types and sizes of entities as the software packages can be purchased off the shelf at low cost and such programs do permit the managers to see the company's financial position in "real-time" and make adjustments to the business trajectory as needed. In addition, these electronic systems can also avail immediate reports on information pertaining to profit and loss, client accounts as well as payroll and revenues as well as allowing quick adjustments in the activities of the entity. Another big advantage is that; the transactions need to be input only once into the electronic accounting system.


The need to protect against data loss through power failure or viruses, and The danger of hackers stealing data. Computer fraud is also a concern, and one needs to instigate a system of controls for who has access to the information, particularly client information. If there is a security breach and data is stolen, management can be held personally liable for the loss of data. One also needs to make sure that the data has been correctly entered into the system, as a mistake in data entry can throw off a whole set of data.
In cases where there is the use of electronic accounting system there is huge potential to save on time. This is the case because the accounting software would allow faster data entry than manual accounting, and hence allows for documents such as invoices, purchase orders and payroll to be collated and printed quickly and accurately there by saving time. In addition, due to its efficiency and ease of use, the electronic accounting system also allow for the improvement in inventory controls, payment collection, saving time and improving cash flow for the entity in question. Due to their capacity to update some of the records automatically, it means the account records would always be up to date, saving time in updating.

**Gap in knowledge and practice**

Most of the literature sighted was from the first world and nothing was obtained from the local context and this reveals a glaring gap in terms of local knowledge and practice for accounting systems at primary schools. While it is evident that there are numerous advantages of harnessing electronic based accounting systems with their huge impact on the efficiency of the accountant to capture, store, handle and ultimately the production of both management accounting and financial accounting reports which are essential for internal and external purposes respectively.

According to Taiwo and Agwu (2016), the computerized and electronic accounting systems have been a major factor of efficient accounting systems and causing great improvement in organizational performance recently. This technology has been used to augment the reliability of accounting information and organizational performance. Accounting systems include the computer hardware and software fundamentals in recording accounting information. Organizational performance in this study was related to ability finances, ability to meet set goals and actions. However, to maximise the benefits of information technology systems, the appropriate implementation and adoption procedures have to be employed otherwise there will be very little or no impact of these technologies on the earlier mentioned variables.

**Empirical studies**

**2.9 Summary**

The second Chapter of the research report considered theoretical, empirical and conceptual studies on the role of accounting and the impact which electronic based accounting systems
have had on the efficient and effective operations of accounting professionals particularly in primary schools. The gap obviously exists in the literature in terms of knowledge, practice and evidence of the use of these systems from the local context. The available models appear not to consider the background of the organisation concerned, the educational backgrounds of the accounting officers as well as the costs to be incurred in securing and developing such an accounting system.

However, the bottom line is that electronic era where technology has proved to be a relevant and inevitable factor impacting on accounting systems as well as the general organizational performance. It has been noted that such electronic based accounting systems have been able to increase the speed in preparation of accounting reports, reliability and accuracy of such reports, which has an effect of transparent and honest dealings of the organization with customers, partners and outsiders, thereby boosting the overall success of such organization.

CHAPTER III

RESEARCH METHODOLOGY

Introduction

The purpose of this research methodology Chapter is to discuss how the actual research was carried out and what perspectives informed it together with the accompanying justification. According to Easterby-Smith et al (2012) a research methodology refers to the mechanism and methods used to plan and collect the data. It includes subjects under the paradigm, research design, research methods as well as presentation, synthesis, analysis and interpretation of the findings. In addition, matters related to ensuring research validity and reliability of the instruments used are discussed in line with Mangal’s (2013) assertion that a research methodology is an analysis of as well as the rational for selecting particular method or methods in a given research study. It is paramount in a research like this to provide strong arguments for the choice of approach which the researcher adopted in the process of gathering data in order to satisfy the research questions and objectives.

3.1 Philosophy of the Research
The study employed the positivist paradigm (Babbie, 2011) in investigating the impact of the change to electronic systems on the efficiency of accountants at primary schools. Such a perspective will help to justify the relationships that exist as well as its direction and strength.

3.2 Research design
The idea of a research design is that it provides a set of process description in a way which helps the scholar to conceptualize as well as observe the problem under study. Coopers and Schindler (2003) posit that research design acts as a master plan which specifies the mechanisms and methodologies for accumulating as well as analyzing the needed research data. In the current study the researcher utilized the descriptive research in the form of a case study research design from the selected schools within the Seke District.

3.3 Case study Research design
The current research made use of the case study research design in which a number of Primary Schools were selected for the research. The design fits adequately with the research questions to be answered, as it entailed studying a number of primary schools within the district on the use of electronic based accounting systems. During the use of this research design the researcher was able to collect relevant information on the accounting systems in use. In addition, the design allowed the researcher to access detailed understanding of the systems in use in the schools in line with Punch (2005) who asserts that use of the case study ordinarily entails a detailed search and intensive scrutiny of a single case and Yin (2008) adds that the research problem can be investigated in its natural setting.

In the current study there was use of qualitative research paradigm and also including some elements of quantitative approach within the case study design which included analysing the results which tended to be more opinion based than the statistical methods in surveys. Undertaking this study using the case study design and the qualitative and quantitative approaches together enabled a comprehensive observation by the scholar in the areas of focus particularly in determining the schools’ accounting systems.

3.4 Research approach
3.4.1 Qualitative research
Both the qualitative and quantitative approaches were employed in order to achieve data convergence. The qualitative research was used to investigate the emotional side related to the
opinions of using the electronic based accounting systems as opposed to the traditional manual based systems within the primary schools. According to Silverman (2012), a qualitative research involves engagement in an enquiry process in order to understand social or human factors which may be based on constructing complex and holistic pictures, by using words and by reporting comprehensive opinions of informants with the everyday settings. Qualitative data was collected to know more about people’s attitudes that cannot be directly observed and measured such as feelings, thoughts, intentions and behaviours that took place in the past regarding the accountant’s experience with the systems in the past and present. In addition, the qualitative research was also utilized to capture more informed insight and better understanding of the primary schools accounting systems without too much cosmetics about generalisability (Cooper & Schindler, 2003).

3.3.2 Quantitative Research Approach
In business research the quantitative approach is often used due to the easy of applying statistical tools for reaching decisions. Babbie (2011) posits that quantitative methods include those methods which highlight objective measurements of parameters and in which the statistical, mathematical, or numerical analysis of gathered data which may be through censuses, questionnaires and surveys or by remodelling pre-existing statistical information with the aid of computers. To add to that Mangal (2013) states that in quantitative research, focus is on accumulating numerical data and generalizing it across the population concerned in order to explain a particular identified phenomenon.

The intention in carrying out quantitative research study is to be able to determine how the relationships which exist between an independent variable and a dependent or outcome variable, within the selected population of primary schools to determine how use of electronic based accounting systems have affected the efficiency of accountants at their jobs. Punch (2005) regards quantitative research designs as either descriptive in which the subjects are usually measured once or in terms of experimental in which the subjects are determined before and after applying the modification or treatment. In the case of a descriptive study it is only aimed at determining the associations between the variables where as in an experimental study it is aimed at establishing the cause and effect position.

The accrued benefit in using the quantitative research approach is that deals in numerical which helps in establishing logic and objectivity. Another aspect in quantitative research is the use of
numbers which are unchanging and invariably detailed which allows for convergence instead of divergence in reasoning (Easterby-Smith et al, 2012).

Sekaran and Bougie (2013) give some characteristics of quantitative approach and highlight the data is usually gathered using structured research instruments such as questionnaires and interviews. In the final analysis it is considered that the overarching goals in a quantitative research study is the aspect of classifying features, count them and construct statistical models with the intention of explaining observed phenomena as advised by Coopers and Schindler (2003).

3.5 Research Subjects
3.5.1 Population
In research the population needs to be clearly identified and according to Silverman (2012), a target population is one which the scholar wishes to draw the sample out of. Adding on Saunders et al (2012) describe a population in research as one consisting of the collection of all observations of a random variable under study and about which one is trying to draw conclusions about. In the current study population consisted of the accounting staff at five primary schools from the Seke district. It must be noted here that for reasons of cost and time it was impossible to observe the behaviour of all the members of the population as indicated above and for that reason the sampling approach was employed as a solution.

3.5.2 Sampling technique
Out of the more than 100 primary schools in the district only five schools were selected using the convenience sampling approach. Babbie (2010) indicates that convenience sampling involves using as the sample who ever happens to be available, in the current study the primary schools which were close to each other were selected for easy of accessibility. This scholar used a non-probability sampling technique where subjects were selected because of their convenient accessibility and proximity to the researcher’s place of employment in order to obviate challenges associated with the research costs. Mangal (2013) indicates that convenience sampling has a merit of being fast and inexpensive, the subjects were usually readily available and also it gave a wide range of respondents as well as a better assurance of data collection since the research targeted only primary schools close to the place of residence of the researcher in Seke District.

3.6 Data collection methods
The data collection for this research study was done over two weeks at the identified five primary schools. The researcher distributed 45 questionnaires to the schools targeting the following stakeholders 15 in accounts department, 10 in school administration, 10 from the SDA of the selected schools and another 10 from the Ministry of Education District Offices. To protect the confidentiality of the participants, the names of the participants will not be made known in this paper and instead will be replaced with numbers. In summary therefore for the five primary schools:

- Total population 295
- Sample Size 45
- Percentage of sample to population 15%

3.6.1 Population and Sample selection

The total population was about 295 made up of school teachers, school administration, SDA members and the officers from the District Education Office at Seke.

3.6.1.1 Limitations of sampling methods

The major disadvantage of using sampling methods was the high risk of getting biased responses in the event that the samples were not carefully chosen.

3.6.1.2 Sample size

According to Kothari (2004), a sample representative of the population must be at least N=30, from the target population if statistical treatments were to be applied. In the current study the scholar used a sample of 45 participants made up of the breakdown shown in the accompanying table.

Table 3.1: Population and Sampling Size

<table>
<thead>
<tr>
<th>Level in School</th>
<th>Sample Size</th>
<th>% Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts department</td>
<td>15</td>
<td>33</td>
</tr>
<tr>
<td>school administration,</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>SDA</td>
<td>10</td>
<td>22</td>
</tr>
</tbody>
</table>
3.7 Research instruments

3.7.1 Questionnaires

The questionnaire is discussed in detailed here as the scholar decided to use it as a data collection tool. According to Easterby-Smith et al (2012), a questionnaire as a tool encompasses all techniques of data collection in a manner in which the respondent is asked to give answers to a set of questions which are predetermined and in order. Coopers and Schindler (2003) show that in a structured questionnaire all the questions are already laid out which makes it easy for the respondents to complete. The information collected was standardized as the same questions were asked in the questionnaires in order to permit objective comparisons. Questionnaires were selected so as to collect information which could be converted into quantifiable data given by the respondents after which the statistical tools were applied.

Questionnaires were selected due to their compatibility with the type of research and also because of their low cost as compared to other methods such as interviews and in addition these tend to be impersonal which encouraged the respondents to offer honest answers.

There are also disadvantages associated with the use of questionnaires such as the fact that they do not allow probing on the answers which were given by the respondents and therefore there was no room to get clarity from the respondents, so in order to improve on this deficiency interviews were then also used to overcome to couple the questionnaires.

3.7.2 Interviews

Babbie (2011) postulates that interviews involve undertaking meetings which may be face-to-face with participants in order to obtain the required data from questioning and answering. On the other hand, Coopers and Schindler (2003) indicate that an interview is a conversation between two people in which an interviewer solicits information from the interviewee. In the current research it was found that this method was very useful as many participants from different schools were needed to be interviewed within quite a short length of time and whilst

<table>
<thead>
<tr>
<th>Ministry of Education District Offices</th>
<th>10</th>
<th>22</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>45</td>
<td>100</td>
</tr>
</tbody>
</table>

Adapted from Morgan and Krejice (1970) sampling tables
using the method the researcher was able to probe further on responses given as advised by Kothari (2004).

The researcher decided to adopt the interview approach using the semi-structured interview in which questions were directed to the participants and the process assisted in triggering further questions during the interaction process exactly in the manner Kothari (2004) indicates. In addition, the interviews were also very effective because they enabled busy members of staff to be interviewed in a short time and thereby getting genuine information for the study.

Some challenges were met during the carrying out of the interviews as some of the participants were reluctant to give the required information possibly for fear of victimisation. This made the comparison and coding of data a challenge during the process therefore causing the scholar to get further evidence from the responses given in the questionnaires to counter the shortfall of interviews.

**Distribution and administration**
All questionnaires were administered in the form hard copies to the schools concerned. As part of the same process the scholar distributed introductory letters on the research study and explained the voluntary nature of participation in the exercise in order to comply with ethical research requirements.

**Retrieval of instruments**
The researcher collected the completed questionnaires personally and this enabled reviewing to see if all questions had been attempted. Questionnaires were retrieved after one week. In addition, the interviews done were mostly face-to-face and a few through the telephone. The researcher made appointments with interviewees at least three days in advance of the actual interviews as advised by Kothari (2012).

**3.8 Primary data**
According to Easterby-Smith *et al* (2012), primary data is the information which originated from the researcher’s own data collection efforts. Alternatively, it refers to the original data and information accumulated for the first time in the accounting systems field. In the current study questionnaires and interviews were used in the process of data gathering. To increase validity and reliability, the researcher advised the participants about the interviews three days
before the interview was carried out and the questionnaires were also self-administered and left
with the respondents for collection after one week in order to allow for adequate time for
respondents to think through the preferred responses.

The primary data which was gathered specifically for the current study was obtained as first-
hand information by the use of questionnaires which were assumed to be reliable and relevant.
This researcher also managed to use judgmental tools on the data that was given by the
respondents in the research and that process was regarded to be quite important in order to
screen out unimportant and unreliable information which could have caused the findings to
place doubt on final report (Babbie, 2011).

3.9 Secondary Data
For the sake of this study secondary data was also an important source of data the study from
the accounting systems used in schools. It consisted of data which was obtained from other
scholars, text books, school performance reports, journals, government publications as well
as budget reports. In the current study, secondary data served to provide to help put in place
clear research questions, research objectives as well as the necessary supporting information.
This secondary data which was accessed for this study was in the form of qualitative as well
as quantitative data and at times it required adjustments to assure validity.

The use of secondary data assisted the scholar in reducing the time spend as well as the incurred
costs in carrying out the data collection process.

3.10 Validity and reliability of data
Validity
Validity is another aspect that needs to be guaranteed for the instrument used in order to ensure
that one collects the right kind of data. Accordingly, Easterby-Smith et al (2012) indicate that
validity is concerned with the idea of the truth in the data collection exercise or alternatively
guaranteeing closeness of the findings to the true picture of what is being researched. This
scholar ensured data validity by collecting data from reliable and predictable sources which
involved respondents who were considered to be more acquainted about the primary schools
accounting activities. Furthermore, the questionnaire was prepared from the research questions
as reflected in chapter 1 in order to guarantee research objectivity. Before its utilization, the
questionnaire was issued and examined by the project supervisor and a number of comments helped to improve the design of the instrument.

**Reliability**
The importance of reliability is the consistency nature which needs to be guaranteed with the instruments used in data collection. According to Sekaran and Bougie (2013) who intimated that reliability needs to be ensured in any research as it indicates the extent to which the research results are repeatable over time by even different researchers which ensures an accurate representation of the total population under study from which the sample is extracted from. In the current research study for the sake of reliability, the same questions were used on the questionnaires to all the respondents. In addition, the researcher then subjected the instruments to tests for normality, colinearity and reliability in which the Cronbach Alpha tests were determined. Furthermore, steps were considered to control the challenges of respondents to answer the questions as well as to assess such problems as are anticipated to occur, then to apply appropriate data cleaning procedures. The researcher ensured that the instrument was pilot tested which included administering it to a representative sample and determine the reaction and responses from the respondents in terms of the instruments being user-friendliness as mentioned by Easterby-Smith et al (2012).

**Approach for Data presentation and analysis**
The data obtained from the quantitative methodologies gathered from questionnaires during the research process were analysed using the assistance of Microsoft excel package which allowed the presentation of the findings in the form of tables and graphs. The use of charts, graphs and tables in the presentation of the findings served to provide indications on trends, averages and relationships. The excel package was used because of its easy availability, adaptability and simplicity in calculations and providing graphical presentations.

3.11. **Summary**
This chapter served to present the research methodology used during the research study. Specifically, the research paradigm, design, research approaches, population and sample, data collection procedures as well as reliability and validity procedures which also included advantages and disadvantages for all the choices made were discussed. In terms of approaches both qualitative and quantitative methodologies were used, this was done in context of a case
study design which the research adopted. The survey methods harnessed questionnaires and interviews were also employed in data gathering for the research.

In the next chapter, the research findings would be presented, analysed and interpreted in order to support recommendations which will be given in Chapter 5.

CHAPTER IV

PRESENTATION AND DISCUSSION OF FINDINGS

Introduction
The role of this part of the report is to collate the findings from the research by properly presenting, analysing and interpreting those findings for purposes of meaning and implications. The results of the research have been discussed including stating the outcomes of the research as well as highlighting the key findings leading to the appropriate recommendations given in chapter 5. This chapter is divided into a number of sections aimed at covering all the main subject headings as reflected in the research questionnaire instrument used. The format is such that each section is introduced, findings presented in detail and ending with discussion, all with the help of illustrations, pie charts, graphs, diagrams and tables.

4.1 QUESTIONNAIRE RESPONSE RATE
The aggregate number of questionnaires which were distributed to respondents was 55, out of which 50 were duly returned after completion which by calculation constituted a 91% response rate. According to Silverman (2012) standard, that level was quite successful as it left only 9% of the questionnaires that had been issued out.

Table 4.1: Research Questionnaire Response Rate

<table>
<thead>
<tr>
<th></th>
<th>RETURNS</th>
<th>NON-RETURNS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQUENCY</td>
<td>50</td>
<td>5</td>
<td>55</td>
</tr>
<tr>
<td>%</td>
<td>91</td>
<td>9</td>
<td>100</td>
</tr>
</tbody>
</table>

Source

Discussion

The high response rate of 50(91%) as compared to the non-returned questionnaires 5(9%), was achieved through working closely with the selected school administrations and by strictly following through on all distributed questionnaires. The issue of the scholar being a known member of one of the schools assisted in influencing the high response rate. According to the calculated sample size as per Krejcie and Norman (1970), a total of 45 items had been determined as the appropriate number of samples from the sampling frame of 295. The actual number of responded questionnaires was 5 above the determined sample size. This helped to increase reliability and credibility of the findings and allow acceptable generalizations to the population.

Section A. Demographic Data

4.2 Age of Respondents to the Questionnaires

Table 4.2: Age of Respondents to the Questionnaires

<table>
<thead>
<tr>
<th>Age of Respondent</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Less than 25yrs</td>
<td>4</td>
<td>8.9</td>
<td>8.9</td>
<td>8.9</td>
</tr>
<tr>
<td>25-30yrs</td>
<td>15</td>
<td>29.8</td>
<td>29.8</td>
<td>38.7</td>
</tr>
</tbody>
</table>
Discussion

The age distribution shown in the Figure 4.2 above reveal that 4(8.9%) of the respondents were below the age of 25 years, 15(29.8%) were between 25 to 30 years, 26(51.1%) were between 30 and 40 years and 5(10.2%) were above 40 years of age. Generally, the staff members at the schools were generally young with the bulk of them below the age of 40 years.

The picture painted here shows that those who enter the education sector want to be economically independent are generally young which means they may still lack the basics of life and therefore seem to want stable employment in the education sector to improve their social standing. It also shows a reflection of what was happening in the general economy where the young ones coming out of colleges seek formal employment and therefore find themselves in the education sector for example.

4.3 Designation of Respondents

<table>
<thead>
<tr>
<th>Designation of Respondents</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDA</td>
<td>6</td>
<td>11.0</td>
<td>11.0</td>
<td>11.0</td>
</tr>
</tbody>
</table>

Table 4.3: Designation of Respondents
The designation of respondents as given in the figure 4.3 above shows that there were 6 SDA members who participated in the research making up (11%), accounts department members who made up 24 (47.3%), whilst school administration made up 14(28.5%) and finally Ministry of Education officials were 7(13.2%) to make up the full valid sample of 50(100%). Almost all the schools which participated had around 47 members of staff and this distribution shows a relatively high proportion of personnel with administration responsibilities. Typically, schools structures are composed of lean structures with many of the staff members reporting directly to the school head who is responsible for reporting to the Ministry of Education District Education Officers.

4.4 Education Level of Respondents to the Questionnaires

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary school or less</td>
<td>4</td>
<td>8.3</td>
<td>8.3</td>
<td>8.3</td>
</tr>
<tr>
<td>Certificate</td>
<td>10</td>
<td>20.2</td>
<td>20.2</td>
<td>28.5</td>
</tr>
<tr>
<td>Diploma</td>
<td>20</td>
<td>40.1</td>
<td>40.1</td>
<td>68.5</td>
</tr>
<tr>
<td>Degree</td>
<td>16</td>
<td>31.5</td>
<td>31.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Source

Discussion

The education sector is generally well educated as portrayed in figure above. The level of education was an important factor since the higher the level of education the better it was for the research questions to be understood and to be well responded. The Figure 4.4 above revealed that secondary school was 4(8.3%), certificate holders were 10(20.2%), 20(40.1%) were holders were of diplomas and a staggering 16(31.5%) were holders of various degrees from universities. That position revealed that more than 92% were qualified in a certain area and held either a certificate, diploma or degree and this was thought to translate into improved ways of carrying out professional work in the bank, elements of professionalism and an understanding of the need to plan strategically for the growth and enhancement of the school’s operational requirements.

4.5 Gender of Respondents to the Questionnaires

Table 4.5: Gender of Respondents to the Questionnaires

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Female</td>
<td>39</td>
<td>77.2</td>
<td>77.2</td>
</tr>
<tr>
<td>-------</td>
<td>--------</td>
<td>----</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Male</td>
<td>11</td>
<td>22.8</td>
<td>22.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source

Discussion

The gender distribution for the respondents revealed that 39(77%) were females and 11(22.8%) were males. This was a reflection of the nature of the light work characteristic of the education sector. However, the most important thing to note was the very high percentage of the females in the education sector which also included three female heads which reflected recognition by the education sector the useful contributions females can give and in the process recognizing everyone’s constitutional rights of being promoted on merit.

4.6 Years of Service with the Organisation

Table 4.6: Years of Service with the Organisation
<table>
<thead>
<tr>
<th>Number of Years with the Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Valid</td>
</tr>
<tr>
<td>Valid</td>
</tr>
<tr>
<td>Valid</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source

Discussion

The years of service of respondents in the organisation was also important in the sense that it afforded shedding light on the years of existence of the entity as well as how much knowledge the respondent wielded to understand the questionnaires relating to the sector in question. The Figure 4.6 above revealed that 16(30.9%) had been in the sector for less than 5 years, 26(51.1%) had spent between 5 and 10 years in the organisation whilst 10(18%) had spent just over 10 years in the organisation. It was clear that that the bulk of the respondents 42(81%) were relatively new to the education sector, as they had been involved for less than 10 years there. However, these were good enough to assist in judging the evolution of the use of electronic accounting systems as opposed to manual systems within the primary school environment.
4.3 Measurement for the study
A five point Likert scale was used for measurements, which assigns a weighted value to the level of agreement or disagreement for a factor as shown below:

1 --- Strongly Agree, 2 - Agree, 3 --- Neutral, 4 --- Disagree, 5 --- Strongly Disagree,

4.4. Sample Adequacy

Factor Analysis
The Kaiser-Meyer-Olkin (KMO) Measure of sampling adequacy (Kaiser, 1970) was used in order to ensure that the factor analysis was appropriate for the data set and only the factors with eigenvalue equal to or greater than one were considered significant. Eigenvalue, significance of factor loading, percentage of variance analysis and factor structure analysis were considered as the criterion for factor extraction. The KMO test should be greater than 0.5 if the sample is to be adequate (Kaiser, 1970) and the test confirmed that as shown in the table below.

KMO and Bartlett Test

<table>
<thead>
<tr>
<th>Table 4.8 KMO and Bartlett's Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Instrument Reliability
Internal reliability consistency was established by calculating the Cronbach’s alpha coefficient (Cronbach, 1951). Cronbach’s alpha is most commonly used to see if questionnaires with multiple Likert scale questions are reliable and a score of more than 0.7 is considered acceptable (Tavakol&Dennick, 2011). Six factors with 26 items were considered for the calculation of the Cronbach’s alpha in the study. Tavakol and Dennick (2011) provide the rule of thumb for interpreting alpha for dichotomous questions (i.e. questions with two possible answers) or Likert scale questions as indicated below:
Table 4.9 Cronbach’s alpha Interpretation

Source: Tavakol and Dennick (2011)

Case processing Summary

<table>
<thead>
<tr>
<th>Cases</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Excluded⁹</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
<td>.961</td>
<td>26</td>
</tr>
</tbody>
</table>

Discussion

The tables 4.4 and 4.5 provide proof to the fact that the instrument used by the researcher was reliable. 26 items which made up the questionnaires were tested using the Cronbach’s Alpha test and a 0.951 coefficient alpha was obtained and this is considered highly reliable and excellent as reflected on the Cronbach’s alpha interpretation table 4.3.
4.5 Analysis of Results for the main objective

The researcher used both descriptive and inferential statistics in analysing the data. The data was summarized numerically, graphically and by factor analysis, correlation and regression analysis were also carried out. In this study four objectives were formulated accordingly. The following results are presented around the objectives of the study.

4.5.1 Main Objective: To understand the impact of the electronic based accounting systems on the efficiency of the accountants in selected primary schools within the Seke District.

The main objective of the study was to understand the impact of the electronic based accounting systems on the efficiency of the accountants in selected primary schools within the Seke District. In this regard the researcher sought to find out the efficiency benefits by the accounts departments by adopting the use of electronic accounting systems as opposed to the traditional manual systems and the results are presented statistically in the table and the figure below.

| Table 4.12 To understand the impact of the electronic based accounting systems on the efficiency of the accountants in selected primary schools within the Seke District |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
|                                  | Frequency | Valid | Cumulative | Mean |
| Valid                            |           |       |             |      |
| Strongly Agree                   | 34        | 78.8  | 78.8        | 1.21 |
| Agree                            | 11        | 21.2  | 100.0       | 1.0  |
| Total                            | 45        | 100.0 |             | 410  |
| Source: Primary Data (2018)      |           |       |             |      |
Figure: 4.8 Impact of electronic based accounting systems on the efficiency of accountants

Discussion

In terms of understanding the positive impact of the electronic based accounting systems on the efficiency of accountants at the selected primary schools, the Figure 4.8 above reveal that 39 (79%) strongly agree with that position whilst 11(21%) agreed with that position, essentially therefore all the 50(100%) of the respondents agree that the electronic based accounting systems have an impact on the efficiency of the accountants. Electronic based accounting systems positively contribute to the efficiency of the accountants through improving their speed, accuracy, relevance of data gathered and processed, large volumes of data can be handled easily in addition to being stored and retrieved relatively easily too.

Correlation and Regression Analysis

The study went further on the objective and tested the relationship between the use of the electronic based accounting systems (as opposed to the manual systems) on the efficiency of the accountants in selected primary schools by conducting a correlation, regression and ANOVA analysis on the factors which characterise the electronic accounting systems and these were considered as critical in achieving the achieving objectives of the primary schools. The results are discussed and presented s below.

Correlation Analysis

The researcher ascertained the vicariate relationship between the six factors of administration willingness, computer system, user training, resources availability, processing errors and fraudulent activities recorded using Spearman rho correlation coefficient in the IBM SPSS system. Spearman rho is used when data is not normally distributed (Griffin, 2009) and this was the case in the computed outcome. The relationship between electronic accounting system and the efficiency of accountants is presented in the table below.
Table 4.13 Correlations and Reliabilities-Macroeconomic environment and bank Performance

<table>
<thead>
<tr>
<th>Macroeconomic environment impacts bank Performance (MEBP)</th>
<th>Correlation Coefficient</th>
<th>Spearman's rho</th>
<th>Significance (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation Coefficient for MEBP</td>
<td>1.000</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance (2-tailed) for MEBP</td>
<td></td>
<td>.000</td>
<td>.011</td>
<td>50</td>
</tr>
<tr>
<td>N 50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

| Correlation Coefficient for IC                           | .477**                    | .569**         | .200                    | 50 |
| Significance (2-tailed) for IC                           | .000                      | .000           | .000                    | 50 |
| N 50                                                      | 50                       | 50             | 50                      | 50 |

| Correlation Coefficient for LI                           | .422**                    | .276**         | .070                    | 50 |
| Significance (2-tailed) for LI                           | .011                      | .000           | .180                    | 50 |
| N 50                                                      | 50                       | 50             | 50                      | 50 |

| Correlation Coefficient for LF                           | -.131*                    | .50**          | .276**                  | 50 |
| Significance (2-tailed) for LF                           | .011                      | .000           | .180                    | 50 |
| N 50                                                      | 50                       | 50             | 50                      | 50 |

| Correlation Coefficient for IMP                          | .407**                    | .240**         | .070                    | 50 |
| Significance (2-tailed) for IMP                          | .000                      | .000           | .036                    | 50 |
| N 50                                                      | 50                       | 50             | 50                      | 50 |
The results in the table above reveal that the relationship between most factors of bank performance is positive which include management knowledge, internal banking controls, monetary policy pronouncements, available funds for loaning, level of interest charged and capping by government on maximum interest to be charged by banks.

The findings of the study presents that the macroeconomic environment impacts the bank performance particularly the capping on interest charged on loans which the RBZ announced. The study by Sandada et al (2014) also reveals that the macroeconomic environment is highly related to organizational performance in this case to bank profitability. The results are further corroborated in the Analysis of Variance Table below.

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>.046</th>
<th>.343**</th>
<th>.300**</th>
<th>.583**</th>
<th>-.109*</th>
<th>1.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td>.373</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.036</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Table: 4.14 ANOVA*

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>132.272</td>
<td>6</td>
<td>22.045</td>
<td>53.423</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>150.620</td>
<td>365</td>
<td>.413</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>282.892</td>
<td>371</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Bank Performance

b. Predictors: (Constant), management knowledge, internal banking controls, monetary policy pronouncements, available funds for loaning, level of interest charged and capping by government on maximum interest to be charged by banks
**Regression Analysis**

After computing and establishing the weight of the correlations between the variables, the researcher also conducted a regression analysis using SPSS tool in order to determine the predictive relationship between the variables. The correlation analysis only measures the strength between variables. The regression analysis was carried out in order to test the predictive relationship between the two main variable; macroeconomic environment and bank performance. The factors of management knowledge, internal banking controls, monetary policy pronouncements, available funds for loaning, and level of interest charged and capping by government on maximum interest to be charged by banks were computed and used as independent variables and bank performance as the dependent variable. The table below presents the findings on regression analysis.

**Table: 4.15 Regression Analysis between Macroeconomic Environmental factors and bank performance**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.648</td>
<td>.169</td>
</tr>
<tr>
<td></td>
<td>Macroeconomic environment</td>
<td>.496</td>
<td>.072</td>
</tr>
<tr>
<td></td>
<td>impacts bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bank profitability is</td>
<td>.593</td>
<td>.083</td>
</tr>
<tr>
<td></td>
<td>impacted by internal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>controls</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Level of interest</td>
<td>-.653</td>
<td>.085</td>
</tr>
<tr>
<td></td>
<td>charged affects</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
bank profitability

| Implementation and Amount of loanable funds affect bank profitability | .405 | .060 | .277 | 6.714 | .000 | .406 | .332 | .256 |
| Implementation monetary policy pronouncement is critical to bank performance | -.133 | .088 | -.076 | -1.512 | .131 | -.094 | -.079 | .058 |
| Employee Commitment contributes to the banks performance | -.229 | .071 | -.182 | -3.225 | .001 | .212 | -.166 | .123 |

| a. Dependent Variable: Bank Performance |

Whilst R2 Value of 0.76 is revealed and meaning that the macroeconomic environment factors in the study carry a 76% weight on bank performance, some of the factors revealed a negative Beta coefficient which however do not say anything about significance. Instead a lot of literature supports monetary policy interventions, capping of interest as was done by the RBZ, levels of interest charged by the banks, available funds for loans as well as the application of the internal bank controls. The negative figures could be as a result of errors which would more time to investigate. Generally, the respondents showed that each of the factors mentioned above had an influence towards the bank’s profitable performance.

Affirming the positive relationship between macroeconomic condition and its impact on bank performance, a further extraction of descriptive data was done from SPSS and results are show in diagrams as below.

Table 4.16 Macroeconomic Environment impacts bank Performance
Discussion

In terms of the impact of the macroeconomic environment on bank profitable performance, 36(73.1%) of the respondents expressed ‘definitely Yes’ the view that macroeconomic condition was indeed a factor in determining the profitable bank performance. Another 9(18.3%) expressed ‘Probably Yes’ whilst 4(7%) and 1(0.8%) indicated ‘Probably No’ and ‘Definitely No’ to give the total of 50 (100%). The importance of the macroeconomic

Figure 4.9: Macroeconomic environment impacts bank profitable performance

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Definitely Yes</td>
<td>36</td>
<td>73.9</td>
<td>73.9</td>
</tr>
<tr>
<td></td>
<td>Probably Yes</td>
<td>9</td>
<td>18.3</td>
<td>92.2</td>
</tr>
<tr>
<td></td>
<td>Probably No</td>
<td>4</td>
<td>7.0</td>
<td>99.2</td>
</tr>
<tr>
<td></td>
<td>Definitely No</td>
<td>1</td>
<td>.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data (2018)

Macroeconomic environment impacts bank profitable performance
conditions was highlighted as key and critical to the profitability of the banks. The macroeconomic environment helps in availing direction and in making the bank actions predictable. The meaning of this is that macroeconomic condition has a huge bearing on the economic performance of the bank which is one of its primary core reasons for existence to create a return for its shareholders consistent with the Stakeholder Theory (Mashavira and Jubenkanda, 2006). Bank performance is expressed by a number of performance metrics such as annual profit, return on investment (ROI), return on assets (ROA) or even return on capital employed (ROCE). Other measures include efficiency, effectiveness and achievement of desired quality by the customers.

Section B: Contributory factors behind the growth in the use of computers within primary schools to do the accounting systems

- There has been a growth in the use of computers within primary schools in their accounting systems.

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>34</td>
<td>14</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Percentage (%)</td>
<td>68</td>
<td>28</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Primary Data (2018)

There has been a growth in the use of computers within primary schools in their accounting systems, this notion was supported by 34(68%) of the respondents who expressed strong agreement, 14(28%) who indicated agreement whilst 1(2%) were neutral, another 1(2%) indicated disagreement whilst none indicated strong disagree.

- The manual accounting systems are still strongly competing within many schools

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>34</td>
<td>14</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Percentage (%)</td>
<td>68</td>
<td>28</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

The notion of the manual accounting systems still strongly competing with electronic based accounting systems within many primary schools was acknowledged by the bulk of the
respondents with 34(68%) who strongly agreed with that position and another 14(28%) who agreed whilst 1(2%) was neutral, another 1(2%) expressed disagreement whilst none indicated strong disagreement. In follow up interviews it was made clear that even up to 60% of the rural schools are still to have electricity and therefore the installation of computer systems may still be far removed. However, the government is in the process of implementing the Rural Electrification through RE Agency. In many parts of Zimbabwe there is also plenty of sunshine and schools are implementing solar installation projects and therefore more primary schools may soon be running electronic based accounting systems.

- **The school accountants are preferring computer based accounting systems over manual accounting systems**

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>36</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Percentage (%)</strong></td>
<td><strong>72</strong></td>
<td><strong>28</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data (2018)

The suggestion of the school accountants preferring computer based accounting systems over manual accounting systems was overwhelmingly supported by all the respondents 50(100%) with 36(72%) strongly agreeing and 14(28%) agreeing. Mange (2015) expresses the fact that accountants are faster and more productive with the electronic accounting systems as compared to the manual system. The system gives them more time to add value to their work and interacting with their stakeholders rather than just attempting to balance the books of accounts which is very labour intensive process with the manual system. It is therefore natural that they would all prefer to migrate to the computer based system to make their work flow smoothly.

- **The use of electronic based accounting systems is more expensive as compared to manual accounting systems**

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>32</td>
<td>14</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Percentage (%)</strong></td>
<td><strong>64</strong></td>
<td><strong>28</strong></td>
<td><strong>2</strong></td>
<td><strong>4</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data (2018)
It is evident from the table above that the respondents saw the use of electronic based accounting systems as being more expensive as compared to manual accounting systems as this was supported by 32(64%) who strongly agreed and another 14(28%) expressed agreement whilst 1(2%) was neutral, 2(4%) indicated disagreement and another 1(2%) expressed disagreement. It is a fact as supported by Manage (2015) that the initial outlay is likely to be expensive obviously as compared to the manual accounting system which is based on traditional methods which demanded that the accountants physically carried out the capturing, calculations and report preparation.

- Preferred features of the computer based accounting system by users

Table 5: Preferred features of the computer based accounting system by users

Source: Primary Data (2018)

Each feature of the computer based accounting system as preferred by users was rated singly and it was evident that 28(56%) of the respondents indicated that the computer based system was fast as it enabled the accountant to speedily process the transactions as well to prepare the financial reports as expected by the Education Act and by the many stakeholders of the school accounting system.

In terms of efficiency 31(62%) of the respondents indicated that the electronic based accounting system was efficient as it enabled the accounting department to utilise few resources in order to achieve the acceptable reporting requirements. Instead of having too many data capture clerks, the same accounting officer who processes a transaction automatically ensures that such is captured in all the accounts where it must be used for aggregate accounting and reporting.

Reliability was also ranked very high with 33(66%) of the respondents indicating that the electronic based accounting system could be used to handle large volumes of transactions without getting tired or bored as a human being would do.

In terms of ease of use only 15(30%) of the respondents expressed that it was easy to use. The computer has both hardware and software which needed users to get thorough and extensive training on, otherwise the computer will not be as useful as it is intended. In other words, it
was expressed that the computers are not easy to use and those who must use them to capture and process transactions need training.

Section C: Impact of the different software products on the efficiency of the primary schools accounting systems.

- The use of electronic based accounting systems has caused a timely improvement in financial reporting

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>36</td>
<td>10</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Percentage (%)</strong></td>
<td><strong>72</strong></td>
<td><strong>20</strong></td>
<td><strong>4</strong></td>
<td><strong>2</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data (2018)

As shown in the table above 36(72%) of the respondents expressed strong agreement with another 10(20%) indicating agreement to the notion that the use of electronic based accounting systems had caused a timely improvement in financial reporting whilst 2(4%) remained neutral whilst 1(2%) apiece each expressed disagreement and strong disagreement. Sangster (2015) indicates a number of features for the computer system one of which is the speed of processing even for voluminous material so that the reports can be availed on time for purposes of decision making by the various stakeholders.

- The use of electronic based accounting systems has caused improvement in accuracy of financial reporting

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>25</td>
<td>22</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Percentage (%)</strong></td>
<td><strong>50</strong></td>
<td><strong>44</strong></td>
<td><strong>2</strong></td>
<td><strong>2</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data (2018)

The figure above shows that the use of electronic based accounting systems had caused improvement in the accuracy of financial reporting was supported by 25(50%) of the
respondents who strongly agreed, with another 22(44%) agreeing whilst 1(2%) apiece was either neutral, disagreed or strongly disagreed. It was clear that all respondents understood the computer being able to process data as it is fed what to work on. The computer did not need the same motivation as the accounts clerk but was consistent throughout by producing the accurate reports for use by the stakeholders. In addition, the computer could also work on large data sets and still guarantee accuracy in the final financial reports.

• The use of electronic based accounting systems has caused better quality reports to be produced in schools financial reporting

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30</td>
<td>15</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Primary Data (2018)

The bulk of the respondents supported the notion that the use of electronic based accounting systems had caused better quality reports to be produced in schools financial reporting as 30(60%) strongly agreed, 15(30%) expressed agreement with only 2(4%) remaining non-committal, 1(2%) apiece each expressing disagreement and strong disagreement. Dr. Deming (1950) expressed quality as “fitness for purpose” which means that the report has to meet minimum requirements on readability, accuracy and timeliness for it to offer the benefits to the stakeholders who need those reports for information for purposes of decision making. Mange (2015) expresses the view that electronic based reports can be easily formatted, enlarged or shrunk in order to fit the required purpose. The computer system helps with spell and grammar checks to ensure that the report is accurate and that there will be no misunderstandings in interpretation. Quality reports stir confidence in users and can therefore make more accurate decisions.

The use of electronic based accounting systems has caused a reduction in complaints on errors from stakeholders
The use of electronic based accounting systems has been effective in causing a reduction in complaints from stakeholders on accounting errors was supported by 33(66%) of the respondents who strongly agreed, 13(26%) who expressed agreement whilst 1(2%) was neutral, 2(4%) indicated disagreement and 1(2%) expressed strong disagreement. In the previous regime in which the manual system was being used there were many errors caused due to the large volume of transactions which had to be performed, captured in the books of accounts and extracted for purposes of preparing the financial books of accounts which always met with difficulties to balance due to the numerous errors. Wood (2009) indicates some of these errors are due to omissions and/or commissions and result in failure of the statements to balance.

- The use of electronic based accounting systems has caused increased compliance to Ministry of Education requirements

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>34</td>
<td>14</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Percentage (%)</td>
<td>68</td>
<td>28</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

In terms of the use of electronic based accounting systems having caused increased compliance to Ministry of Education requirements 34(68%) of the respondents strongly agreed, 14(28%) agreed whilst 1(2%) was neutral, another 1(2%) disagreed and none 0(0%) expressed strong disagreement. The Ministry of Education at the district level is responsible for supervising the activities at the primary schools and ensuring adherence to the Education Act. The requirements relate to the procedures on school fees collection, maintenance of accurate records as well as the application of those resources. The use of electronic based accounting systems will ensure that the school is fully compliant by producing on time accounting reports which meet the minimum standards as required by the Act.
Section D: Benefits which have accrued to the schools due to the use of the computerized system as compared to the manual system still in use in accounting systems in primary schools

<table>
<thead>
<tr>
<th>The use of electronic based accounting systems has improved relations with stakeholders</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>29(58)</td>
<td>13(26)</td>
<td>2(4)</td>
<td>2(4)</td>
<td>2(4)</td>
</tr>
<tr>
<td>The use of electronic based accounting systems in primary schools has yielded greater financial accountability by accountants</td>
<td>35(70)</td>
<td>11(22)</td>
<td>1(2)</td>
<td>2(4)</td>
<td>1(2)</td>
</tr>
<tr>
<td>The use of electronic based accounting systems witnessed faster implementation of developmental projects at schools</td>
<td>16(32)</td>
<td>16(32)</td>
<td>2(4)</td>
<td>7(14)</td>
<td>9(18)</td>
</tr>
<tr>
<td>The use of manual based accounting systems caused low revenue inflows into school coffers</td>
<td>9(18)</td>
<td>13(26)</td>
<td>3(6)</td>
<td>17(34)</td>
<td>8(16)</td>
</tr>
<tr>
<td>The manual based accounting systems created loopholes for fraud by administrators</td>
<td>19(38)</td>
<td>20(40)</td>
<td>2(4)</td>
<td>4(8)</td>
<td>5(10)</td>
</tr>
</tbody>
</table>

Source: Primary Data (2018)

Benefits which have accrued to the schools due to the use of the computerized system as compared to the manual system still in use in accounting systems in primary schools were expressed under five key expressions in which the first one was on the use of electronic based accounting systems which was said to have improved relations with stakeholders and this was supported by 29(58%) of the respondents who expressed strong agreement with another 13(26%) just agreeing whilst 2(4%) were neutral, and 2(4%) apiece each expressed disagreement and strong disagreement. The improvement in the relations was noted through the reduction in the number of complaints which parents and guardians noticed and pointed out

The second benefit related to the use of electronic based accounting systems in primary schools having yielded greater financial accountability by the accountants and this was supported by 35(70%) of the respondents who expressed strong agreement and another 11(22%) indicated agreement whilst 1(2%) remained neutral, 2(4%) indicated disagreement and the last lot of 1(2%) expressed strong disagreement. This ties in with the arguments given by A-Hiyari et al (2013) who insists that the system gives greater accountability as it can be easily traced who entered the transactions and processed them, which makes accountants want to more cautious with their work.

In terms of the benefit on the use of electronic based accounting systems having witnessed faster implementation of developmental projects at schools, this saw a mixed feeling among the respondents with 16(32%) and 16(32%) of the respondents expressing strong agreement and agreement respectively whilst 2(4%) remained neutral, 7(14%) expressed disagreement and the last lot of 9(18%) indicated strong disagreement. According to Marshal and Paul (2015) projects which may take several months to accomplish and which vary in terms of complexity need financial approvals and work with quite some amount of detail which the computer based system is able to facilitate quite easily.

The use of manual based accounting systems caused low revenue inflows into school coffers intended to show the advantage of using the electronic accounting system in which 9(18%) of the respondents strongly agreed, 13(26%) expressed agreement whilst 3(6%) remained neutral 17(34%) expressed disagreement and the last lot of 8(16%) of the respondents indicated strong disagreement. Romney and Steinbart (2015) indicate that it may not be an issue of low revenue inflows but simply failure to capture all transactions as entered and sometimes providing an opportunity for embezzlement of school funds.

The fifth benefit on the electronic based accounting system over the manual based accounting systems was the latter’s weakness which created loopholes for fraud by administrators this was supported by 19(38%) of the respondents who expressed strong agreement with another lot 20(40%) indicating agreement whilst 2(4%) remained neutral, 4(8%) expressed disagreement and with last group of 5(10%) indicating strong disagreement.
### Section E: Cost implications of operating an electronic based financial accounting system

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The installation of an electronic based accounting system requires a huge capital outlay</td>
<td>31(62)</td>
<td>14(28)</td>
<td>1(2)</td>
<td>2(4)</td>
<td>2(4)</td>
</tr>
<tr>
<td>The high capital outlay matches the improved features of an electronic based accounting system which outweighs the losses caused by a manual accounting system</td>
<td>14(28)</td>
<td>17(34)</td>
<td>2(4)</td>
<td>10(20)</td>
<td>7(14)</td>
</tr>
<tr>
<td>The use of an electronic based accounting system requires fewer accountants as compared to the manual accounting system</td>
<td>24(48)</td>
<td>16(32)</td>
<td>1(2)</td>
<td>5(10)</td>
<td>4(8)</td>
</tr>
<tr>
<td>The increased revenue accountability in electronic based accounting system nullifies the high initial capital outlay</td>
<td>13(26)</td>
<td>18(36)</td>
<td>2(4)</td>
<td>11(22)</td>
<td>6(12)</td>
</tr>
<tr>
<td>The payback period for the costs associated with the installation of an electronic based accounting system is less than two years as compared to the losses incurred with manual handling accounting system</td>
<td>21(42)</td>
<td>17(34)</td>
<td>3(6)</td>
<td>6(12)</td>
<td>3(9)</td>
</tr>
</tbody>
</table>

Source: Primary Data (2018)

The bulk of the respondents indicated that the installation of an electronic based accounting system requires an initial huge capital outlay as 31(62%) expressed strong agreement, 14(28%) indicated agreement whilst 1(2%) was neutral and 2(4%) apiece each
expressed disagreement and strong disagreement. According Dangazo and Rufai (2014) that initial high cost is very much justified as the system is able to generate revenue and plug out losses. A complete desktop computer was indicated to cost around $850 pet set and a typical primary school would require between five and six sets. In addition, there will be needed a server, printers, peripheral gadgets and access to an internal system of connectivity and a medium sized server costs around $5000. Whilst these costs may seem moderate the bigger cost is experienced in the purchase of software as well as in acquiring the necessary licences. Besides the actual accounting staff, there may be need for an IT expert and again this causes an expansion of the wage bill (Topash, 2014).

The respondents’ understanding of the usefulness of electronic based accounting system was indicated in this question in which the bulk of them expressed the view that the high capital outlay matches the improved features of an electronic based accounting system which outweighs the losses caused by a manual accounting system as 14(28%) indicated strong agreement, 17(34%) indicated agreement whilst 2(4%) indicated neutrality, 10(20%) expressed disagreement and the last group of 7(14%) showed strong disagreement. As emphasized by Marshal and Paul (2015) the benefits and returns of an electronic based accounting system far outweighs any costs incurred during installation or system maintenance.

The aspect of the use of an electronic based accounting system requiring fewer accountants as compared to the manual accounting system was supported by 24(48%) of the respondents who expressed strong agreement with another 16(32%) indicating agreement whilst 1(2%) indicated neutrality, 5(10%) expressed disagreement with another 4(8%) indicating strong disagreement. It was evident that the use of the computer based accounting system demands only a few accounting as the system is able to perform a lot of the traditional accounting functions on its own such as calculations, accounting summaries and report generation.

The notion of the increased revenue accountability in electronic based accounting system having nullified the high initial capital outlay was supported by 13(26%) who expressed strong agreement with another 18(36%) set expressing agreement whilst 2(4%) were non-committal, 11(22%) expressed disagreement and the last lot of 6(12%) indicated strong disagreement.

The payback period for the costs associated with the installation of an electronic based accounting system is less than two years as compared to the losses incurred with manual handling accounting system was supported by 21(42%) who expressed strong agreement with
another lot of 17 (34%) indicated agreement whilst 3 (6%) were non-committal, 6 (12%) expressed disagreement and the last lot of 3 (9%) indicated strong disagreement.

Section F: Strategies to improve the adoption of the electronic accounting by all primary schools

The respondents on the open ended question indicated a number of strategies and important steps to be taken in order to facilitate a smooth adoption and use an electronic based accounting system which will enable the school to benefit from the characteristics of this tool which include speed for executing transactions, speed of producing financial reports, accuracy, ability to handle large volume of transactions, capacity for easy of budget tracking, real time expenditure tracking and the possibility of linking the school directly with the Ministry of Education for easier oversight application. Essentially, the need to reduce accounting errors was important as well as to pacify the stakeholders who had previously complained about the frequent occurrence of the errors. Numerous fraudulent activities had also been reported to the police and to the Ministry of Education on these and the use of the computer based system had the potential to reduce fraud. A number of key success factors were pointed out and these include the following:

- Provision of resources by the school authorities in the form of software, hardware and personnel to operate the computer system

- The role of training of all accounting personnel so that they are able to make full use of the computer system

- The need to electrify the schools was also highlighted as the computerized accounting systems a source of power

Some of the strategies to encourage the conversion to electronic accounting system include the following:
• High awareness levels among the stakeholders on the importance of electronic based accounting systems.

• Subsidizing the hardware and software costs by the government in order to make the system affordable by poor rural schools

4.2 Summary

The chapter served to present and discuss the research’s findings. The questionnaire was used for data collection from 50 respondents from the different primary schools in the district. A 91% questionnaire response rate was obtained which was considered to be quite adequate for the purpose of the research. Follow up interviews were also used to get clarification on some of the unclear questionnaire responses. Reliability and validity of the questionnaire were tested and these were found to be very high which suggested that the instrument was consistent and its findings could be generalised. There were four data user groups which were discovered to have high interest in accessing and comparing original or modified budgets, financial reports, balance sheets, cash flow and statement of income. It was also evident that the use of electronic based accounting systems comes with the need for capitalization, training of personnel, need for access to electricity (power) as well as the traditional for regular financial reports. A major finding was that the accountants were better by far in terms of speed, accuracy, efficiency and effectiveness. The efficiency of the accountants leapfrogged several times ahead by using electronic based accounting systems as compared to the traditional manual accounting systems which were very prone to errors and discontent among the several school stakeholders. This increase in efficiency has caused improvement in the assessment of accountability since the stakeholders such as SDA and legislative and oversight bodies (such as the Ministry of Education) need to ensure that the school resources were deployed in accordance with appropriations.
CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction
The purpose of this chapter was to highlight the summary of the research, give relevant conclusions as well as recommendations based on the findings from the study. It also indicates recommendations for further studies. The following had been listed as the research questions of interest which guided the investigation on the accounting systems at primary schools within the Seke District. The main research question was “What has been the impact of electronic accounting system at the primary schools within the Seke District?” the accompanying specific research questions were as follows:

• What are the contributory factors behind the growth in the use of computers within primary schools to do the accounting systems?

• What has been the impact of the different software products on the efficiency of the primary schools accounting systems?

• Which benefits have accrued to the schools due to the use of the computerized system as compared to the manual system still in use in accounting systems in primary schools?

• At the level of the primary school, what are the cost effects of operating such a computerized accounting system

5.1 Summary
This study aimed at investigating the impact of electronic accounting systems on the accounting efficiencies within primary schools within the Seke District. Both quantitative and qualitative approaches were utilised in order to achieve data convergence. The researcher also used a case study approach. The questionnaire was used for data collection from 50 respondents from the different primary schools in the district. A 91% questionnaire response rate was obtained which was considered to be quite adequate for the purpose of the research. Follow up interviews were also used to get clarification on some of the unclear questionnaire responses. Reliability and validity of the questionnaire were tested and these were found to be very high which suggested that the instrument was consistent and its findings could be generalised.
There were four data user groups which were discovered to have high interest in accessing and comparing original or modified budgets, financial reports, balance sheets, cash flow and statement of income. It was also evident that the use of electronic based accounting systems comes with the need for capitalization, training of personnel, need for access to electricity (power) as well as the traditional for regular financial reports. A major finding was that the accountants were better by far in terms of speed, accuracy, efficiency and effectiveness. The efficiency of the accountants leapfrogged several times ahead by using electronic based accounting systems as compared to the traditional manual accounting systems which were very prone to errors and discontent among the several school stakeholders.

This increase in efficiency has caused improvement in the assessment of accountability since the stakeholders such as SDA and legislative and oversight bodies (such as the Ministry of Education) need to ensure that the school resources were deployed in accordance with appropriations. The use of these electronic accounting systems have enabled accounting departments to issue reports on the correct financial position of the school and judgements can also be made about the actual performance such overspending may indicate poor financial management, weak budgetary practices, or uncontrollable and unforeseen circumstances. On the other side, under spending may indicate effective financial management that provides the necessary quality and quantity of services within the available appropriations or a decision by school management to accumulate a surplus of resources for future capital investment.

A robust school accounting information system has the potential to give a wider perspective on pertinent budgetary concerns not just profitability reports. The revelation was also made that Financial Accounting for primary School Systems was meant to aid in the construction and subsequent improvement of accounting efficiencies, comprehensive up to date data systems which yield decision smoothness within these primary schools environment within the Seke District.

5.2 Conclusion

The successful management of any large organization which includes schools needs effective harnessing of information and for a primary school this information may include things like
staff and student information to financial data and reports for the primary school facility and its related programs. It can be concluded from the findings from this study that, a robust education information system yields several benefits such as the following:

- **Utilizing the data in school decision-making** – it was noted that good information helps drive good decisions and as such an electronic accounting information system can make good decision making possible for school-based administrators, accountants and for external users of education information.

- **Harnessing financial data to aim at certain focus areas for improvement** - timely and accurate financial information can assist decision makers who are placed at all levels to focus on relevant improvement strategies.

- **Harnessing information for timely program evaluation** - to be effective, program evaluation must be timely as well as complete. When program and other data are compiled by the accounts department and if effectively linked to a well-designed accounting information system, the goals of schooling can be met more effectively and efficiently.

- **Utilising data for school budgetary control** – effective school budgetary management is possible only when all of the costs of school operations are available and to proceed to improve accounting efficiency and mandated financial reporting which accrues to many benefits of a comprehensive accounting information system which become particularly important when examining the relationship between programs and costs and thus allowing the making of appropriate, cost-effective, and timely decisions about students, schools, and programs, accurate and complete information must be widely available to the many users of education data, such as the research community, school administrators, school boards, policymakers, school improvement teams, creditors and potential creditors, and the general public.
• It is also concluded that accountants must be efficient so as to increase the value of the school’s comprehensive accounting information system which must become very useful when examining the distribution of resources (fiscal equity) and the use of those resources (productivity), which are the two major considerations in school financial accounting information systems.

• Efficiency by the accountants is required as it assists in evaluating accountability on school achievement in which attention is paid on how much it costs to achieve a minimally acceptable level of educational performance for all students. With that need in mind the definitions of school financial data must align with other aspects of the education information system.

• An efficient, aligned and comprehensive accounting information system for the school should provide the information needed to answer a number of questions about the school such as the following - How much is spent on education? Who pays for education? How are funds allocated? How are educational resources linked to student achievement?

• It can also be concluded that at the primary school level effective communication with all the stakeholders is important and as such accountants must ensure that their electronic based accounting system must be effective by adhering to the following basic characteristics:

  • **Understandability** - information should be clear, but not oversimplified. Explanations and interpretations should be included where necessary.

  • **Reliability** - information should be verifiable and free from bias. It should be comprehensive; thus, nothing should be omitted that is necessary to accurately represent events and conditions. However, nothing should be included that might cause the information to be misleading.
• **Relevance** - there must be a close, logical relationship between the information provided and the purpose for which it is needed.

• **Timeliness** - information should be available soon enough after the reported events to affect decisionmaking.

• **Consistency** - once a principle or a method is adopted, it should be used for all similar events and conditions.

• **Comparability** - procedures and practices should remain the same across time and reports.

Conclusions for this research has been made cover of each research objective as given in the following section.

**Objective 1 - To identify the contributory factors behind the growth in the use of computers within primary schools for their accounting systems**

Several factors have caused a move by the primary schools to adopt electronic accounting systems as opposed to manual systems in order to ensure speed, accuracy, timely reporting of financial information and reduction in conflicts with the school stakeholders as well as reducing fraudulent opportunities.

**Objective 2 - To isolate the implications of the different software products and their applications as adopted by the schools’ accounting systems**

There are several software types on the market for use in primary schools electronic based accounting systems however these have different accuracies, uses and compatibilities with other systems. Some software is obtained off the shelf whilst the other can be tailor made or customized but these have different cost structures.

**Objective 3 - To discuss the benefits which have accrued to the schools due to the use of the computerized system:**

There are several benefits have accrued and these include enhanced understandability, relevance, accuracy, timeliness and easy of availability for decision making for the school.

**Objective 4 - To identify the cost effects of operating such an electronic accounting system in a primary school**
There are several costs which have to be met in order to set up and run an electronic based accounting system and these include the fact that the school must be electrified, the computers must be procured at an initially higher cost and there is also need to train the users so that there is maximum benefit from the system. Other costs are related to acquisitions of licences for the software which is borne on a continuous basis as these licences expire and have to be renewed. In addition, the computers and the system need regular service and maintenance in order to ensure its regular effectiveness and this also costs money as specialists IT persons have to be engaged from time to time.

5.3 Recommendations

5.3.1 School administration

The accounts department and the rest of the school administration must embrace the electronic accounting system by ensuring that:

- They get training on the use of computers and the application of the various software, databases as well as the actual accounting software.
- They must use the accounting system regularly and consistently to capture all transactions and not some of the transactions.
- They must safe guard the electronic based accounting system from vandalism, fraudulent use and unauthorized access.

5.3.2 School Development Association

The SDA has a big role to play in ensuring that the school administration runs the financial system in a transparent and accurate manner on behalf of the parents and guardians who select them to represent their interest by making that the resources are adequately accounted for. The electronic based accounting system plays a very big role in this development and therefore the SDA must avail financial and other resources to establish an electronic based accounting system which is more accurate, faster and can handle large volumes of transactions which are typical for a primary which may have an enrolment of up to 1200 pupils.

5.3.3 Ministry of Education

The Ministry of Education through the activities of its district officers ultimately provides policy direction to the schools as well as providing oversight on the processes and activities
pursued by the school in terms of resources mobilisation and the reporting thereof through the electronic accounting system. They must help in sourcing cheaper but good quality hardware and may be to do so for a number of schools, so that the price per unit may be reduced from the large volumes purchased for the schools.

5.3.4 Parents and Guidance

This is a very important constituency as the school resources are generated by the parents in the form of the various payments made in to the schools for the pupils. They need to take care of their schools and participate in the various developmental programmes by directly contributing financial and other required resources into the school. They must also attend meetings called upon by the SDA to understand the needs of the school and to be present when the SDA and school administration present financial and other school reports. Cultivation of such an interest is critical in order to interrogate the financial reports and ultimately contribute towards the development of the school.

5.4 Suggested Area for further Study

Whilst focus in this study focused more on the impact of electronic accounting systems on efficiencies in a primary school situation, there could other factors which may be pertinent to the conclusions given such as the impact of electronic accounting systems in reducing fraud and in improving accountability of the various key stakeholders which may need to be explored further. As school information systems need not be necessarily complicated, it is important to determine how such information can be integrated in order to give the full range of information which may be needed in a school set up for proper administration decisions to be made.

References


APPENDIX 1: QUESTIONNAIRE

My name is Monica Gwerevende, I am student in the Department of Accounting at Bindura University of Education. In partial fulfilment of Bachelor of Accountancy (Honours) degree, I am carrying out research entitled: “Impact of electronic accounting systems on the efficiency of accountants in a dynamic environment in primary schools”. Your views are very important to this survey, because they represent the views of other respondents who are not in sample. Please answer the questions freely. You cannot be identified from the information you provide, and no information about individuals will be given to the college. All the information you will be treated in the strictest confidence.

When you have completed the questionnaire, please return it to me.

Thank you for taking your time to help me.