

**THE EFFECTS OF COMPUTERIZED ACCOUNTING SYSTEM
ON AUDITING PROCESS: A CASE STUDY OF MTWARA
DISTRICT COUNCIL (MDC)**

**By
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**Dissertation Submitted in Partial Fulfillment of the Requirements for Award of
the Degree of Master of Science in Accounting and Finance of
Mzumbe University**

2013

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation/thesis entitled **The Effects of Computerised Accounting System on Auditing process**, in partial/fulfillment of the degree of Master of Science in Accounting and Finance of Mzumbe University.

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LIST OF ABBREVIATION

AIS	-	Accounting Information Systems
CAATs	-	Computer Aided Audit Techniques
CAG	-	Controller and Auditor General
CAS	-	Computerized Accounting System
CAIS	-	Computerized Accounting Information Systems
CEO	-	Chief Executive Officer
CIS	-	Computerized Information Systems
CPAs	-	Certified Public Accountants
EDP	-	Electronic Data Processing
ERP	-	Enterprise Resources Planning
IS	-	Information System
IT	-	Information Technology
MAS	-	Manual Accounting System
MDC	-	Mtwara District Council
NAO	-	National Audit Office
PC	-	Personal Computer
POB	-	Public Oversight Board

ABSTRACT.

The main objective of this study was to assess the effects of computerised accounting system (CAS) on auditing process. Specifically the study aim to examine the contributions of CAS to the effectiveness and efficiency of the auditing process, to examine the factors affecting effectiveness and efficiency of auditing process in CAS, to identify problems organisation faces in CAS and to identify the problems encountered with auditing in CAS.

The study was carried out at Mtwara district council (MDC), with sample size of 30 people who were purposely selected. Data were collected through questionnaires, observations and documentary. The collected data was processed using the statistical package (SPSS). Descriptive statistics and Cross tabulation were used to analyses data for the purpose of understanding the main characteristics of the research variables.

The findings of this study revealed that the contributions of CAS to the effectiveness and efficiency of the auditing process is moderate. Knowledge of CAS, quality of audit planning, accountability concerns, responsibility awareness, ethical pressure, stakeholder forces, completeness of audit risk judgments and appropriateness of sample selected are the factors affecting effectiveness and efficiency of auditing process in CAS. Further more the findings indicated that, MDC encountered with the following problems in CAS; costs, competent personnel needs, the employee sharing password, the introduction of viruses, the loss of audit trail, lack of segregation of duties, and the potential for observing errors or fraud in CAs is less.

And finally the researcher recommended that, the management should put much effort on training staffs to empower their skills and ability to work under computerized environment, and the management should also emphasize on segregation of duties in order to make internal control system more strong.

TABLE OF CONTENT

CERTIFICATION.....	i
DECLARATION AND COPYRIGHT	ii
ACKNOWLEDGEMENTS	iii
LIST OF ABBREVIATION	iv
ABSTRACT.....	v
LIST OF TABLE	vix
LIST OF FIGURES.....	xi
CHAPTER ONE	1
1.0 Introduction	1
1.1 Background to the problem	1
1.2 Statement of the problem	3
1.3 Objectives of the study	4
1.3.1 General objective.....	4
1.3.2 Specific objectives.....	5
1.4 Research questions	5
1.5 Significant of the study	5
1.6 Scope of the study	6
1.7 Limitation of the study	6
1.8 Definition of key terms	6
CHAPTER TWO	8
LITERATURE REVIEW	8
2.0 Introduction	8
2.1 Theoretical Literature.....	8
2.1.1Computerised accounting information system.....	8
2.1.2 The differences between CAS and MAS	9
2.1.3Audit approach to the small computer environment	10
2.1.4 Computer files and processing methods	12
2.1.5 Principles of Data Processing.....	15

2.1.6 Computer Controls	16
2.1.5 Internal Control	18
2.2 Empirical Literature	20
2.2.1 The contributions of CAS to the effectiveness and efficiency of auditing process	20
2.2.2 The factors affecting effectiveness and efficiency of auditing process in CAS....	22
2.2.3 The major problems organisation face in CAS	23
2.2.4 Ways to overcome the problems encountered with auditing in CAS	25
2.3 Conceptual framework	26
CHAPTER THREE	28
RESEARCH METHODOLOGY	28
3.0 Introduction	28
3.1 Research Design.....	28
3.2 Area of the Study.....	29
3.3 Unity of Inquiry.....	29
3.4 Methods of Data Collection	29
3.4.1 Primary Data	29
3.4.1.1 Questionnaire	30
3.4.1.2 Observation	30
3.4.2 Secondary Data	30
3.4.2.1 Documentary	30
3.5 Analysis and presentation.....	31
CHAPTER FOUR	32
PRESENTATION OF FINDINGS	32
4.0 Introduction	32
4.1 Respondents profile.....	32
4.2 Finding regarding the research objectives.....	33
4.2.1 Analysis of the research objective number one.....	33
4.2.2 Analysis of the research objective number two	34
4.2.3 Analysis of the research objective number three	48

4.2.4 Analysis of the research objective number four.....	59
CHAPTER FIVE	68
DISCUSSION OF THE FINDINGS	68
5.0 Introduction	68
5.1 Discussion of the findings	68
CHAPTER SIX	71
SUMMARY, CONCLUSION AND RECOMENDATION	71
6.0 Introduction	71
6.1 Summary	71
6.2 Conclusion.....	72
6.3 Recommendation.....	72
6.4 Recommendation for further study	73
BIBLIOGRAPHY	75
APPENDIX I	81

LIST OF TABLES

Table 4.1 Summary of expected and actual respondents	32
Table 4.2 The contribution of CAS.....	34
Table 4.3 Knowledge of computerised Accounting System	35
Table 4.4 The risk assessment competence.....	36
Table 4.5 Quality of audit planning judgments.....	38
Table 4.6 Accountability concern	39
Table 4.7 Responsibility awareness	40
Table 4.8 Ethical pressure	42
Table 4.9 Stakeholder forces.....	43
Table 4.10 Audit competitive.....	44
Table 4.11 Completeness of audit risk judgment.....	46
Table 4.12 Appropriateness of sample selected	47
Table 4.13 The level of security in CAS within the organization.....	49
Table 4.14 The level of internal control in CAS within the organization.....	49
Table 4.15 Costs.....	50
Table 4.16 Competent personnel needs.....	51
Table 4.17 The employee sharing password	52
Table 4.18 The accidental and intentional entry of bad data	53
Table 4.19 The introduction of viruses	54
Table 4.20 Errors in programming.....	55
Table 4.21 The loss of audit trail.....	56
Table 4.22 The lack of segregation between duties	57
Table 4.23 The potential for observing errors or fraud in CAS is less	58
Table 4.24 Change of legal regulation and company policies	59
Table 4.25 The challenge of paperless audit trails	60
Table 2.26 Changing technology	61
Table 4.27 Control and security concerns.....	62

Table 4.28 Process oriented-not results oriented	63
Table 4.29 Complexity of the practice	64
Table 4.30 Professional integration.....	65
Table 4.31 Sources of errors and inconsistency	66
Table 4.32 Personal computer environment.....	67

LIST OF FIGURES

Figure 2.1: Conceptual framework.....	27
Figure 4.1 Knowledge of computerized accounting system	35
Figure 4.2 The risk assessment competency	37
Figure 4.3 Quality of audit planning judgments	38
Figure 4.4 Accountability concern	39
Figure 4.5 Responsibility awareness.....	41
Figure 4.6 Ethical pressure.....	42
Figure 4.7 Stakeholder force	43
Figure 4.8 Audit competitive	45
Figure 4.9 Completeness of audit risk judgment.....	46
Figure 4.10 Appropriateness of sample selected.....	48

CHAPTER ONE

1.0 Introduction

This chapter presents the background of the study, research problem and the objectives of the study. It also underlines the research questions and the significance of the study. Finally, prescribe the scope of the study.

1.1 Background to the problem

The impact of information technology (IT) in business has grown exponentially in recent years and it has changed the audit process and has resulted in opportunities and challenges for auditors (Solomon and Trotman, 2003). The audit profession is rapidly advancing in response to changes in its environment. It is also argued that auditors are struggling to maintain their identity and purpose as the organizations they audit undergo radical changes (Solomon et al 2003). Advances in IT continuously render control procedures outdate, and the “value” of traditional audit has become seriously questioned (Tongren and Warigon, 1997). As IT changes occur more quickly, auditors must keep pace with emerging technological changes and their impact on their organisation’s data processing system, as well as their own audit procedures (Rezaee and Einstein, 1998). As usage of IT in the organisations increasingly becoming more complex, auditors must embrace technology, understand it, and be able to audit effectively the processes and use it as an audit tool. While the complexity of IT makes auditing more challenging, it also provides an opportunity to streamline internal audit activities by designing and utilizing continuous IT controls. Training of computer skills for the internal audit staffs would ensure IT knowledge as an alternative to traditional manual audit techniques (Hass, Abdolmohammadi and Burnaby, 2006). IT is an increasingly powerful tool for improving the delivery of government services. IT and the internet in particular have opened new possibilities for the government and the governed, just as it has for the businesses and its customers (Hazman and Maniam, 2004; Moon, 2002). Over the past

decade many governments including the Tanzanian government, have planned and implemented programmes projected to start on the government into the digital land. The highly complex bureaucracies that grew to regulate the economy and society through the highly differentiated but usually lowly integrated machinery can eventually reconstructed through IT (Marche & McNiven, 2003; Davison, Wagner & Ma, 2005). Governments of both developed and developing countries have embraced IT to improve the quality of public services, increase public access to information and to energize more participation in public affairs (Becker, 1998; Moon, 2002). As computer technology has become sophisticated, government organisations have become progressively more reliant on computerised information systems (CIS) to perform their operations and to process, maintain, and report essential information. Besides, the size and very tasks and the command for timely and accurate information necessitate the use of IT in public services.

Although overall objective and scope of an audit do not change in a computerised environment, but the use of IT has tremendously changed the mode and speed of processing, and storage media of financial data and records (Yang and Guan, 2004). These changes have significantly inflated the organisations and the procedures of the clients accounting and internal control systems. Consequently, the reliability of computerised data and of the systems that process, maintain and report these data are a major concern to audit. Auditors evaluate the reliability of computer generated data supporting financial statements and analyze specific programs and their outcomes. In addition, auditors examine the adequacy of controls in information systems and related operations to ensure system effectiveness (Veerankutty, 1996). IT Auditing is the process of collecting and evaluating evidence to determine whether a computer system has been designed to maintain data integrity, safeguard assets, allows organisational goals to be achieved effectively, and uses resources efficiently. Auditor must know the

characteristics of users of the information system and the decision making environment in the client organisation while evaluating the effectiveness of any system¹.

Public sector audit and accounting practices in Tanzania are experiencing focal reform aimed at escalating transparency, streamlining accountability and improving overall financial management in line with international standards and practices. Improvements in IT have also provided the spur to adopt more cost-effective tools for overseeing government accounts and supplying information to government decision makers for effective and efficient financial management. The IT developments in government have opened new challenges for auditing professions, as now the auditors have to audit the accounts prepared on CIS. However the effects of CAS on auditing process are unknown.

1.2 Statement of the problem

The migration of e-business tools and practices into government organisations in recent years is changing the way the citizens and governments interact. Tanzanian governments are transforming themselves as they increasingly move to delivering information and services electronically. Public sector auditors have a significant interest in these developments, especially in issues related to prudence and integrity, value for money, the stewardship of public assets and the quality of information used for decision making. The CAS and IT have become the backbone of almost every organisation. As a result, IT-audit is needed to provide assurance that systems are adequately controlled, secured and functioning as intended (Petterson, 2005).

The aim of bookkeeping through computerised accounting system is to hold better records, efficient book management, to avoid typo errors and ultimately improving the management of their business (Musa and Ahmed, 2006). Rezaee and Reinstein (1998) argued that CAS has made inputting information for transactions and events more

¹http://www.intosaiitaudit.org/india_general_principles.pdf

simple and evaluating the related controls and results more critical. CAS increases the accuracy and speed of transaction processing, and can even lead to competitive advantages for many organizations in terms of operation efficiency, cost saving and reduction of human errors (Cannon and Crowe, 2004). Furthermore, McBride (2000) stated that; Computerised accounting systems ease auditing and have better access to required information such as cheque numbers, payments, and other transactions which help to reduce the time needed to provide this type of information and documentation during auditing.

In recent decades many organizations have started to adopt the computerised accounting system due to its significance and to cope with technological changes. Some of the organisations deploying this system include; Nigeria public sector organisations, Saudi organisations, Malaysia public sector organisations, Tanzania public sector organisations and Tanzania investment Bank.

Even though CAS has been employed in many organisations on Auditing process but there are few studies in Tanzanian context that have examined the effects of CAS on auditing process. Also there is lack of studies that have explored in details the effects of CAS on auditing process to the local government authorities. Therefore, the aim of this study is to address these gaps by assessing the effects of CAS on auditing process in Tanzanian local government authorities particularly Mtwara District Council.

1.3 Objectives of the study

1.3.1 General objective

The general objective of this study was to assess the effects of computerised accounting information system on auditing process in local government authorities.

1.3.2 Specific objectives

The following were the specific objectives of this study;

- (a) To examine the contributions of CAS to the effectiveness and efficiency of the auditing process.
- (b) To examine the factors affecting effectiveness and efficiency of auditing process in CAS.
- (c) To identify significant problems which organisation faces in computerised accounting system.
- (d) To identify the problems encountered with auditing in CAS.

1.4 Research questions

- (a) To what extent does CAS contribute to the effectiveness and efficiency of auditing process?
- (b) What are the factors affecting effectiveness and efficiency of auditing process in CAS?
- (c) What problems does an organisation face in computerised accounting system?
- (d) What are the problems encountered with auditing in computerised accounting system?

1.5 Significant of the study

- (a) The findings of this study will benefit Tanzanian local government authorities and other organisation so as to rectify and make adjustments in the areas of weakness in the whole computerised accounting system in order to facilitate the auditing process.
- (b) The study will enable accountants, auditors and public at large to improve their knowledge about computerised accounting system and auditing process in computerised environment.

- (c) This study is for the partial fulfillment of the requirements for award of the Degree of Masters in Science of Accounting and Finance.
- (d) The study will assist other researchers who will carry out similar studies.

1.6 Scope of the study

The study was dealing with auditing procedures and examination of the computerised accounting system with the view of assessing the effect of computerised accounting system on the auditing process.

The research topic was very wide, it included all registered public sector organisations which maintain computerised accounting records, and which are audited. The researcher dealt with the public sector industries. The researcher chose Mtwara district council as the case study to represent other public sector organisations.

1.7 Limitation of the study

These were the limitations of the study

- (a) Some documents or records were considered too confidential to be accessed, as the result researcher failed to get some relevant information for the research contained in those documents.
- (b) Some of the respondents (staffs) were not cooperative
- (c) Time was not enough to undertake all study procedures.

1.8 Definition of key terms

The followings are the key terms used in this study;

Computerised Accounting Systems

Meigs et al (1998) defined a computerised accounting system as a system that uses computers to input, process, store and output accounting information inform of financial

reports. He adds that accounting system records all transactions that routinely deal with events that affect the financial position and performance of an entity.

Auditing process

According Jain (2002), auditing is concerned with verification of accounting data and determining the accuracy and reliability of accounting statements and reports.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In this chapter, the views of other researchers and the discussions on the effects of CAS on auditing process are reviewed. The literature review is divided into two sections. Section one consist of theoretical part which provides an overview of the common understanding of CAS and auditing process. The second section is the empirical part which provides the views of other researchers with respect to the problem being studied.

2.1 Theoretical Literature

2.1.1 Computerised accounting information system

It should be noted that Computerised Accounting Information Systems (CAIS) and Information Technology (IT) - based Accounting Systems mean one and the same thing. Both of these will be used interchangeably in this research paper.

An Accounting Information System (AIS) is the system of records a business keeps maintaining its accounting system. This includes the purchase, sales, and other financial processes of the business. The purpose of AIS is to accumulate data and provide decision makers (investors, creditors, and managers) with information to make decisions. While this was previously a paper-based process, most modern businesses now use accounting software such as Sage, Peachtree, and Pegasus etc.

According to Lanier (1992), an IT- based accounting system is:

“a set of organised procedures used to collect and record accounting data with the use of a computer”.

Types of IT – Based Accounting Systems

There are two types of IT-based accounting systems. These consist of:

- Integrated Accounting Systems and
- Stand Alone Accounting Systems (Dodd, 1992; Lanier, 1992; Fardon, 2002).

According to Lanier (1992), integrated accounting systems are systems in which two or more accounting modules are used together and share information between each other. A module is a program that is written to perform only a specific accounting function such as accounting receivable processing and may be able to communicate with other modules. In other words, in such a system each module handles a separate function but also communicate with the other modules.

A stand-alone accounting system can be defined as a system in which only one module is used(Lanier, 1992).

The usage of the integrated accounting system or the stand-alone accounting system in a business depends on a load of factors such as the frequency of transactions, staff knowledge and skill, and the size of the business (Dodd, 1992; Lanier, 1992; Fardon, 2002).

2.1.2 The differences between CAS and MAS

It is important to consider the differences between computerised accounting information systems and manual accounting systems (MAS). There are essential differences between manual and IT-based accounting systems which auditors should take into account, especially when they perform their tasks in an IT-based accounting environment (Rezaee and Reinstein, 1998; Grays and Manson, 2000; Taylor and Glezen, 1994). The following consists of some of the important differences that have been recognized:

The human being who operates a manual accounting system can react intelligently to various events that affect the organisation while IT-based accounting systems can only act in an apparently intelligent way if they are only programmed to do so (Gray and Manson, 2000).

This inadvertently means that manual systems are more flexible than IT-based accounting systems.

Random errors associated with manual processing are much more numerous than those which are associated with IT-based accounting systems since IT-based accounting systems always process items in the same way (Gray and Manson, 2000).

Lack of documentation is a significant problem in many computer installations. Without adequate documentation, the audit trail may disappear and the auditor may find it difficult, if not impossible, to follow the processing in a particular application area (Watne and Turney, 1990).

Transactions in manual systems are usually authorized before they are executed and recorded (Coserat, 2000). However, this is not always the case in IT-based accounting systems where some transactions are automatically executed and recorded without management explicit authorization. (Rezaee and Reinstein, 1998; Taylor and Glezen, 1994).

2.1.3 Audit approach to the small computer environment

According to Woolf (1997) the overall audit approach remains unchanged. Audit approach in computer environment have the following typical stages;

(a) Recording the accounting and internal control system

Simple overview flowcharts may be used, showing, inter alia, inputs, processes, reports and interfaces (if any) with other software also being run.

(b) Assessing the risk of misstatement in financial statements

The potential risks of misstatement are greatly reduced by the use of well tried and tested accounting packages, from which any major bugs will already have been eliminated; conversely the risks of misstatement are increased where an in-house spreadsheet is used for accounting purposes. The most important source of information is likely to be from within the auditor's own organisation i.e. his experience with packages used by other clients. As in manual system, the environment surrounding the accounting routines is a factor which influences the assessment of risk, e.g. the quality of the accounting staff and training they receive, password protection, back up procedures. The auditors should document his assessment of risk and the reasons for the assessment, just as he would in a manual system perhaps using a checklist of some kind.

(c) Determining the overall approach, particularly as to whether controls are to be relied upon.

As there will be limited division of duties and limited formal controls, it is most unlikely that the auditor will be able to rely on controls for audit purposes; an audit approach using detailed substantive test is likely to be the only realistic option.

(d) Determining the nature and extent of substantive testing

The auditors should vary the levels of substantive testing applied to computer operations, depending on his assessment of the risks involved. Provided that the overall environment in which the computer operates is satisfactory it is likely that substantive test levels may be reduced in comparison to a manual system.

(e) Executing the audit test

The use of PCs by auditors can be subdivided into cases where the client's own machines are used by the auditors and cases where the auditor uses his own PC as an

audit aid. In the former category the auditor can, with the client's permission but not necessary with the knowledge of staff perform test packs and similar test runs on the client's system using the client's software and files except, of course, that the test data will be contrived for audit purposes. Use by auditors of their own PCs can be immensely beneficial in the context of analytical review procedures, which by their nature involve calculations, comparisons and analysis, for which computers are ideally suited, providing the speedy processing of relevant data in amore advanced manner, using arrays extending over several years and screen display.

(f) Concluding and reporting

Errors found in any computerised accounting system may well be systematic in nature and are therefore far more likely to affect a large number of transactions. This should be taken into account by the auditor in assessing the potential impact on the financial statements.

2.1.4 Computer files and processing methods

The accounting function for an entity often involves recording, updating, retrieving and reporting on large volumes of transaction data and related information. To understand how all this information is handed in a computer environment, auditors must be familiar with the computer files and data processing methods

Computer files

According to Cosserat (2000), computer hardware and software are of use only if there are data to process. In accounting applications, data are organize in transaction files and master files. Information may be contained in a database. The following are the computer files;

(a) Transaction files

These are the equivalent of journals, such as a sales journal. Transaction files contain details of individual transactions which affect a master file; for example, credit sales

transaction affects the debtors' master file. For a batch processing system, a transaction file is prepared for each batch of transaction to be processed.

(b) Master File

These are the equivalent of ledgers. An example is the debtors' master file which maintains permanent information. Transaction files are used to update master file. In updating, the entire file is rewritten, the two files are compared and the difference agreed to the control total on the transaction file. The old copies of the master files and transaction files are retained, and the process repeated. This is referred to as the grandfather – father – son approach: the new update file is the son, the master file utilized in the updating run that produced the son is the father, and the previous master file is the grandfather.

(c) The Database

When accounting applications are developed independently, separate file are kept to support each application. In such instances, files may contain duplicate information. For example, a payroll file generally includes the following data elements: employee name, address, tax file number, pay rate etc. these data elements are repeated in separate personnel file. It is possible to pool this information in a database; such information is stored only once but is accessible by all authorized application programs. A database therefore minimizes data redundancy.

Data Processing Methods

Data Processing Methods are the ways in which data are entered into and processed by the computer, Cosserat (2005). There are three widely used methods;

- (a) Batch entry / Batch processing Method
- (b) On- line entry / Batch processing Method
- (c) On- line entry / on- line processing Method

Batch entry / Batch processing Method

With the batch entry / batch processing method, data are accumulated by classes of transaction (such as sales or cash payments) and are both entered and processed in batches. The processing of similar transactions accumulated together generally makes this an efficient method. Batch processing is usually done at a convenient time- daily, nightly, weekly or monthly as required or to accord with events such as payroll cycle or the reporting cycle. The ability to generate batch or control totals prior to processing and the use of batch numbers as transaction trail or processing reference are significant advantages of the batch processing method. However, disadvantage of this method is that the master file cannot updates until the batch data are accumulated.

On- line entry / Batch processing Method

With the on- line entry / batch processing method, individual transactions are entered directly into the computer (via a terminal) as they occur. A machine readable validated transaction file is accumulated as the transactions are entered. This file subsequently processed to update the master file. Cosserat (2000) further said that, advantage of this method is that the data are subjected to certain edit and validation checks by the computer program at the data the time of entry, and error messages are communicated immediately to terminal operator

On- line entry / On- line processing Method

This method of data processing differs from the on- line entry / batch processing method in two aspects:

- Master files are updates concurrently with data entry; and
- Transaction log is produced that consists of a chronological record of all transactions.

In order to provide a transaction trail, each transaction is assigned a unique identifying number by the computer program. The major disadvantage of on- line entry / on-line processing method are risk errors in the master file from concurrent update and the possible loss of part or all of the master files in the case hardware failure.

2.1.5 Principles of Data Processing

Lee (1983) suggested that, at least seven functions should be distinguished in any data processing:

- (a) The recognition of relevant data.
- (b) Classification according to its nature and relation to the system.
- (c) The recording of it in prescribed form.
- (d) Monetization or conversion (where necessary) into the currency in which the accounts are kept.
- (e) Summarization, or grouping with other data of a similar nature.
- (f) Translation into double entry.
- (g) Manipulation according to the rules of the accounting system.
 - Inaccurate information and erroneous or falsified data input
 - Misuse by authorized end users
 - Incomplete processing and / or duplicate transactions
 - Untimely processing
 - Communication system failure
 - Inadequate training and support.

According to Woolf (1990), application controls are controls within a computer application which ensure completeness and accuracy of input and processing and the validity of the resulting accounting entries. They are in combination of manual and computer programmed procedures. Application controls performed by computer are not controls themselves, but part of computer programs that allow control to be exercised.

They aid the provision of controls over completeness and accuracy of input and processing and the validity of accounting entries in the same way as the manual controls. But in addition they provide control over the calculation, summarization and categorization carried out by the computer.

2.1.6 Computer Controls

As the methods of processing used in a computer system are different from those which apply to manual systems, the means by which control is achieved are different.

Auditors must be familiar with the vast variety of control techniques available within a computerised environment. There are two main controls in a computer based system: Application controls and General controls.

(a) Application controls

Application controls apply to the processing of individual accounting applications and help ensure the completeness and accuracy of transaction processing, authorization and validity. Types of application controls include:

- Data Capture Controls- ensure that all transactions are recorded in the application system, transactions are recorded only once, and rejected transaction are identified, controlled, corrected, and reentered into the system.
- Data Validation Controls- ensure that all transactions are properly valued.
- Processing Controls- ensure that there is proper processing of transactions.
- Output Controls- ensure that computer output is not distributed or displayed to unauthorized users.
- Error Controls- ensure that errors are corrected and resubmitted to the application system at the correct point in processing.

Application controls may be compromised by the following application risks:

- Weak security
- Unauthorized access to data and unauthorized remote access
- Organisational Controls- include segregation of duties controls.
- Data Center and Network Operations Controls- ensure the proper entry of data into an application system and proper oversight of error correction.
- Hardware and Software Acquisition and Maintenance Controls- include controls to compare data for accuracy when they are input twice by two separate components.
- Access Security Controls- ensure the physical protection of computer equipment, software, and data, and are concerned with the loss of assets and information through theft or unauthorized use.
- Application System Acquisition, Development, and Maintenance Controls- ensure the reliability of information processing.

Chambers and Court (1991), point out that, audit activities are performed in computer environment wherever computer- based accounting systems, large or small are operated by enterprises, or by third parties on behalf of the enterprises or for the purpose of processing information supporting the amount included in the financial statements. The nature of the computer based accounting system is such that the auditor is afforded opportunities to either the enterprises or another computer to assist him in performance of his audit work. The technique performed with computer in this way, are into two major categories:

- Use of audit software
- Use of test data

Howard (1992) defines audit software, as computer programs used for audit purpose to examine the contents of the enterprise's computer files. The programs may consist of

package programs or utility programs, which are usually run independently of the enterprises computer-based accounting system.

Furthermore, Howard (1992) defines test the operating of the enterprise's computer programs. Audit test data consist of data submitted by the auditor for processing by the enterprise's computer- based accounting system. Information may be processed during a normal production run ("Live" test data) or during a special run at a point in time outside the normal cycle ("Dead" test data)

(b) General Controls

Hicks (1993), defines general controls, as the overall managerial controls applied to all software, hardware, and personnel involved in the information system. They include management, system development, hardware and system software, access and miscellaneous controls

General controls relate to the overall information- processing environment and have a great effect on the organisation's computer operations.

2.1.5 Internal Control

According to Pany and Whittington (1997), internal control is defined as the process effected by the entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories'

- Reliability of financial reporting
- Effectiveness and efficiency of operations
- Compliance with applicable laws and regulations.

Internal control varies significantly from one organization to the other, depending on such factors as their size, nature of operations, and objectives. Yet certain features are

essential to satisfactory internal control in almost any large scale organization. Internal control of an organization includes five components: The control environment, Risk assessment, the accounting information and communication system, control activities, and Monitoring.

Accounting information is needed at all levels of an organization to assist management in meeting the organization's objectives. Of major concern to the auditors are the accounting information system, and the way in which responsibilities for internal control over financial reporting are communicated through the organization.

An organization's accounting information system consists of the methods and records established to records process, summarize and report an entity's transaction and to maintain accountability for the related assets, liabilities, and equity. Accordingly, an accounting information system should:

- Identify and record all valid transactions
- Describe on a timely basis the transactions in sufficient detail to permit proper classification of transactions for financial statements.
- Determine the time period in which transactions occurred to permit recording of transactions in the proper accounting period.
- Present properly the transaction and the related disclosure in the statements.

In addition to the typical system of journals, ledgers, and other recordkeeping devices, an accounting information system should include a chart of accounting and a manual of accounting policies and procedures as aids for communication policies. A chart of accounts is a classified listing of all accounts in use, accompanied by a detailed description of the purpose and contents of each. A manual of accounting policies and procedures states clearly in writing the methods of treating transactions. In combination, the chart of accounts and manual of accounting policies and procedures should provide clear guidance that will allow proper and uniform handling of transactions.

However, internal control can do much to protect against both errors and irregularities and ensure the reliability of accounting data. Still it is important to recognize the existence of inherent limitations of internal control. Mistakes may be made in performance of controls as a result of misunderstanding of the instructions, mistakes of judgment, carelessness, distraction or fatigue. In addition, without active participation by the board of directors and an effective internal audit department, top management can easily override internal control (Pany and Whittington, 1997).

2.2 Empirical Literature

2.2.1 The contributions of CAS to the effectiveness and efficiency of auditing process

The researcher reviewed various studies which discuss the contributions of CAS to the effectiveness and efficiency of auditing process in computerised environment. The following are the empirical findings from different researchers;

In the study of Mark (2011) assessed the impact of CAS on financial reporting in manufacturing firms in Uganda, a case study of Uganda breweries limited. The findings indicated that CAS minimizes errors and allows easy posting of transactions on ledgers. On examining the qualities of financial reports generated by the firm, the results revealed that financial reports produced are reliable. The researcher found out that Uganda breweries runs a fully CAS in financial reporting thus benefiting from the system. The firm is able to maintain the financial report qualities of timeliness, reliability and accuracy because of CAS.

Theobald (2008) assessed the impact of computerised accounting system on auditing process case study of Tanzania investment bank. The results of the study revealed that CAS has positive impact on the auditing process. Since, the system contributes to effectiveness and efficiency on the auditing process by 85%. Also the study showed that

CAS has improved the accounting operations through speed communication, accuracy and easiness.

The traditional view of small business record keeping suggest that it is a paper based and hand of to the accountant firm to prepare the annual tax return. Porter & Millar (1985) mentioned in this competitive advantage, over the years, information technology had played a major role, changing the nature of business who knows its effects. With the introduction of new technology and more user friendly software, computerized accounting system (CAS) appears to reduce the problems in book record keeping practice. Furthermore, with the new and rapid financial information, new updates and changes will be available for others in making decisions.

Managers and Auditors who deal with IT-based accounting systems can be provided with a wider and more up to date variety of information than those who deal with manual systems. This will ensure that the operations of the business are run effectively and efficiently (Taylor and Glezen, 1994).

Wilkinson, Cerullo, Raval and Wong-On-Wong (2000),noted that huge numbers of daily accounting transactions can be undertaken and recorded smoothly using computerized processing; the computerized accounting systems simplifying the accounting procedure by increasing the accuracy of the calculation, speeding-up transaction processing, decreasing the cost of processing the transactions and other data, and increasing the productivity of employees.

The rapid change in information technology, the wide spread of user-friendly systems and the desire of organizations to acquire and implement up-to-date computerized systems and software have made computers much easier to use and enabled accounting tasks to be accomplished with increased speed and accuracy (Al-Fehaid, 2003).

Technology permit auditors to increase their productivity as well as that of the audit function (Brazel et al., 2004; Reed et al., 1990). For example, computerized assisted

auditing can automate previously manual audit tests therefore reducing total audit hours expended.

Generally computers was being used for accounting since last three decades by government bodies, industries, companies, schools and other micro, small or medium business in Libya. They used computer in making their task easier and convenient and to produce a more reliable and accurate records (Breen, Sciulli and Calvert, 2003)

2.2.2 The factors affecting effectiveness and efficiency of auditing process in CAS

The following studies discussed various factors which affect effectiveness and efficiency of auditing process in computerised accounting system;

Cengage (2011) investigated the impact of accounting information system knowledge and audit effectiveness in Thailand. The results of the study revealed that, knowledge of CAS, the risk assessment competency and quality planning judgments are the factors which affect audit effectiveness in computerised environment.

Cohen and Sayag (2010) examined the effectiveness of internal auditing. An empirical examination of the study was done in Israel organisations. The findings showed that the quality of audit work, professional proficiency, and career and advancement are determinants of the effectiveness of internal auditing. While, organisation independence, the sector to which an organisation belongs and top management supports are determined as not the factors which affect effectiveness of internal auditing.

Cengage (2010) assessed the effects of audit pressure on audit process efficiency and audit report effectiveness in Thailand. The results revealed that; accountability concern, responsibility awareness, ethical pressure, stakeholder force, audit competitive, completeness of audit risk judgments and appropriateness of sample selected are the factors which affect audit efficiency in CAS.

2.2.3 The major problems organisation faces in CAS

Musa (2006) investigated the perceived threats of computerised accounting information systems (CAIS) in Saudi organisations. The results of the study revealed that almost half of the responded Saudi organisations suffered financial losses due to internal and external CAIS security breaches. The results also revealed that accidental and intentional entry of bad data; costs such as training and software updates; accidental destruction of data by employees; employees' sharing of passwords; introduction of computer viruses to CAIS; suppression and destruction of output; unauthorized document visibility; and directing prints and distributed information to people who were not entitled to receive are the most significant perceived security threats to CAIS in Saudi organisations. The study introduced some suggestions and recommendations to strengthen the IT security controls and to enhance the awareness of CAIS security issues in Saudi organizations in order to manage the IT risks and to achieve a better protection to their CAIS and IT internal controls.

Kunkel (2004) also noted that implementation of CAS at many corporations has led to increased audit related risk due to automated interdependencies among business processes, and integrated relational database. There are many types of risk associated with CAS; this includes loss of computer assets, erroneous record keeping, increased risk of fraud, competitive disadvantages if wrong IT selected, loss or theft of data, privacy violations, and business disruption (Warren et al 1998; Gelinas et al 1999; Hermanson et al 2000; Hadden et al 2003)

According to Al-Fehaid (2003), the adoption of IT based accounting systems by clients has reduced certain problems such as human errors. However, it creates new challenges or risks for auditors such as the possibility of error in programming, the loss of audit trail, the lack of segregation between duties and Change of legal regulation and company policies.

Lauren, (2012) noted that the following are the problems organisations face in CAS; Updating a traditional accounting department to use a computerized system can represent a significant cost, especially for a larger business.

Hermanson et al. (2000) conducted an exploratory study to examine the IT-related activities of internal auditors in the US organizations. Information gathered from over 100 internal audit directors indicated that internal auditors focus primarily on traditional IT risks and controls, such as IT asset safeguarding, application processing, and data integrity, privacy, and security. However, other areas such as risks related to systems development and acquisition received little attention from internal auditors. The results also revealed that several factors have been associated with internal auditors' performance of IT evaluations, including the nature of the audit objective, the prevalence of computer audit specialists on the internal audit staff, and the existence of new CIS.

The potential for observing errors or fraud in IT-based accounting systems is less than in manual accounting systems (Cosserat, 2000). This is because, in the IT-based accounting systems, data is stored in a machine-readable form rather than a visible form which could be deliberately accessed and altered through computer facilities on different sites. Also, the reduced number of staffs involved in handling computer transactions can lead to the obscuring of errors, which would be more easily discovered where information and documents are dealt with manually (Wasik, 1991).

Edward (2011) examined the relationship between internal controls and the quality of financial statement in local governments a case study of Wakiso district. The findings of the study showed that the level of internal control system is average. Also there is strong relationship between internal controls and the quality of financial statements. It's thus recommended that Wakiso district management should ensure that all internal controls that are implemented are properly functioning and are not undermined by its staff as a

way of attaining quality of financial statements since internal controls lead to quality of financial statements.

Mwasalwiba (2006) noted that there are problems encountered with auditing process in computerised accounting system. These problems include; the challenge of paperless audit trail, changing technology, control and security concerns, process oriented-not results oriented, complexity of the practice, professional integration, sources of errors and inconsistency and personal computer environment.

2.2.4 Ways to overcome the problems encountered with auditing in CAS

The following are different measures that can be employed to overcome problems encountered with auditing in computerised environment;

The auditors use the computerised assisted auditing techniques (CAATs) that will have automating audit processes and implementing a continuous auditing framework, auditors are able to focus on areas of highest risk, reduce audit time, reduce resources, and will gain more confidence in the effectiveness controls. This will improve overall audit recommendations to management and satisfy the demand for more reliable, relevant, and timely information. In Accounting Information System environments, auditors with greater Accounting Information System Knowledge will assess control risk at high level (Cengage, 2011).

Auditors have to acquire and develop their skills and competences in order to be able to fulfill their mission in a professional manner as required by their professional organisations. One of the major, and growing, domains of the skill and competence requirements consists of information technology (Kalaba, 2002).

As technological developments continue, auditors will need to expand their accounting information system (AIS) knowledge and skills in order to perform effective and efficient audits. When assigning staff to an audit engagement, it may be prudent to

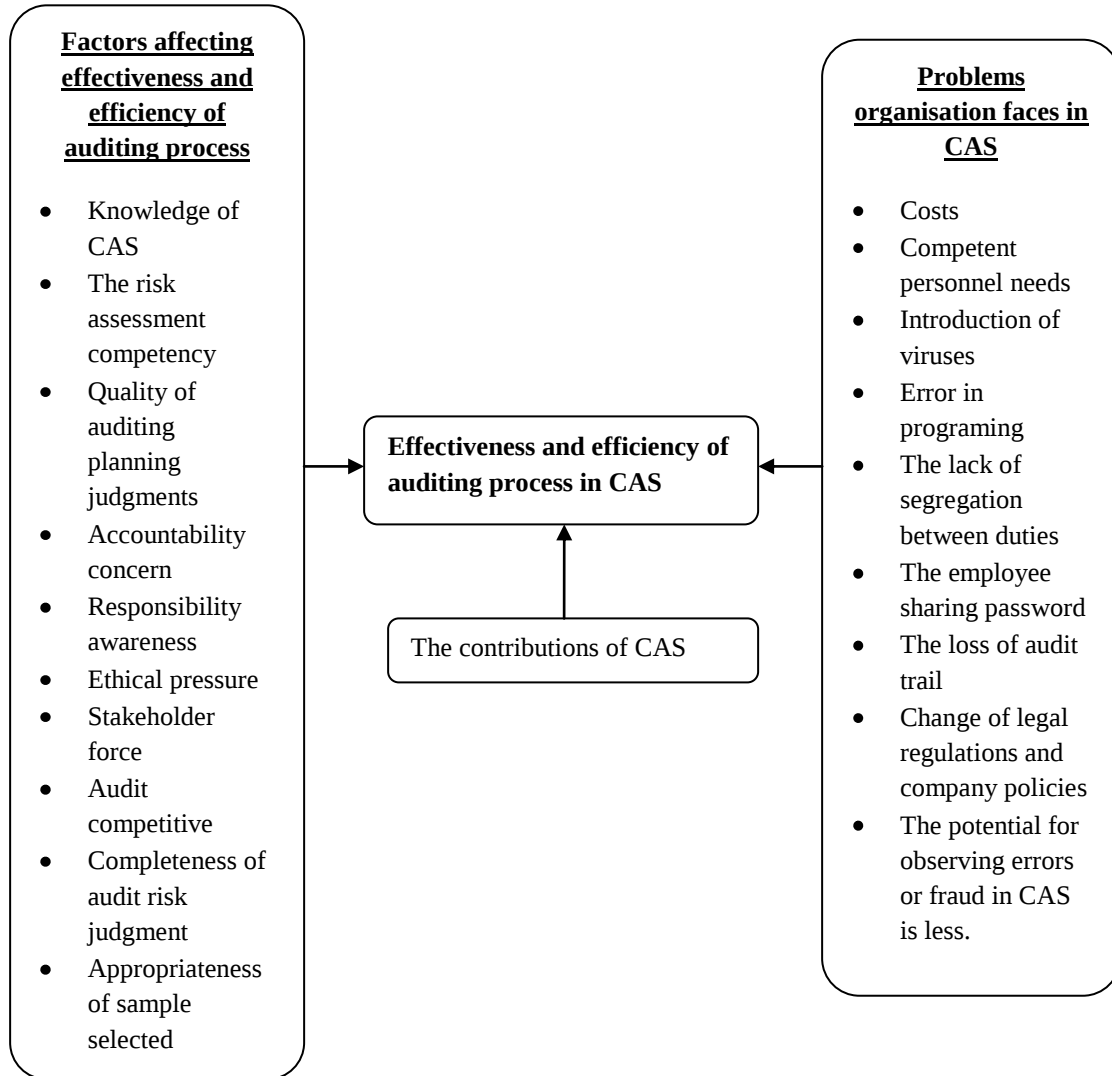
consider the staff members' levels of AIS expertise (with respect to the client's AIS), in addition to their general audit experience levels. The results of the study clearly point to the advantages of sufficiently training both auditors and IT auditors so that they are equipped with the requisite expertise, given the complexity of their clients' IT. From an educational standpoint, the study points to an increasing need to improve the system-related educational experiences of accounting students who will be the IT and financial statement auditors of the future (Brazel, 2008).

However, the dynamic growth of the electronic data processing environment requires auditors not only to be independent but also to be literate in computer appreciation (Okoye, 2011).

2.3 Conceptual framework

A conceptual frame work is a set of broad ideas and principles taken from relevant field of inquiry and used to structure subsequent presentation (Reichel and Raney, 1987). In this study; dependent variable is effectiveness and efficiency of auditing process in CAS while independent variables are factors which affect effectiveness and efficiency of auditing process, contribution of CAS and problems which organisation faces in CAS. The interrelationship between and among these variables are presented diagrammatically for supplementary understanding of the effects of computerised accounting system on auditing process.

Figure 2.1: Conceptual framework



Source: Researcher (2013)

KEY:

—————→ Direct relationship

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

Kothari (2004), define research methodology as a way to systematically solve the research problem. In it we study the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them.

The research methodology was consisting of research design, data collection methods, sample and sample size, sampling procedure, area of study, and data analysis and presentation.

3.1 Research Design

Nachmias (2003), defined research design as a program that guides the investigator in the process of collecting, analysing and interpreting observations. Or is the blue print that enables the investigator to come up with solution to the problem and guides him or her in various stages of the research.

The researcher used a case study design to assess the effects of computerised accounting system on auditing process. A case study design is defined as a research strategy, an empirical inquiry that investigates a phenomenon within its real life context (Yin, 2009). The design was chosen because it enables the researcher to obtain information needed for the study, also it helps the researcher to focus on a single unit study and also it will help the researcher in getting a deeper knowledge of a wide problem with limited resources.

3.2 Area of the Study

This research was conducted at Mtwara district council. The researcher selected Mtwara district council to represent other local government authorities which are in the same line of business.

3.3 Unity of Inquiry

The researcher had a sample of 30 people who were purposely selected. The sample was involved Mtwara district council staff and external auditors. This included respondents from finance department, internal audit unit and National Audit Office. Only people considered as capable of producing relevant information was consulted. The researcher was aiming at knowing the effects of computerised accounting system on the effectiveness and efficiency of auditing process, merits and problems that this system poses, if any when compared with manual system.

3.4 Methods of Data Collection

The researcher used various types of data such as primary data and secondary data. Primary data are those which are collected afresh and for the first time (Kothari, 2005). These data were obtained by the researcher for the first time through interview, questionnaires and observations. Secondary data are data that are already available and refer to data that have already been collected and analyzed by someone else (Kothari, 2005). Secondary data were obtained through documentary review, which included published and unpublished documents, and different reports.

3.4.1 Primary Data

The following were methods researcher used to collect primary data;

3.4.1.1 Questionnaire

In this study the questionnaire was the main instrument for data collection. The researcher adopted the questionnaire because it is fast, cheap and it gives the respondents enough time to reflect on the questions. Since each respondent was asked to respond to the same set of questions, it will provide an efficient way of collecting responses from a large sample prior to quantitative analysis (Saunders et al., 2007).

3.4.1.2 Observation

Some of data were obtained from participatory and non-participatory observation. The researcher was participating in daily routine operations of the organisation, in which a researcher was in a position to see how the organization doing their accounting through computer and how they are audited.

3.4.2 Secondary Data

Documentary review was used by the researcher to collect secondary data.

3.4.2.1 Documentary

Saunders et al. (2000), explained that documents are secondary form of data collected and stored by organisations or governments so as to be used by externals who are interested with those data to use in any relevant area to which can fit, these includes articles, income statements of the organisations, government manuals, reports etc. Data was obtained through reviewing of various documents, some from the respective department of the researcher's interest such as accounting manual, financial regulations and audited report. The researcher's interest was to know the opinions of the auditors, principles and procedures used by the corporation in preparation of the financial statements and auditing process.

3.5 Analysis and presentation

The collected data was processed using the statistical package for social sciences (SPSS) version 20. Data was presented in tables and bar charts. Descriptive statistics was used to analyses data for the purpose of understanding the main characteristics of the research variables. Cross tabulation was used to determine the relationships between variables. These techniques of data presentation and analysis were preferred by the researcher because they are easily applicable and understandable.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.0 Introduction

This chapter presents the findings of this study. It also covers descriptive statistics and cross tabulation analysis.

4.1 Respondents profile

A total of 30 questionnaires were administered in the study. Out of these, 25 questionnaires were returned giving a response rate of 83.33 percent (Table 4.1). Each questionnaire was inspected and corrected for the purpose of detecting errors as well as cleaning data before being processed in the computer. The inspection and correction was done in two ways; firstly, in the field by reviewing all questionnaires if are properly filled and secondly, before and during the processing of the data in the computer. In the field the data was inspected to detect the most obtrusive omissions and inaccuracies in the data. Before processing the data in the computer there were no questionnaire dropped because they were properly filled and contained complete answers.

Table 4.1 Summary of expected and actual respondents

Respondents categories	Expected number of respondents	Actual respondents	Actual percentages of respondents
Finance department	10	8	80%
Internal audit unit	10	9	90%
National Audit Office	10	8	80%
TOTAL	30	25	83.33%

Source: Filed work (2013)

4.2 Finding regarding the research objectives

This section analyses the findings of the study with respect to the research objectives. The variable was accepted to be valid when its responses exceeded 50% of the total responses from the respondents.

4.2.1 Analysis of the research objective number one

The first objective of this study intended to examine the contributions of CAS to the effectiveness and efficiency of auditing process in local government authorities in Tanzania.

The results revealed that, twenty respondents representing 80% of the total responses said that the contribution of CAS to the effectiveness and efficiency of auditing process is moderate. Two respondents representing 8% of the total responses said that the contribution of CAS to the effectiveness of auditing process is high. One respondent representing 4% of the total responses said that the contribution of CAS to the effectiveness and efficiency of auditing process is very high. While, one respondent representing 4% of the total responses said that contribution of CAS to the effectiveness and efficiency of auditing process is low. And lastly one respondent representing 4% of the total responses said that contribution of CAS to the effectiveness of auditing process is very low (Table 4.2). Therefore based on these responses the contributions of CAS to the effectiveness and efficiency of auditing process in Mtwara District council is moderate.

Table 4.2 The contribution of CAS

	Frequency	Percent	Valid Percent	Cumulative Percent
Very low	1	4.0	4.0	4.0
Low	1	4.0	4.0	8.0
Moderate	20	80.0	80.0	88.0
High	2	8.0	8.0	96.0
Very high	1	4.0	4.0	100.0
Total	25	100.0	100.0	

Source: field work (2013)

4.2.2 Analysis of the research objective number two

The second research objective of this study intended to identify the factors which affect the effectiveness and efficiency of auditing process in CAS in local government authority.

Regarding the factors which affect audit effectiveness in CAS, the results were analysed as shown here in table 4.3, 4.4 and 4.5;

The knowledge of computerised accounting system

The results showed that, nineteen respondents representing 76% of the total responses agreed that the knowledge of CAS is the factor which affects audit effectiveness in CAS. Three respondents representing 12% of the total responses strongly agreed that the knowledge of CAS is the factor which affects audit effectiveness in CAS. One respondent representing 4% of the total responses remained neutral to the question whether the knowledge of CAS is the factor which affects audit effectiveness in CAS. While, one respondent representing 4% of the total responses disagreed with knowledge of CAS as a factor which affects audit effectiveness in CAS. And lastly, one respondent representing 4% of the total responses strongly disagreed that the knowledge of CAS is

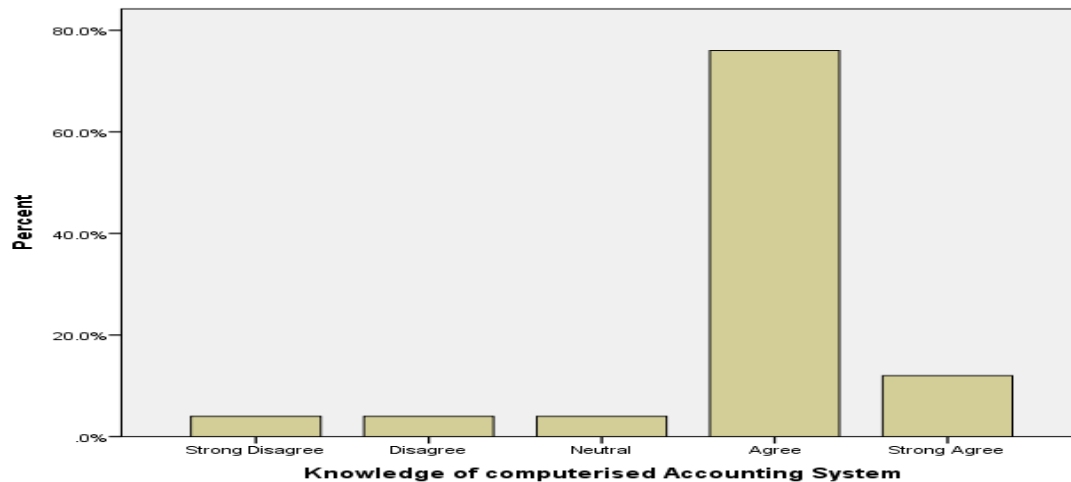
the factor which affects audit effectiveness in CAS (figure 4.1). Furthermore the analysis through cross tabulation indicates that, knowledge of CAS has contribution to the effectiveness of auditing process in CAS (Table 4.3). Therefore basing on this response, the knowledge of CAS is determined as the factor which affects audit effectiveness in CAS.

Table 4.3 Knowledge of computerised Accounting System

		Knowledge of computerised Accounting System					Total
		Strong Disagree	Disagree	Neutral	Agree	Strong Agree	
The contributions of CAS	Very low	0	0	0	1	0	1
	Low	0	0	1	0	0	1
	Moderate	1	1	0	15	3	20
	High	0	0	0	2	0	2
	Very high	0	0	0	1	0	1
Total		1	1	1	19	3	25

Source: Field work (2013)

Figure 4.1 Knowledge of computerized accounting system



The risk assessment competence

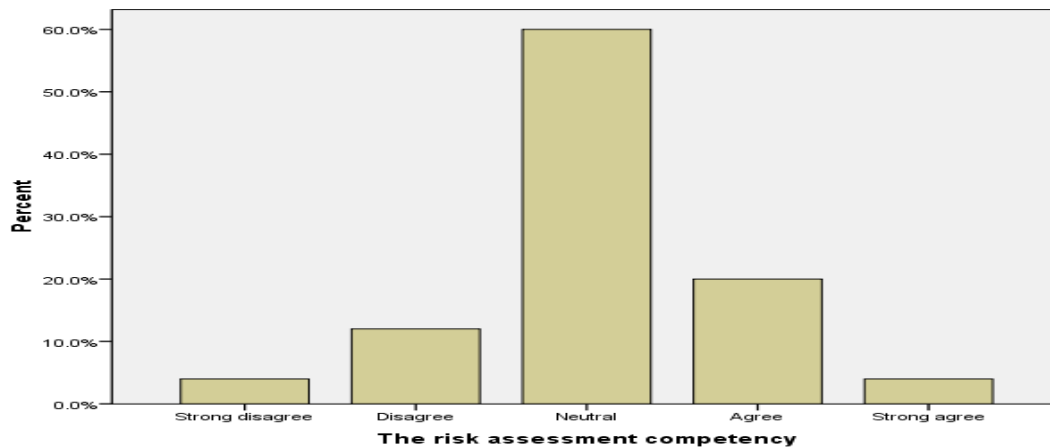
The results revealed that, fifteen respondents representing 60% of the total responses remained neutral to the question whether the risk assessment competence is the factor which affects audit effectiveness in CAS. Five respondents representing 20% of the total responses agreed that the risk assessment competence is the factor which affects audit effectiveness in CAS. One respondent representing 4% of the total responses strongly agreed that the risk assessment competence is the factor which affects audit effectiveness in CAS. While, three respondents representing 12% of the total responses disagreed with risk assessment competence as a factor affecting audit effectiveness in CAS. And lastly, one respondent representing 4% of the total responses strongly disagreed that the risk assessment competence is the factor which affects audit effectiveness in CAS (Figure 4.2). Furthermore the analysis through cross tabulation indicates that, the risk assessment competence has no contribution to the effectiveness of auditing process in CAS (Table 4.4). Therefore basing on this response, the risk assessment competence is not determined as the factor which affects audit effectiveness in CAS.

Table 4.4 The risk assessment competence

		The risk assessment competency					Total
		Strong disagree	Disagree	Neutral	Agree	Strong agree	
The contributions of CAS	Very low	0	0	1	0	0	1
	Low	0	0	1	0	0	1
	Moderate	1	2	12	4	1	20
	High	0	1	1	0	0	2
	Very high	0	0	0	1	0	1
Total		1	3	15	5	1	25

Source: field work (2013)

Figure 4.2 The risk assessment competency



The quality of audit planning judgments

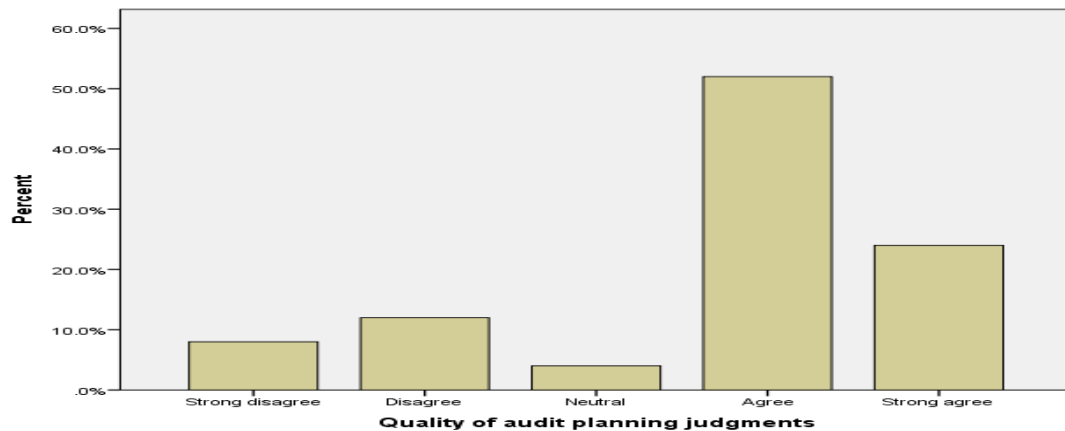
The results showed that, thirteen respondents representing 52% of the total responses agreed that the quality of audit planning judgments is the factor which affects audit effectiveness in CAS. Six respondents representing 24% of the total responses strongly agreed that the quality of audit planning judgments is the factor which affects audit effectiveness in CAS. One respondent representing 4% of the total responses remained neutral to the question whether the quality of audit planning judgments is the factor which affects audit effectiveness in CAS. While, three respondents representing 12% of the total responses disagreed with quality of audit planning judgments as a factor affecting audit effectiveness in CAS. And lastly, two respondents representing 8% of the total responses strongly disagreed that the quality of audit planning judgments is the factor which affects audit effectiveness in CAS (Figure 4.3). Furthermore the analysis through cross tabulation indicates that, the quality of audit planning judgments has contribution to the effectiveness of auditing process in CAS (Table 4.5). Therefore basing on this response, the quality of audit planning judgments is determined as the factor which affects audit effectiveness in CAS.

Table 4.5 Quality of audit planning judgments

		Quality of audit planning judgments					Total
		Strong disagree	Disagree	Neutral	Agree	Strong agree	
The contributions of CAS	Very low	0	0	0	1	0	1
	Low	1	0	0	0	0	1
	Moderate	1	2	1	11	5	20
	High	0	0	0	1	1	2
	Very high	0	1	0	0	0	1
Total		2	3	1	13	6	25

Source: field work (2013)

Figure 4.3 Quality of audit planning judgments



With the regard to the factors which affect the efficiency of auditing process in CAS, the findings were analysed as shown here in table 4.6, 4.7, 4.8, 4.8, 4.9, 4.10, 4.11 and 4.12;

Accountability concern

The results indicated that, thirteen respondents representing 52% of the total responses strongly agreed that accountability concern is a factor which affects audit efficiency in CAS. Eight respondents representing 32% of the total responses agreed that accountability concern is a factor which affects audit efficiency in CAS. Two respondents representing 8% of the total responses remained neutral to the question whether accountability concern is a factor which affects audit efficiency in CAS. While,

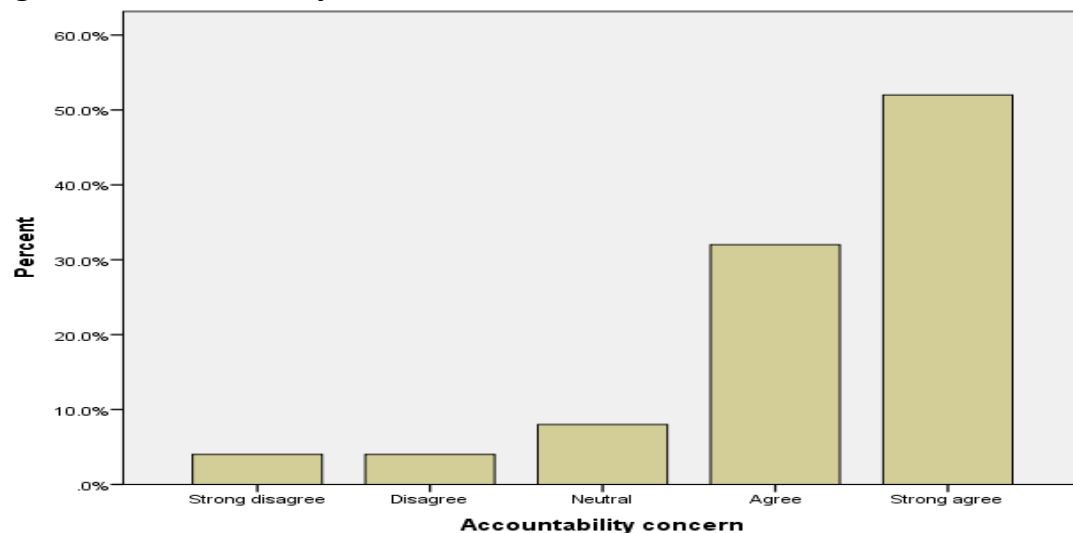
one respondent representing 4% of the total responses disagreed with accountability concern as a factor affecting audit efficiency in CAS. And lastly, one respondent representing 4% of the total responses strongly disagreed that accountability concern is a factor which affects audit efficiency in CAS (4.4). Furthermore the analysis through cross tabulation indicates that, accountability concern has contribution to the efficiency of auditing process in CAS (Table 4.6). Therefore based on this response, the accountability concern is determined as the factor which affects audit efficiency in CAS.

Table 4.6 Accountability concern

		Accountability concern					Total
		Strong disagree	Disagree	Neutral	Agree	Strong agree	
The contributions of CAS	Very low	0	0	0	0	1	1
	Low	0	0	0	1	0	1
	Moderate	1	1	1	7	10	20
	High	0	0	1	0	1	2
	Very high	0	0	0	0	1	1
Total		1	1	2	8	13	25

Source: field work (2013)

Figure 4.4 Accountability concern



Responsibility awareness

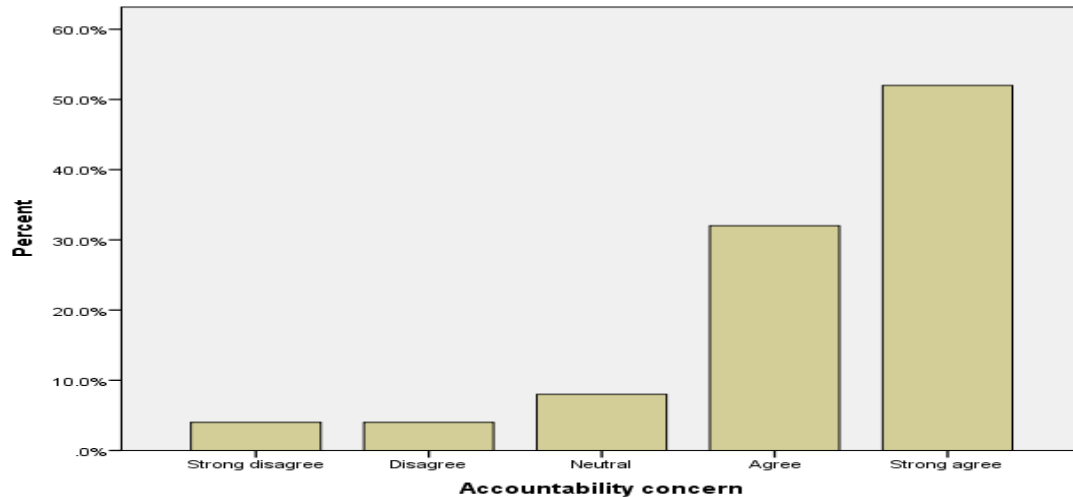
The results showed that, thirteen respondents representing 52% of the total responses strongly agreed that the responsibility awareness is the factor which affects audit efficiency in CAS. Nine respondents representing 36% of the total responses agreed that the responsibility awareness is the factor which affects audit efficiency in CAS. One respondent representing 4% of the total responses remained neutral to the question whether responsibility awareness is the factor which affects audit efficiency in CAS. While, one respondent representing 4% of the total responses disagreed with responsibility awareness as a factor affecting audit efficiency in CAS. And lastly, one respondent representing 4% of the total responses strongly disagreed that the responsibility awareness is the factor which affects audit efficiency in CAS (Figure 4.5). Furthermore the analysis through cross tabulation indicates that, responsibility awareness has contribution to the efficiency of auditing process in CAS (Table 4.7). Therefore based on this response, the responsibility awareness is determined as the factor which affects audit efficiency in CAS.

Table 4.7 Responsibility awareness

		Responsibility awareness					Total
		Strong disagree	Disagree	Neutral	Agree	Strong agree	
The contributions of CAS	Very low	0	0	0	0	1	1
	Low	0	0	0	0	1	1
	Moderate	1	1	0	7	11	20
	High	0	0	0	2	0	2
	Very high	0	0	1	0	0	1
Total		1	1	1	9	13	25

Source: field work (2013)

Figure 4.5 Responsibility awareness



Ethical pressure

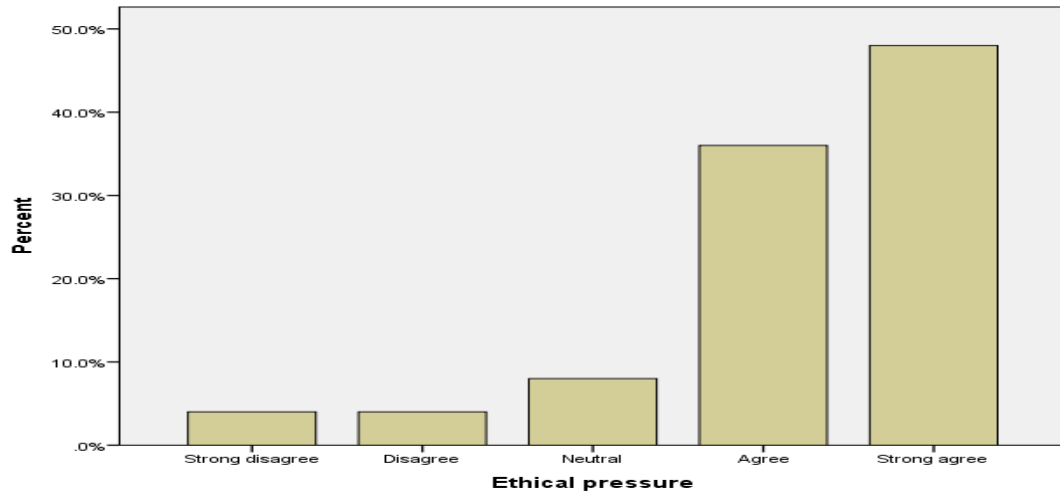
The results revealed that, twelve respondents representing 48% of the total responses strongly agreed that the ethical pressure is the factor which affects audit efficiency in CAS. Nine respondents representing 36% of the total responses agreed that the ethical pressure is the factor which affects audit efficiency in CAS. Two respondents representing 4% of the total responses remained neutral to the question whether the ethical pressure is the factor which affects audit efficiency in CAS. While, one respondent representing 4% of the total responses disagreed with ethical pressure as a factor affecting audit efficiency in CAS. And lastly, one respondent representing 4% of the total responses strongly disagreed that the ethical pressure is the factor which affects audit efficiency in CAS (Figure 4.6). Furthermore the analysis through cross tabulation indicates that, the ethical pressure has contribution to the efficiency of auditing process in CAS (Table 4.8). Therefore based on this response, the ethical pressure is determined as the factor which affects audit efficiency in CAS.

Table 4.8 Ethical pressure

		Ethical pressure					Total
		Strong disagree	Disagree	Neutral	Agree	Strong agree	
The contributions of CAS	Very low	0	0	0	1	0	1
	Low	0	0	0	0	1	1
	Moderate	1	1	1	8	9	20
	High	0	0	0	0	2	2
	Very high	0	0	1	0	0	1
Total		1	1	2	9	12	25

Source: field work (2013)

Figure 4.6 Ethical pressure



Stakeholder forces

The results indicated that, ten respondents representing 40% of the total responses strongly agreed that the stakeholder force is the factor which affects audit efficiency in CAS. Seven respondents representing 28% of the total responses agreed that the stakeholder force is the factor which affects audit efficiency in CAS. One respondent representing 4% of the total responses remained neutral to the question whether stakeholder force is the factor which affects audit efficiency in CAS. While, four respondents representing 16% of the total responses disagreed with stakeholder force as

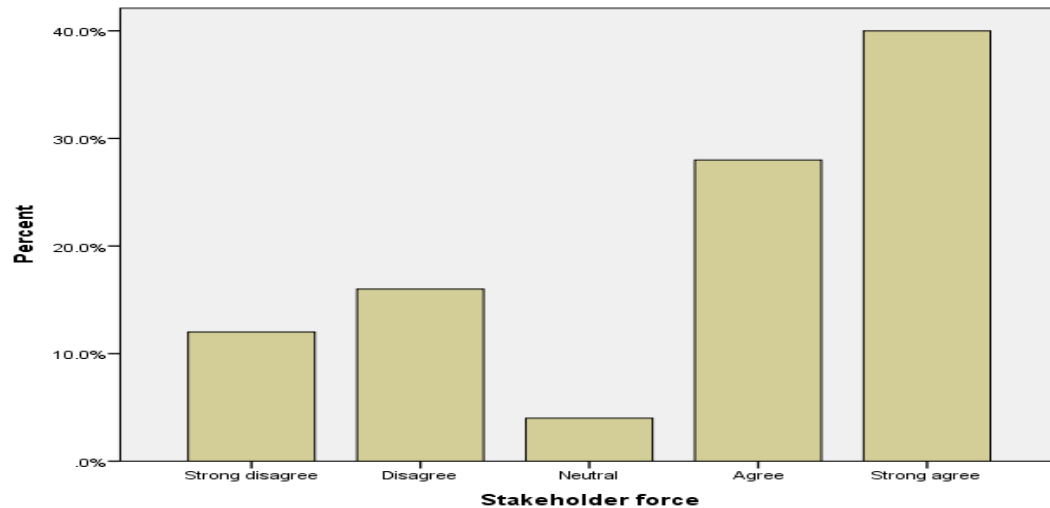
a factor affecting audit efficiency in CAS. And lastly, three respondents representing 12% of the total responses strongly disagreed that the stakeholder force is the factor which affects audit efficiency in CAS (Figure 4.7). Furthermore the analysis through cross tabulation indicates that, the stakeholder force has contribution to the efficiency of auditing process in CAS (Table 4.9). Therefore based on this response, the stakeholder force is determined as the factor which affects audit efficiency in CAS.

Table 4.9 Stakeholder forces

		Stakeholder force					Total
		Strong disagree	Disagree	Neutral	Agree	Strong agree	
The contributions of CAS	Very low	0	1	0	0	0	1
	Low	0	0	0	0	1	1
	Moderate	3	3	0	6	8	20
	High	0	0	1	1	0	2
	Very high	0	0	0	0	1	1
Total		3	4	1	7	10	25

Source: field work (2013)

Figure 4.7 Stakeholder force



Audit competitive

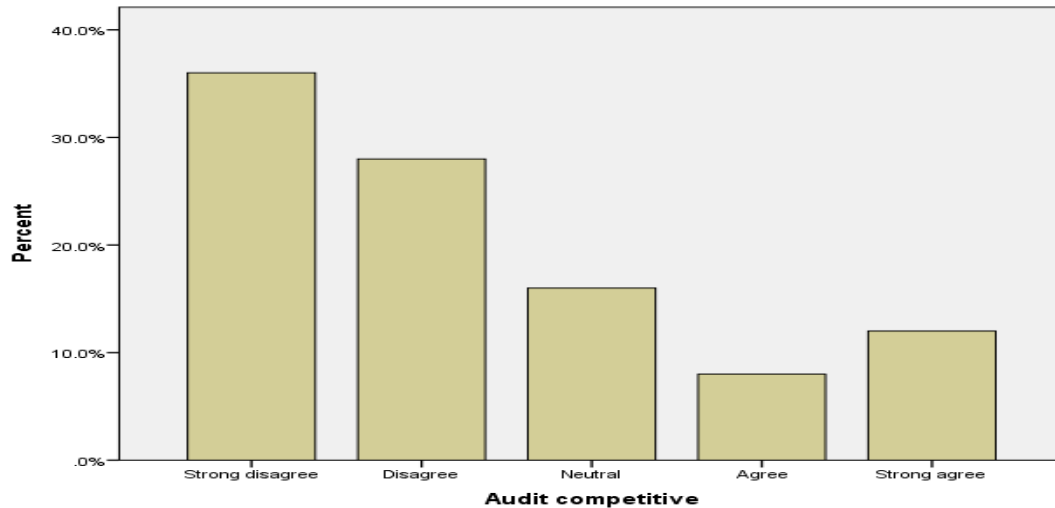
The results showed that, nine respondents representing 36% of the total responses strongly disagreed that the audit competitive is the factor which affects audit efficiency in CAS. Six respondents representing 24% of the total responses disagreed with audit competitive as a factor affecting audit efficiency in CAS. Four respondents representing 16% of the total responses remained neutral to the question whether the audit competitive is the factor which affects audit efficiency in CAS. While, three respondents representing 12% of the total responses agreed that the audit competitive is the factor which affects audit efficiency in CAS. And lastly, three respondents representing 12% of the total responses strongly agreed that the audit competitive is the factor which affects audit efficiency in CAS (4.8). Furthermore the analysis through cross tabulation indicates that, the audit competitive has contribution to the efficiency of auditing process in CAS (Table 4.10). Therefore based on this response, the audit competitive is determined as not the factor which affects audit efficiency in CAS.

Table 4.10 Audit competitive

		Audit competitive					Total
		Strong disagree	Disagree	Neutral	Agree	Strong agree	
The contributions of CAS	Very low	1	0	0	0	0	1
	Low	1	0	0	0	0	1
	Moderate	6	6	3	2	3	20
	High	1	1	0	0	0	2
	Very high	0	0	1	0	0	1
Total		9	7	4	2	3	25

Source: field work (2013)

Figure 4.8 Audit competitive



Completeness of audit risk judgment

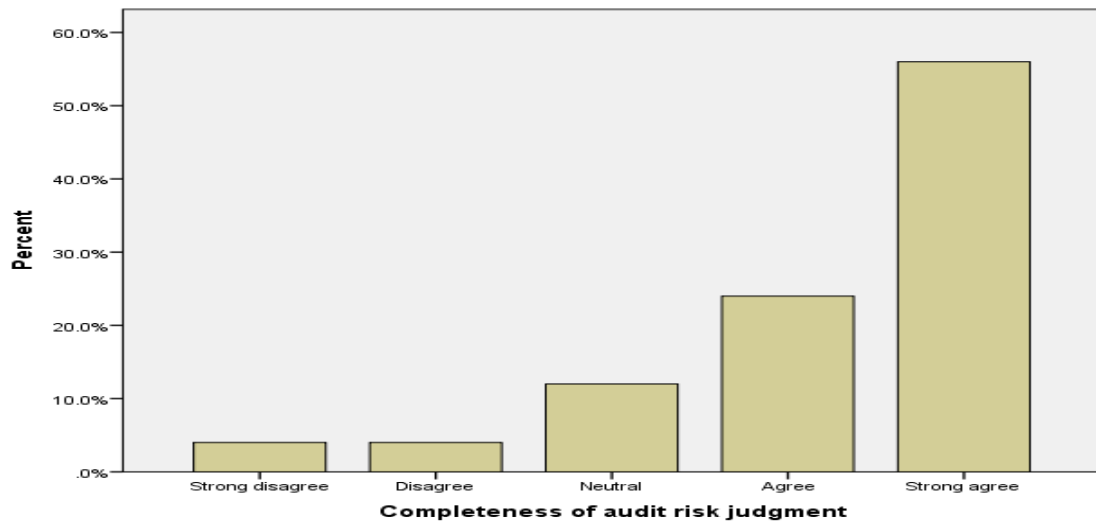
The results revealed that, fourteen respondents representing 56% of the total responses strongly agreed that the completeness of audit risk judgment is the factor which affects audit efficiency in CAS. Six respondents representing 24% of the total responses agreed that the completeness of audit risk judgment is the factor which affects audit efficiency in CAS. Three respondents representing 12% of the total responses remained neutral to the question whether the completeness of audit risk judgment is the factor which affects audit efficiency in CAS. While, one respondent representing 4% of the total responses disagreed with completeness of audit risk judgment as the factor affecting audit efficiency in CAS. And lastly, one respondent representing 4% of the total responses strongly disagreed that the completeness of audit risk judgment is the factor which affects audit efficiency in CAS (Figure 4.9). Furthermore the analysis through cross tabulation indicates that, the completeness of audit risk judgment has contribution to the efficiency of auditing process in CAS (Table 4.11). Therefore based on this response, the completeness of audit risk judgment is determined as the factor which affects audit efficiency in CAS.

Table 4.11 Completeness of audit risk judgment

		Completeness of audit risk judgment					Total
		Strong disagree	Disagree	Neutral	Agree	Strong agree	
The contributions of CAS	Very low	0	0	0	0	1	1
	Low	0	0	0	1	0	1
	Moderate	1	1	2	5	11	20
	High	0	0	0	0	2	2
	Very high	0	0	1	0	0	1
Total		1	1	3	6	14	25

Source: field work (2013)

Figure 4.9 Completeness of audit risk judgment



Appropriateness of sample selected

The results indicated that, twelve respondents representing 48% of the total responses strongly agreed that the appropriateness of sample selected is the factor which affects audit efficiency in CAS. Ten respondents representing 40% of the total responses agreed that the appropriateness of sample selected is the factor which affects audit efficiency in CAS. One respondent representing 4% of the total responses remained neutral to the

question whether the appropriateness of sample selected is the factor which affects audit efficiency in CAS. While, one respondent representing 4% of the total responses disagreed with appropriateness of sample selected as a factor affecting audit efficiency in CAS. And lastly, one respondent representing 4% of the total responses strongly disagreed that the appropriateness of sample selected is the factor which affects audit efficiency in CAS (Figure 4.10). Furthermore the analysis through cross tabulation indicates that, the appropriateness of sample selected has contribution to the efficiency of auditing process in CAS (Table 4.12). Therefore based on this response, the appropriateness of sample selected is determined as the factor which affects audit efficiency in CAS.

Table 4.12 Appropriateness of sample selected

		Appropriateness of sample selected					Total
		Strong disagree	Disagree	Neutral	Agree	Strong agree	
The contributions of CAS	Very low	0	0	0	1	0	1
	Low	0	0	0	0	1	1
	Moderate	1	1	1	8	9	20
	High	0	0	0	1	1	2
	Very high	0	0	0	0	1	1
Total		1	1	1	10	12	25

Source: field work (2013)

Figure 4.10 Appropriateness of sample selected



4.2.3 Analysis of the research objective number three

The third research objective of this study intended to identify the significant problems organisation face in CAS. Also the level of security and internal control were studied. The findings were analysed as shown here in table 4.13 and 4.14;

The level of security in CAS within the organisation

The results revealed that, eighteen respondents representing 72% of the total responses said that the level of security in CAS within the organisation is moderate. Three respondents representing 12% of the total responses said that the level of security in CAS within the organisation is high. Two respondents representing 8% of the total responses said that the level of security in CAS within organisation is very high. While, one respondent representing 4% of the total responses said that the level of security is low. And lastly one respondent representing 4% of the total responses said that the level of security within organisation is very low (Table 4.13). Therefore based on this response the level of security within the organisation is moderate.

Table 4.13 The level of security in CAS within the organization**Level of security**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very low	1	4.0	4.0	4.0
	Low	1	4.0	4.0	8.0
	Moderate	18	72.0	72.0	80.0
	High	3	12.0	12.0	92.0
	Very high	2	8.0	8.0	100.0
	Total	25	100.0	100.0	

Source: field work (2013)**The level of internal control within the organisation**

The results indicated that, nineteen respondents representing 76% of the total responses said that the level of internal control in CAS within the organisation is moderate. Three respondents representing 12% of the total responses said that the level of internal control in CAS within the organisation is high. One respondent representing 4% of the total responses said that the level of internal in CAS within organisation is very high. While, one respondent representing 4% of the total responses said that the level of security is low. And lastly one respondent representing 4% of the total responses said that the level of internal control within organisation is very low (Table 4.14). Therefore based on this response the level of internal control within the organisation is moderate.

Table 4.14 The level of internal control in CAS within the organization**Internal control**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very low	1	4.0	4.0	4.0
	Low	1	4.0	4.0	8.0
	Moderate	19	76.0	76.0	84.0
	High	3	12.0	12.0	96.0
	Very high	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

Source: field work (2013)

Regarding the problems organisation faces in CAS, the following are the results found in the study area;

Costs

The results showed that, eleven respondents representing 44% of the total responses strongly agreed that the costs such as staff training and software updates is the problem organisation faces in CAS. Nine respondents representing 36% of the total responses agreed that the cost is the problem organisation faces in CAS. Two respondents representing 8% of the total responses remained neutral to the question whether the cost is the problem organisation faces in CAS. While, one respondent representing 4% of the total responses disagreed with cost as a problem organisation faces in CAS. And lastly, two respondents representing 8% of the total responses strongly disagreed that the cost is the problem organisation faces in CAS (Table 4.15). Therefore based on this response, the cost is determined as the problem organisation face in CAS.

Table 4.15 Costs

Costs					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	2	8.0	8.0	8.0
	Disagree	1	4.0	4.0	12.0
	Neutral	2	8.0	8.0	20.0
	Agree	9	36.0	36.0	56.0
	Strong agree	11	44.0	44.0	100.0
	Total	25	100.0	100.0	

Source: field work (2013)

Competent personnel needs

The results indicated that, eight respondents representing 32% of the total responses strongly agreed that the competent personnel need is the problem organisation faces in CAS. Seven respondents representing 28% of the total responses agreed that the competent personnel need is the problem organisation faces in CAS. Three respondents representing 12% of the total responses remained neutral to the question whether the

competent personnel need is the problem organisation faces in CAS. While, five respondents representing 20% of the total responses disagreed with competent personnel need as a problem organisation faces in CAS. And lastly, two respondents representing 8% of the total responses strongly disagreed that the competent personnel need is the problem organisation faces in CAS (Table 4.16). Therefore based on this response, the competent personnel need is determined as the problem organisation faces in CAS.

Table 4.16 Competent personnel needs

Competent personnel needs					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	2	8.0	8.0	8.0
	Disagree	5	20.0	20.0	28.0
	Neutral	3	12.0	12.0	40.0
	Agree	7	28.0	28.0	68.0
	Strong agree	8	32.0	32.0	100.0
	Total	25	100.0	100.0	

Source: field work (2013)

The employee sharing password

The results showed that, thirteen respondents representing 52% of the total responses strongly agreed that the employee sharing password is the problem organisation faces in CAS. Six respondents representing 24% of the total responses agreed that the employee sharing password is the problem organisation faces in CAS. One respondent representing 4% of the total responses remained neutral to the question whether the employee sharing password is the problem organisation faces in CAS. While, two respondents representing 8% of the total responses disagreed with employee sharing password as a problem organisation faces in CAS. And lastly, three respondents representing 12% of the total responses strongly disagreed that the employee sharing password is the problem organisation faces in CAS (Table 4.17). Therefore based on this

response, the employee sharing password is determined as the problem organisation faces in CAS.

Table 4.17 The employee sharing password

The employee sharing password

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong agree	3	12.0	12.0
	Disagree	2	8.0	20.0
	Neutral	1	4.0	24.0
	Agree	6	24.0	48.0
	Strong agree	13	52.0	100.0
	Total	25	100.0	100.0

Source: field work (2013)

The accidental and intentional entry of bad data

The results revealed that, nine respondents representing 36% of the total responses strongly disagreed that the accidental and intentional entry of bad data is the problem organisation faces in CAS. Eight respondents representing 32% of the total responses disagreed with accidental and intentional entry of bad data as a problem organisation faces in CAS. Three respondents representing 12% of the total responses remained neutral to the question whether the accidental and intentional entry of bad data is the problem organisation faces in CAS. While, three respondents representing 12% of the total responses agreed that the accidental and intentional entry of bad data is the problem organisation faces in CAS. And lastly, two respondents representing 8% of the total responses strongly agreed that the accidental and intentional entry of bad data is the problem organisation faces in CAS (Table 4.18). Therefore based on this response, the accidental and intentional entry of bad data is determined as not the problem organisation faces in CAS.

Table 4.18 The accidental and intentional entry of bad data**The accidental and intentional entry of bad data**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	9	36.0	36.0	36.0
	Disagree	8	32.0	32.0	68.0
	Neutral	3	12.0	12.0	80.0
	Agree	3	12.0	12.0	92.0
	Strong agree	2	8.0	8.0	100.0
	Total	25	100.0	100.0	

Source: field work (2013)**The introduction of viruses**

The results showed that, eleven respondents representing 44% of the total responses strongly agreed that the introduction of viruses is the problem organisation faces in CAS. Ten respondents representing 40% of the total responses agreed that the introduction of viruses is the problem organisation faces in CAS. Two respondents representing 8% of the total responses remained neutral to the question whether the introduction of viruses is the problem organisation faces in CAS. While, one respondent representing 4% of the total responses disagreed with introduction of viruses as a problem organisation faces in CAS. And lastly, one respondent representing 4% of the total responses strongly disagreed that the introduction of viruses is the problem organisation faces in CAS (Table 4.19). Therefore based on this response, the introduction of viruses is determined as the problem organisation faces in CAS.

Table 4.19 The introduction of viruses**The introduction of viruses**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	1	4.0	4.0
	disagree	1	4.0	8.0
	Neutral	2	8.0	16.0
	Agree	10	40.0	56.0
	Strong agree	11	44.0	100.0
	Total	25	100.0	100.0

Source: field work (2013)**Error in programming**

The results indicated that, ten respondents representing 40% of the total responses strongly disagreed that the error in programming is the problem organisation faces in CAS. Eleven respondents representing 44% of the total responses disagreed with error in programming as a problem organisation faces in CAS. Two respondents representing 8% of the total responses remained neutral to the question whether the error in programming is the problem organisation faces in CAS. While, one respondent representing 4% of the total responses agreed that the error in programming is the problem organisation faces in CAS. And lastly, one respondent representing 4% of the total responses strongly agreed that the error in programming is the problem organisation faces in CAS (Table 4.20). Therefore based on this response, the error in programming is determined as not the problem organisation faces in CAS.

Table 4.20 Errors in programming

Errors in programming					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	10	40.0	40.0	40.0
	Disagree	11	44.0	44.0	84.0
	Neutral	2	8.0	8.0	92.0
	Agree	1	4.0	4.0	96.0
	Strong agree	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

Source: field work (2013)

The loss of audit trail

The results indicated that, thirteen respondents representing 52% of the total responses strongly agreed that the loss of audit trail is the problem organisation faces in CAS. Nine respondents representing 36% of the total responses agreed that the loss of audit trail is the problem organisation faces in CAS. One respondent representing 4% of the total responses remained neutral to the question whether the loss of audit trail is the problem organisation faces in CAS. While, one respondent representing 4% of the total responses disagreed with loss of audit trail as the problem organisation faces in CAS. And lastly, one respondents representing 4% of the total responses strongly disagreed that the loss of audit trail is the problem organisation faces in CAS (Table 4.21). Therefore based on this response, the loss of audit trail is determined as the problem organisation faces in CAS.

Table 4.21 The loss of audit trail

The loss of audit trail					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	1	4.0	4.0	4.0
	Disagree	1	4.0	4.0	8.0
	Neutral	1	4.0	4.0	12.0
	Agree	9	36.0	36.0	48.0
	Strong agree	13	52.0	52.0	100.0
	Total	25	100.0	100.0	

Source: field work (2013)

The lack of segregation between duties

The results revealed that, eight respondents representing 32% of the total responses strongly agreed that the lack of segregation between duties is the problem organisation faces in CAS. Eight respondents representing 32% of the total responses agreed that the lack of segregation between duties is the problem organisation faces in CAS. Two respondents representing 8% of the total responses remained neutral to the question whether the lack of segregation between duties is the problem organisation faces in CAS. While, four respondents representing 4% of the total responses disagreed with lack of segregation between duties as a problem organisation faces in CAS. And lastly, three respondents representing 12% of the total responses strongly disagreed that the lack of segregation between duties is the problem organisation faces in CAS (Table 4.22). Therefore based on this response, the lack of segregation between duties is determined as the problem organisation faces in CAS.

Table 4.22 The lack of segregation between duties**The lack of segregation between duties**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	3	12.0	12.0	12.0
	Disagree	4	16.0	16.0	28.0
	Neutral	2	8.0	8.0	36.0
	Agree	8	32.0	32.0	68.0
	Strong agree	8	32.0	32.0	100.0
	Total	25	100.0	100.0	

Source: field work (2013)

The potential for observing error or fraud in CAS is less

The results showed that, seven respondents representing 28% of the total responses strongly agreed that the potential for observing error or fraud in CAS is less is the problem organisation faces in CAS. Eleven respondents representing 44% of the total responses agreed that the potential for observing error or fraud in CAS is less is the problem organisation faces in CAS. Two respondents representing 8% of the total responses remained neutral to the question whether the potential for observing error or fraud in CAS is less is the problem organisation faces in CAS. While, two respondents representing 8% of the total responses disagreed with potential for observing error in CAS is less as a problem organisation faces in CAS. And lastly, three respondents representing 12% of the total responses strongly disagreed that the potential for observing error or fraud in CAS is less is the problem organisation faces in CAS (Table 4.23). Therefore based on this response, the potential for observing error or fraud in CAS is less is determined as the problem organisation faces in CAS.

Table 4.23 The potential for observing errors or fraud in CAS is less

The potential for observing errors or fraud in CAS is less

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	3	12.0	12.0	12.0
	Disagree	2	8.0	8.0	20.0
	Neutral	2	8.0	8.0	28.0
	Agree	11	44.0	44.0	72.0
	Strong agree	7	28.0	28.0	100.0
	Total	25	100.0	100.0	

Source: field work (2013)

Change of legal regulation and company policies

The results revealed that, five respondents representing 20% of the total responses strongly disagreed that the change of legal regulation and company policies is the problem organisation faces in CAS. Ten respondents representing 40% of the total responses disagreed with change of legal regulation and company policies as a problem organisation faces in CAS. Three respondents representing 12% of the total responses remained neutral to the question whether the change of legal regulation and company policies is the problem organisation faces in CAS. While, four respondents representing 16% of the total responses agreed that the change of legal regulation and company policies is the problem organisation faces in CAS. And lastly, three respondents representing 12% of the total responses strongly agreed that the change of legal regulation and company policies is the problem organisation faces in CAS (Table 4.24). Therefore based on this response, the change of legal regulation and company policies is determined as the problem organisation faces in CAS.

Table 4.24 Change of legal regulation and company policies**Change of legal regulation and company policies**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	5	20.0	20.0
	Disagree	8	32.0	52.0
	Neutral	5	20.0	72.0
	Agree	4	16.0	88.0
	Strong agree	3	12.0	100.0
	Total	25	100.0	100.0

Source: field work (2013)**4.2.4 Analysis of the research objective number four**

The fourth research question of this study intended to identify the possible weakness and problems that are associated with auditing in CAS and suggesting ways of correcting them. The following are the findings;

The challenge of paperless audit trail

The results revealed that, fourteen respondents representing 56% of the total responses strongly agreed that the challenge of paperless audit trail is the problem encountered with auditing in CAS. Six respondents representing 24% of the total responses agreed that the challenge of paperless audit trail is the problem encountered with auditing in CAS. Two respondents representing 8% of the total responses remained neutral to the question whether the challenge of paperless audit trail is the problem encountered with auditing in CAS. While, two respondents representing 8% of the total responses disagreed with challenge of paperless audit trail as a problem encountered with auditing in CAS. And lastly, one respondent representing 4% of the total responses strongly disagreed that the challenge of paperless audit trail is the problem encountered with auditing in CAS (Table 4.25). Therefore based on this response, the challenge of paperless audit trail is determined as the encountered with auditing in CAS.

Table 4.25 The challenge of paperless audit trails

The challenge of paperless audit trails

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	1	4.0	4.0	4.0
	Disagree	2	8.0	8.0	12.0
	Neutral	2	8.0	8.0	20.0
	Agree	6	24.0	24.0	44.0
	Strong agree	14	56.0	56.0	100.0
	Total	25	100.0	100.0	

Source: field work (2013)

Changing technology

The results showed that, fourteen respondents representing 56% of the total responses strongly agreed that the changing technology is the problem encountered with auditing in CAS. Seven respondents representing 28% of the total responses agreed that the changing technology is the problem encountered with auditing in CAS. Two respondents representing 8% of the total responses remained neutral to the question whether the changing technology is the problem encountered with auditing in CAS. While, one respondent representing 4% of the total responses disagreed with changing technology as a problem encountered with auditing in CAS. And lastly, one respondent representing 4% of the total responses strongly disagreed that the changing technology is the problem encountered with auditing in CAS (Table 4.26). Therefore based on this response, the changing technology is a problem encountered with auditing in CAS.

Table 2.26 Changing technology**Changing technology**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	1	4.0	4.0	4.0
	Disagree	1	4.0	4.0	8.0
	Neutral	2	8.0	8.0	16.0
	Agree	7	28.0	28.0	44.0
	Strong agree	14	56.0	56.0	100.0
	Total	25	100.0	100.0	

Source: field work (2013)**Control and security concern**

The results indicated that, nine respondents representing 36% of the total responses strongly agreed that the control and security concern is the problem encountered with auditing in CAS. Eight respondents representing 32% of the total responses agreed that the control and security concern is the problem encountered with auditing in CAS. Three respondents representing 12% of the total responses remained neutral to the question whether the control and security concern is the problem encountered with auditing in CAS. While, three respondents representing 12% of the total responses disagreed with control and security concern as a problem encountered with auditing in CAS. And lastly, two respondents representing 8% of the total responses strongly disagreed that the control and security concern is the problem encountered with auditing in CAS (Table 4.27). Therefore based on this response, the control and security concern is determined as the problem encountered with auditing in CAS.

Table 4.27 Control and security concerns**Control and security concerns**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong agree	2	8.0	8.0
	Disagree	3	12.0	20.0
	Neutral	3	12.0	32.0
	Agree	8	32.0	64.0
	Strong agree	9	36.0	100.0
	Total	25	100.0	100.0

Source: field work (2013)

Process oriented-not results oriented

The results indicated that, ten respondents representing 40% of the total responses strongly agreed that the process oriented-not results oriented is the problem encountered with auditing in CAS. Seven respondents representing 28% of the total responses agreed that the process oriented-not results oriented is the problem encountered with auditing in CAS. Two respondents representing 8% of the total responses remained neutral to the question whether the process oriented-not results oriented is the problem encountered with auditing in CAS. While, three respondents representing 12% of the total responses disagreed with process oriented-not results oriented as a problem encountered with auditing in CAS. And lastly, three respondents representing 12% of the total responses strongly disagreed that the process oriented-not results oriented is the problem encountered with auditing in CAS (Table 4.28). Therefore based on this response, the process oriented-not results oriented is a problem encountered with auditing in CAS.

Table 4.28 Process oriented-not results oriented

Process oriented-not results oriented				
	Frequency	Percent	Valid Percent	Cumulative Percent
Strong disagree	3	12.0	12.0	12.0
Disagree	3	12.0	12.0	24.0
Valid Agree	9	36.0	36.0	60.0
Strong agree	10	40.0	40.0	100.0
Total	25	100.0	100.0	

Source: field work (2013)

Complexity of the practice

The results revealed that, nine respondents representing 36% of the total responses strongly agreed that the complexity of the practice is the problem encountered with auditing in CAS. Nine respondents representing 36% of the total responses agreed that the complexity of the practice is the problem encountered with auditing in CAS. Three respondents representing 12% of the total responses remained neutral to the question whether the complexity of the practice is the problem encountered with auditing in CAS. While, two respondents representing 8% of the total responses disagreed with complexity of the practice as a problem encountered with auditing in CAS. And lastly, two respondents representing 8% of the total responses strongly disagreed that the complexity of the practice is the problem encountered with auditing in CAS (Table 4.29). Therefore based on this response, the complexity of the practice is a problem encountered with auditing in CAS.

Table 4.29 Complexity of the practice

Complexity of the practice				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	2	8.0	8.0
	Disagree	2	8.0	16.0
	Neutral	3	12.0	28.0
	Agree	9	36.0	64.0
	Strong agree	9	36.0	100.0
	Total	25	100.0	100.0

Source: field work (2013)

Professional integration

The results showed that, nine respondents representing 36% of the total responses strongly agreed that the professional integration is the problem encountered with auditing in CAS. Nine respondents representing 36% of the total responses agreed that the professional integration is the problem encountered with auditing in CAS. One respondent representing 4% of the total responses remained neutral to the question whether the professional integration is the problem encountered with auditing in CAS. While, four respondents representing 16% of the total responses disagreed with professional integration as a problem encountered with auditing in CAS. And lastly, two respondents representing 8% of the total responses strongly disagreed that the professional integration is the problem encountered with auditing in CAS (Table 4.30). Therefore based on this response, the professional integration is the problem encountered with auditing in CAS.

Table 4.30 Professional integration

Professional integration				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	2	8.0	8.0
	Disagree	4	16.0	24.0
	Neutral	1	4.0	28.0
	Agree	9	36.0	64.0
	Strong agree	9	36.0	100.0
	Total	25	100.0	100.0

Source: field work (2013)

Sources of errors and inconsistency

The results indicated that, eleven respondents representing 44% of the total responses strongly agreed that the source of errors and inconsistency is the problem encountered with auditing in CAS. Eight respondents representing 32% of the total responses agreed that the source of errors and inconsistency is the problem encountered with auditing in CAS. Two respondents representing 8% of the total responses remained neutral to the question whether the source of errors and inconsistency is the problem encountered with auditing in CAS. While, two respondents representing 8% of the total responses disagreed with source of errors and inconsistency as a problem encountered with auditing in CAS. And lastly, two respondents representing 8% of the total responses strongly disagreed that the source of errors and inconsistency is the problem encountered with auditing in CAS (Table 4.31). Therefore based on this response, the source of errors and inconsistency is the problem encountered with auditing in CAS.

Table 4.31 Sources of errors and inconsistency
sources of errors and inconsistency

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strong disagree	2	8.0	8.0	8.0
Disagree	2	8.0	8.0	16.0
Neutral	2	8.0	8.0	24.0
Agree	8	32.0	32.0	56.0
Strong agree	11	44.0	44.0	100.0
Total	25	100.0	100.0	

Source: field work (2013)

Personal computer environment

The results indicated that, eleven respondents representing 44% of the total responses strongly agreed that the personal computer environment is the problem encountered with auditing in CAS. Seven respondents representing 28% of the total responses agreed that the personal computer environment is the problem encountered with auditing in CAS. Three respondents representing 12% of the total responses remained neutral to the question whether the personal computer environment is the problem encountered with auditing in CAS. While, two respondents representing 8% of the total responses disagreed with personal computer environment as a problem encountered with auditing in CAS. And lastly, two respondents representing 8% of the total responses strongly disagreed that the personal computer environment is the problem encountered with auditing in CAS (Table 4.32). Therefore based on this response, the personal computer environment is the problem encountered with auditing in CAS.

Table 4.32 Personal computer environment**Personal computer environment**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strong disagree	2	8.0	8.0	8.0
	Disagree	2	8.0	8.0	16.0
	Neutral	3	12.0	12.0	28.0
	Agree	7	28.0	28.0	56.0
	Strong agree	11	44.0	44.0	100.0
	Total	25	100.0	100.0	

Source: field work (2013)

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.0 Introduction

This chapter discusses the findings of the study by considering research objectives and questions addressed in chapter one.

5.1 Discussion of the findings

With the regard to the contributions of CAS to the effectiveness and efficiency of auditing process; the findings show that the contributions of CAS to the effectiveness and efficiency of auditing process is moderate. The results are consistent with the findings of the study by Theobald (2008) which revealed that CAS contributes to the effectiveness and efficiency by 85%. Further more the researcher of this study noted that, CAS poses a small number of contributions toward the effectiveness and efficiency of auditing process such as; auditors save time in reviewing financial documents like cash books and vouchers, and they can get some few reports from the system immediately as they inquire for their works. This is due to the fact that the EPICOR package is partly used for both Finance division and Audit unit in performing their works, some of the modules are not in use such as; individual trial balance, balance sheet, and cash flow statements for each account. The auditors have no skills and enough knowledge of CAS then they find difficult to conduct audit process under computerised environment. Therefore the auditors still base on MAS to perform their works.

Regarding the factors affecting effectiveness and efficiency of auditing process in CAS the results show that; the knowledge of computerised accounting system and quality of audit planning are the factors which affect audit effectiveness in CAS in local government authority, this results confirm the findings of Cengage (2011). While the risk assessment competency is not the factor affecting audit effectiveness in CAS. This

result contradicts by the findings of Cengage (2011) which found that risk assessment competency is the factor which affects audit effectiveness in CAS. Further more the results of the study revealed that internal auditors need to enhance their knowledge and skills of CAS for the purpose of planning, directing, supervising and reviewing work performed.

On the other hand the results show that; accountability concern, responsibility awareness, ethical pressure, stakeholder force, completeness of audit risk judgment and appropriateness of sample selected are the factors which affect audit efficiency in CAS. This result confirms the findings of Cengage (2010). But audit competitive is considered to have no influence on audit efficiency as majority of the respondents disagreed to the question on audit competitive is a factor which affect audit efficiency in CAS. Again this result is opposed by the finding of Cengage (2010) which found that audit competitive is a factor which affects audit efficiency in CAS.

Pertaining to the significant problems the organisation faces in computerised accounting system the results show that; costs such as staff training and software updates, competent personnel needs, the employees sharing password, the introduction of viruses, the loss of audit trail, the lack of segregation of duties and the potential for observing errors or fraud in CAS is less are the problems organization faces in CAS. While the accidental and intentional entry of bad data, error in programming, and change of legal regulation and company policies are not the problems MDC faces in CAS. And other problems organisation faces in CAS are; network problem, power problem and there are few computers which are connected with the intranet.

The results revealed that the level of security and internal control is moderate. This result is consistence with the findings by Edward (2011). In his paper, he noted that the level of internal control system is average and there is strong relationship between internal controls and the quality of financial statements. The internal auditors focus primarily on traditional risks assessment and controls such as physical presence in stock

taking. Less attention has been directed to IT data integrity, application processing and system development.

Further more the results show that the MDC has good control on data protection against damage. The council use different ways to protect data from damage such as; the council maintains computer room which is restricted to some extent, only authorized staffs have access to computers and the council use antivirus programmes to protect data and files from viruses' attack.

Finally with regard to the problems encountered with auditing in CAS. The results show that; the challenge of paperless audit trails, changing technology, control and security concerns, process oriented-not results oriented, complexity of the practice, professional integration, source of errors and inconsistency and personal computer environment are the problem encountered with auditing in CAS. This result is consistency with the findings of the study by Mwasalwiba (2006). In his study, he noted that gaining sufficient evidence in paperless (electronic) environment is a challenging task for most auditors.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMENDATION

6.0 Introduction

This chapter presents summary, conclusion and recommendation of the study. Also presents the recommendation for further study.

6.1 Summary

The study has assessed the effects of computerised accounting system on auditing process the case study of MDC. The specific objectives of this study include; to examine the contributions of CAS to the effectiveness and efficiency of the auditing process, to examine the factors affecting the effectiveness and efficiency of auditing process in CAS and to identify significant problems which organisation faces in CAS. The assessment was made by measuring the effectiveness and efficiency of auditing process through studying the installed computerised accounting system (EPICOR). The research was well conducted and the researcher succeeded to get relevant data through reviewing documents and questionnaires which were provided to 30 respondents. The collected data were analysed through descriptive statistics and cross tabulation analysis.

The results revealed that; the contribution of CAS to the effectiveness and efficiency of auditing process is moderate. The knowledge of computerised accounting system and quality of audit planning are the factors which affect audit effectiveness in CAS in local government authority while the risk assessment competency is not the factor which affects audit effectiveness in CAS. Accountability concern, responsibility awareness, ethical pressure, stakeholder force, completeness of audit risk judgment and appropriateness of sample selected are the factors which affect audit efficiency in CAS while audit competitive is not the factor which affect audit efficiency in CAS. Furthermore; costs, competent personnel needs, the employees sharing password, the

introduction of viruses, the loss of audit trail, the lack of segregation of duties and the potential for observing errors or fraud in CAS is less are the problems organization faces in CAS. While the accidental and intentional entry of bad data, error in programming, and change of legal regulation and company policies are not the problems MDC faces in CAS. Finally the results showed that; the challenge of paperless audit trail, changing technology, control and security concerns, process oriented-not results oriented, complexity of the practice, professional integration, sources of errors and inconsistency and personal computer environment are the problems encountered with auditing in CAS.

6.2 Conclusion

Although CAS poses a small number of contributions toward the effectiveness and efficiency of auditing process such as auditors save time in reviewing financial documents and they can print reports from the system immediately as they inquire for their work. The findings show that the contributions of CAS to the effectiveness and efficiency of auditing process is moderate.

Therefore this study concludes that the auditing process in computerised accounting system is not effective and efficient particularly at Mtwara district council.

6.3 Recommendation

From the point of view of the researcher the following were recommended. All staff members who are responsible for maintaining operations in CAS should not exchange their password for security purposes and to reduce hacking problems.

However, all posted data, files and any important information must be protected against damages by creating backups, in case of software and hardware disaster. Removable discs and cartridge can also be used to store other documents. Also antivirus programs must be updated more often and all computers should be scanned daily so that the management can be sure of safety of all files and other important information.

Since the organisation does not performing well in CAS, the management needs to put some more effort on training of the staffs so as to make them user friend of the system and to cope with the technology's development. This will help to increase efficiency and also improve the entire system.

Management should emphasize on segregation of duties so as to make the internal control system more strong. The lack of segregation of duties discourages team spirit of other staffs. Segregation of duty makes every member of the staff to become a good team player and improve performance; also this will save cost in terms of man power acquisitions and will improve competence.

The problem of power failure was encountered at MDC, the organisation should be aware of the whole system because the breakdown will result to the loss of records already entered into machines. These systems need to have reliable power source to operate continuously. The management should maintain standby generator in order to avoid unwelcome power failures.

Since technology changes every day, hence volatile there is a need for auditors to have a continuous learning. Further more, auditors and all IT specialists have to keep in touch with ever changing IT environments so as to keep pace with the organisation system changes.

Therefore, management should find ways to over come these problems highlighted above.

6.4 Recommendation for further study

This study could not identify other ways and procedures to be taken to overcome problems encountered with auditing in CAS therefore further studies are recommended to find out other ways and procedures to overcome those problems. Also this study considers only local government authorities, further studies are needed to assess the

effects of CAS on auditing process in non government organisations and other industries. Furthermore, the conclusion was drawn based on very small number of sample size then the researcher recommends that future studies should increase the sample size.

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APPENDIX I
RESEARCH QUESTIONNAIRE

Dear interviewee,

You are kindly request to answer the set of questions here below by giving relevant information. This research is conducted looking forward the effects of computerized accounting system on auditing process in LGA's.

Name of department.....

Name of respondent.....

Position of respondent.....

Instructions

1. Please select the appropriate answer.
2. In case you are required to explain/comment, please do so in the space provided.

PART: A [THE CONTRIBUTIONS OF COMPUTERIZED ACCOUNTING SYSTEM TO THE EFFECTIVENESS AND EFFICIENCY ON AUDITING PROCESS]

1. What do you know about computerized accounting system?.....
.....
.....
.....

2. How does computerized accounting system assist you in relation to your daily activities?.....
.....
.....
.....
.....
3. What achievements does computerized accounting system ever bring in your organization?.....
.....
.....
.....
4. To what extent does CAS contribute to the effectiveness and efficiency of auditing process?

Please Rate ☒ to the appropriate level.

	1	2	3	4	5
	Very low	Low	Moderate	High	Very high
The effectiveness and efficiency of auditing process					
• The contributions of CAS					

PART B: [THE FACTORS AFFECTING AUDIT EFFECTIVENESS AND EFFICIENCY IN CAS]

5. The following are the factors affecting audit effectiveness in computerized accounting system. To what extent do you agree the following are the factors affecting audit effectiveness in CAS within your organization?

Please Rate ☒ to the appropriate level.

	1	2	3	4	5
	Strong disagree	Disagree	Neutral	Agree	Strong agree
Audit effectiveness in CAS.					
Knowledge of computerized accounting system					
The risk assessment competency					
Quality of audit planning judgments					

6. The following are the factors affecting audit efficiency in computerized accounting system. To what extent do you agree the following are the factors affecting audit efficiency in CAS within your organization?

Please Rate ☒ to the appropriate level.

	1	2	3	4	5
	Strong disagree	Disagree	Neutral	Agree	Strong agree
Audit efficiency in CAS.					
Accountability concern					
Responsibility awareness					
Ethical pressure					
Stakeholder force					
Audit competitive					
Completeness of audit risk judgment					
Appropriateness of sample selected					

PART: C [THE SIGNIFICANT PROBLEMS ORGANIZATION FACE IN CAS]

1. What difficulties do you face with computerized accounting system in performing your daily activities?.....
.....
.....
.....
2. What is the level of security in computerized accounting system within your organization?

Please Rate ☒ the appropriate level.

	1	2	3	4	5
	Very low	Low	Moderate	High	Very high
Computerized accounting system (CAS).					
Level of security					

3. What is the level of internal control system in computerized accounting system within your organization?

Please Rate ☒ the appropriate level.

	1	2	3	4	5
	Very low	Low	Moderate	High	Very high
Computerized accounting system (CAS).					
Internal control					

4. The following are the significant problems organization face in computerized accounting system. To what extent do you agree the following are the problems your organization face in computerized accounting system?

Please Rate ☒ to the appropriate level.

	1	2	3	4	5
	Strong disagree	Disagree	Neutral	Agree	Strong agree
Computerized accounting system (CAS).					
Costs such as staff training and software updates					
Competent personnel needs					
The employee sharing password					
The accidental and intentional entry of bad data					
The introduction of viruses					
Errors in programming					
The loss of audit trail					
The lack of segregation between duties					
The potential for observing errors or fraud in CAS is less.					
Change of legal regulations and company policies					

5. What other problems do you think your organization face in computerized accounting system?.....
-
-
-

PART: D [THE PROBLEMS ENCOUNTERED WITH AUDITING IN CAS]

1. What difficulties do you face with computerized accounting system in performing your daily activities?.....

.....

.....

.....

.....

2. The following are the problems encountered with auditing in CAS. To what extent do you agree the following problems are associated with auditing in CAS within your organization?

Please Rate ☒ the appropriate level.

	1	2	3	4	5
	Strong disagree	Disagree	Neutral	Agree	Strong agree
Computerized accounting system (CAS).					
The challenge of paperless audit trails					
Changing technology					
Control and security concerns					
Process oriented- not results oriented					
Complexity of the practice					
Professional integration					
Sources of errors and inconsistency					
Personal computer environment					

3. What other possible weakness and problems do you think are associated with auditing in CAS in your organization?.....

.....

.....

.....

4. What ways or procedures should be taken to overcome such weakness and problems?.....
.....
.....
.....

THANK YOU VERY MUCH FOR PARTICIPATING IN THIS STUDY

Please return the questionnaire in the reply envelope to:

Bhourat Kombo

Contact number: +255715 959 566