

**COMPUTERISED ACCOUNTING AND DECISION-MAKING OF SELECTED
TELECOMMUNICATION COMPANIES IN MOGADISHU, SOMALIA**

BY

MOHAMED AHMAD DHORE

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DECLARATION

I **MOHAMED AHMAD DHORE** do declare that this research dissertation entitled “Computerized Accounting and Decision-Making in Selected telecommunication Companies in Mogadishu, Somalia” is my original work and has not been presented for a degree or any other academic award in any university or institution of learning.

Signature of Candidate:

_____ 

Name of Candidate:

MOHAMED AHMAD DHORE

Date:

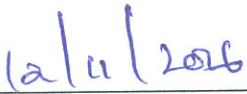
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APPROVAL

I confirm that the work reported in this thesis is carried out by the candidate under my supervision and is submitted for examination with my authorization/approval.



DR. ABUGA MOKONO ISAAC



Date

DEDICATION

I dedicate this report to my beloved family for their financial support.

ACKNOWLEDGEMENT

First and foremost, the researcher would like to convey his gratitude to the Almighty God. He has been so gracious, guiding and protecting him since his early childhood up to this time of his final stage of this study.

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Finally, I cannot forget my respondents from all the selected commercial bank branches who volunteered their time to respond my questions. Their contribution towards the success of this study cannot be underestimated. To all of you I say God bless you abundantly.

ABBREVIATIONS AND ACRONYMS

ADHD	Attention Deficit Hyperactivity Disorder
AIS	Accounting Information Systems
BPM	Business Performance Measurement
CAIS	Computerized accounting Information Systems
CHDR	College of Higher Degree and Researcher
CPAs	Certified Practicing Accountants
CVI	Content Validity Index
IBM	International Business machines
IMF	International monetary fund
IS	Information Systems
MAIS	Manual Accounting Information Systems
MIS	Management information systems
OBP	Operational Business Performance
PNDC	Provisional National Defense Council
R&D	research and development
ROI	Return on Investment
SaaS	Software as a Service
SBP	Strategic business performance
SOEs	State-Owned Enterprises
SPSS	Statistical Package for Social Sciences

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ABSTRACT

This study examined how computerized accounting impacts on decision-making of selected telecommunication companies operating in Mogadishu, Somalia. The objectives included to examine the effectiveness of computerized accounting information employed by selected telecommunication companies; to assess the decision-making of the selected telecommunication companies; to find out whether there is significant relationship between effectiveness of computerized accounting and decision-making of telecommunication companies in Mogadishu, Somalia.

The research findings indicate that computerized accounting practices among the selected telecommunication companies were effective. This study found out that the decision-making in the selected companies was effective and finally, this study also found out that there is strong, positive and significant relationship between effectiveness in computerized accounting and decision-making of the telecommunication companies.

Regarding computerized accounting, this study concludes that the computerized accounting systems in the selected telecommunication companies in Mogadishu are generally effective; on decision-making, this study concludes that the decision-making among the selected telecommunication companies in Mogadishu, Somalia is effective; and on the relationship between the two variables, this study concludes that effectiveness in computerized accounting leads to improvement in the decision-making of the selected telecommunication companies as regards to the need for achievement, ability to focus and pursue a goal and optimism.

This study recommends that since data validation of the companies is still ineffective, the management of the selected telecommunication companies together with their accountants should ensure that data validation matches the current universal standards as computerized accounting systems in the selected telecommunication companies cannot still compare the same input data with some predefined standards or known data; the management of the selected telecommunication companies and their accountants should learn the principles of storing data such that it can be well processed to make use of the Query facility to produce desired information; and that the management of the three selected telecommunication companies should be discreet and rely on neutral position while making decisions as excessive optimism hurdles acknowledging some risks and may lead to serious damage on the business and even to its complete failure while making decisions.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This study examined the role of computerized accounting on decision-making in selected telecommunication companies in Somalia. This chapter presents the background of the study; statement of the problem; purpose of the study, specific objectives, research questions, research hypotheses, scope of the study, significance of the study, and the operational definitions of the study.

1.2. Background of the Study

The background of this study is presented on the following perspectives: historical, theoretical, conceptual and contextual.

1.2.1 Historical Perspective

Accounting as a discipline has existed since the 15th Century (Frank wood& Sangster, 2005). According to these Frank wood & Sangster (ibid), since then both companies and economies have greatly evolved. Computerized accounting theory is a continuously-evolving subject, as it must adapt to new ways of doing business, new technological standards and gaps that are discovered in reporting mechanisms. The scholars also noted that organizations such as the International Accounting Standards Board help create practical applications of accounting theory, and professionals such as CPAs help companies navigate accounting standards for acceptable decision making.

Till 1970th-80th the most common used system in accounting was “general ledger” (Sacco, 1998). According to the author, it was a book with assigned pages for each account, such as cash, receivables, payables, stockholder equity. Thus, everyday transactions were entered by hand into a journal. After each transaction entry had to be posted in a proper general ledger account on the assigned page. Next step was an input of the numbers from general ledger into financial statements and preparing tax returns. However, he noted that all these processes where inefficient, slow, and manual. Even a minor mistake or inaccuracy in these processes led to long time spent for recalculations.

As a way of improving decision and reducing cases of fraud and theft, invention of accounting software revolutionized accounting processes (Weber, 2011). Weber (ibid) also

noted that multiple developments forerun present-day technologies. Thus, a countess Ada Lovelace computing machine was the first machine created and used for accounting. The IBM 9Pac was one of the first programming systems that preceded the invention of many modern accounting systems. Weber (ibid) also noted that SAP software was created in 1973 and provided opportunities not only for automated financial transactions but also for supported executive decision making. Before the invention of Peachtree program, all accounting computerized programs for decision making unavailable for broad public. Peachtree was the first program sold in stores and accessible for everyone.

In 1983 company Intuit introduced a computerized computing program for personal finance Quicken. After that TurboTax for calculation of federal and income taxes and QuickBooks for small business accounting purposes were presented to wide public (Weber, 2011). At this point of the development of accounting technologies manual journal entries were left in the past and computer technologies made profession of accountant easier. According to him, accounting software gave an opportunity to professional accountants to do their job faster and more productive as well as improving decision of organization or companies. At the same time owners of small companies, who had limited knowledge in accounting area, could keep their finance statements in order to use accounting software (VAN-Briefing, 2005).

The last decade of 20th century brought significant changes to data communication throughout that world including the developing countries (Frank wood& Sangster, 2005). Thus, it became faster, more reliable, and less expensive. The scholars also noted that the client/server applications in a “hosted” environment became popular among technology manufacturers and suppliers. They also noted that this kind of model allowed a firm to operate complex accounting systems with just a little investment. The model also gave way to the on demand Software as a Service (SaaS) financial systems. SaaS application is designed in such a way that it allows user to work with rich accounting application through a thin client web browser with means of improving the decision making avenues for the organisations.

As information technologies grow more progressive, the manual accounting systems have become gradually inadequate for decision needs (Brecht and Martin, 1996). Consequently, public and private sector firms in both developing and developed economies view CAIS as a vehicle to ensure effective and efficient information flow in the recording, processing, and

analysis of financial data. Effective and efficient information flow enhances managerial decision-making, thereby increasing the firm's ability to achieve corporate and business strategy objectives (Manson, McCartney, and Sherer, 2001). This in turn, may increase the prospects of the firm's survival (Platt and Platt, 2012).

This is where a Computerized accounting helps to improve decision making through simplifying, integrating, and streamlining all the business processes, cost-effectively and easily and helps presents the true picture of all the business undertakings to users of financial reports. With the decrease in the price of computers and accounting programs, this method of keeping books is becoming popular.

1.2.2 Theoretical Perspective

This study was based on two neoclassical rationality theories. These theories involved prospect theory by Savage (1954) and the regret theory spearheaded by Bell (1982). The prospect theory is a model of decision-making under risk that explicitly incorporates the cognitive errors that have been found to systematically occur in decision contexts. This theory asserts that people are especially sensitive to environmental changes. For example, persons adapt to the status quo, which serves as a neutral reference point, and then evaluate changes from this neutral reference point. If so, decision-makers may more easily anticipate gains and losses than non-gains and non-losses, because the latter do not constitute changes from their neutral reference point (MIT encyclopedia of Cognitive science, 2002).

The regret theory by Bell (1982) assumes comparisons between choices and captures anticipated regret and triumph when one learns that a different choice would have produced a better or worse outcome. These theories have been employed for this study because recent advancements in management information systems (MIS) have increased the ability of managers to progress towards optimal decision-making by reducing the two constraints identified by Simon (1979): time (computational processing power) and memory (information storage and retrieval). To the neoclassical rational approach of decision theory can be associated decision tools like: the cost benefit analysis, the SWOT analysis the net present value technique which are important elements in computerized accounting information systems. These theories were proposed for this study because there essence is

based on the two study variables (computerized accounting and decision-making). In this regard, they acted as guiding principles for this study.

1.2.3 Conceptual Perspective

Computerized accounting is method of accounting using modern accounting technology (VAN-Briefing, 2005). Thus, it reduces the problems in manual accounting and help to save time cost, prepare accurate accounts and also help to easy communication of accounts. Computerized accounting information is a beneficial use of current technological advances (Brynjolfsson and Hitt, 2003). Thus, effectiveness of computerized accounting in the selected telecommunication companies in Mogadishu will be investigated inform of data validation, security, storage and accuracy, information and reporting.

Decision making is the process of making choices by setting goals, gathering information, and assessing alternative occupations. Decision-making is regarded as the cognitive process resulting in the selection of a belief or a course of action among several alternative possibilities. Every decision-making process produces a final choice that may or may not prompt action. Decision-making is the process of identifying and choosing alternatives based on the values and preferences of the decision-maker. In this study, decision-making will be investigated in terms of the need for achievement, ability to focus and pursue a goal and decision-making optimism.

As computerized accounting information reduces the problems of manual accounting as regards to time cost, preparing accurate accounts and also helps in easy communication of accounts, this could significantly enhance the need for achievement, ability to focus and pursue a goal and decision-making optimism.

1.2.4 Contextual Perspective

The telecommunication companies in Somalia employ computerized accounting information in their business. According to Murgatroyd et al. (2007), accounting information helps in assessing financial resources and decision-making powers among the board and management such that they can implement the functions and responsibilities that have been delegated to them. Murgatroyd et al. (2007) also contended that accounting information is very crucial for

the success of the operationalisation of telecommunication companies and the management should attach a great importance to it. Through accounting information decision making is being devolved to the local authorities (*Ibid*).

Amidst all the efforts being put in place and expectation that accounting information would generate relevant information the companies need, it has been noted that the managements of the telecommunications still fail to reach the expected financial decision-making and growth target. This has been confirmed by the report of by Somalia Private Sector () on its prediction of financial decision-making in the last two years. This reports shows that from the planned target of financial decision-making of (5.8 %) from the financial year 2013 to 2014; only 3.6 % was realized leaving a deficit of (2.2%); the same trend was also observed in the financial year of 2014 to 2015 the planned target of the financial decision-making was (6.4 %) the managements end up realizing only (4.2 %).

Failing to achieve established target for financial positions could be influenced by several factors among which is failing to make critical and strategic decisions based on accounting information. As there has not been critical and empirical study on the study variables in particular reference to telecommunication companies in Somalia, this study attempted to unearth the extent to which accounting information impacts on the decision making of telecommunication companies in the country and provide appropriate interventions for improvement.

1.2 Statement of the Problem

For the past few years, the managements of the telecommunication companies in Somalia have failed to make decisive decisions towards their financial decision-making. This has been confirmed by Somalia Private Sector Foundation (2015). This report indicated that the financial decision-making in the last two years. This reports shows that from the planned target of financial decision-making of (5.8 %) from the financial year 2013 to 2014; only 3.6 % was realized leaving a deficit of (2.2%); the same trend was also observed in the financial year of 2014 to 2015 the planned target of the financial decision-making was (6.4 %) the managements end up realizing only (4.2 %). Several factors could be responsible for this failure by one of them could be lack of critical and strategic decisions making based on computerized accounting. As there is scanty information on the two study variables in particular reference to telecommunication companies in Somalia, this study attempted to

unearth the extent to which accounting information impacts on the decision making of telecommunication companies in the country and provide appropriate interventions for improvement.

1.4 Purpose of the Study

The purpose of this study was to examine and correlate between computerized accounting systems and decision making of selected telecommunication companies in Mogadishu, Somalia.

1.5 Specific Objectives

- (i) To examine the effectiveness of computerized accounting information employed by selected telecommunication companies in Mogadishu, Somalia.
- (ii) To assess the decision-making of the selected telecommunication companies in Mogadishu, Somalia.
- (iii) To find out whether there is significant relationship between effectiveness of computerized accounting and decision-making of telecommunication companies in Mogadishu, Somalia.

1.6 Research Questions

- (i) What is the effectiveness of computerized accounting employed by the selected telecommunication companies in Mogadishu, Somalia?
- (ii) What is the level of decision-making of the selected telecommunication companies in Mogadishu, Somalia?
- (iii) Is there any significant relationship between computerized accounting and decision-making of the selected telecommunication companies in Mogadishu, Somalia?

1.7 Null Hypotheses

There is no significant relationship between computerized accounting systems and decision-making of the selected telecommunication companies in Mogadishu, Somalia.

1.8 Scope of the Study

1.7.1 Geographical Scope

This study was carried out in three selected telecommunication companies in Mogadishu, Somalia. These telecommunication companies include Hormuud telecommunication Company, Africa Online and Nation Link. These telecommunication companies had been targeted for this study because they are among the few telecommunication companies that

with relatively low decision-making position in the last few years in Mogadishu, Somalia. Thus, the impact of computerized accounting systems on their business decision needed to be established.

1.8.2 Content scope

This study established the relationship between computerized accounting systems and decision of selected telecommunication companies in Mogadishu, Somalia. Effectiveness of computerized accounting systems employed by selected telecommunication companies in Mogadishu was determined as regards to its data validation, financial security; data storage and accuracy; and decision-making was examined in terms of data validation, security, storage and accuracy, information and reporting. Effectiveness of decision-making of selected telecommunication companies in Mogadishu was determined through the need for achievement, ability to focus and pursue a goal and decision-making optimism.

1.8.3 Theoretical Scope

This study was guided by the two neoclassical theories and these include prospect theory by Savage (1954) and the regret theory spearheaded by Bell (1982). The prospect theory asserts that people are especially sensitive to environmental changes. Thus, decision-makers may more easily anticipate gains and losses than non-gains and non-losses, because the latter do not constitute changes from their neutral reference point (MIT encyclopaedia of Cognitive science, 2002). On the other hand, the regret theory by Bell (1982) assumes comparisons between choices and captures anticipated regret and triumph when one learns that a different choice would have produced a better or worse outcome. These theories are relevant to this study because they link decision-making aspects to gains and losses than non-gains and non-losses which are outcomes of computerized accounting information.

1.8.3 Time Scope

The period for this study was four years that is from 2011 to 2014. This time frame was considered for this study because it was from 2011 that selected telecommunication companies in Mogadishu shifted from manual accounting systems to computerized accounting systems. By considering this time framework, various trends of computerized accounting systems were traced and their impact on the business decision of the selected telecommunication companies could be established.

1.9 Significance of the study

The management of the selected telecommunication companies will also benefit from this

study as it will establish the areas of anomalies existing in the current computerized accounting systems they employ and suggest ways of improving them. This will enable them *to design and employ better systems that can drive their companies forward and become competitive in the area.*

This research paper will be of prime benefit to the management and staff of other telecommunication companies and other Telecommunication that have not yet employed computerized accounting systems since it will enable them identify and understand the values and benefits of using computerized accounting systems for financial reporting and how this can impact on their business decision.

The study will also be of great benefit to the students who will be able to access this information that will guide them in research and equip them with knowledge as far as computerized accounting is concerned and the importance of computerized accounting as far as business decision is concerned. In other terms, it will act as a point of reference for other future researchers.

Lastly, by establishing the relationship between computerized accounting and decision of selected telecommunication companies in Mogadishu will enrich the researcher with skills and techniques of carrying out research on similar and related aspects or topics.

1.10 Operational Definition of Key Terms

Computerized accounting Information Systems (CAIS) in this study refers to the use of computers with accounting applications for business to prepare accurate accounts and also help to easy communication of accounts as well as integrating all business operations, including external suppliers and vendors in the value chain. Effectiveness of computerized accounting systems will be investigated in this study in terms of data validation, security, storage and accuracy, information and reporting.

Decision making in this study is the dependent variable and it refers to the process of making choices by setting goals, gathering information and assessing alternative occupations. However, its effectiveness in this study will be investigated in terms of need for achievement, ability to focus and pursue a goal and decision-making optimism.

Telecommunication Companies in this study refer to those companies involved in selling of goods in quantity, as to retailers or jobbers, for resale (opposed to retail). In other terms, these are companies involved in the sale of goods or merchandise to retailers; to industrial, commercial, institutional, or other professional business users; or to other telecommunications and related subordinated services. The telecommunication companies that investigated included Hormuud telecom, Africa Online and Nation Link in Mogadishu.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the theoretical review; the conceptual framework and reviews the related literature objective by objective so as to throw more light on study variables. Lastly, the gaps existing in the literature reviewed are established.

2.2 Theoretical Review

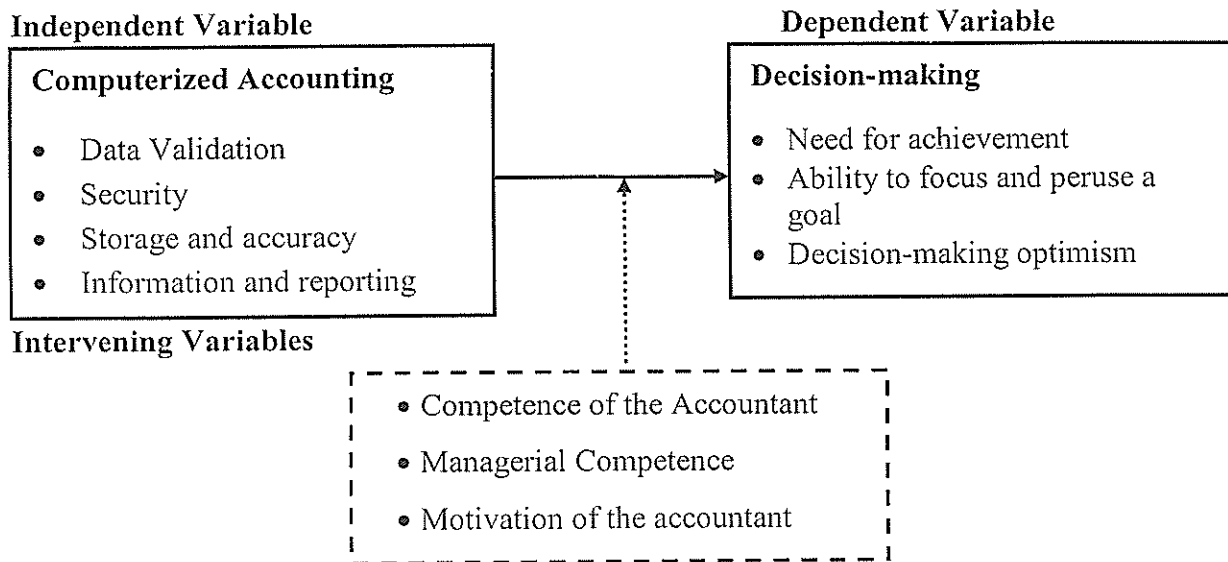
This study employed neoclassical rationality theories. These theories involved prospect theory by Savage (1954) and the regret theory spearheaded by Savage (1954). The prospect theory is a model of decision-making under risk that explicitly incorporates the cognitive errors that have been found to systematically occur in decision contexts. This theory asserts that people are especially sensitive to environmental changes, i.e. persons adapt to the status quo, which serves as a neutral reference point, and then evaluate changes from this neutral reference point. If so, decision-makers may more easily anticipate gains and losses than non-gains and non-losses, because the latter do not constitute changes from their neutral reference point (MIT encyclopaedia of Cognitive science, 2002).

The regret theory assumes comparisons between choices and captures anticipated regret and triumph when one learns that a different choice would have produced a better or worse outcome (MIT encyclopaedia of Cognitive science, 2002).

These theories have been employed for this study because recent advancements in management information systems (MIS) have increased the ability of managers to progress towards optimal decision-making by reducing the two constraints identified by Simon (1979): time (computational processing power) and memory (information storage and retrieval). To the neoclassical rational approach of decision theory can be associated decision tools like: the cost benefit analysis, the SWOT analysis, the net present value technique which are important elements in computerized accounting information systems.

2.3 Conceptual Framework

Figure 1: Conceptual Framework



Source: Adopted from Simon (1979); Conceptualized by the Researcher

Figure 1 demonstrates that effectiveness of computerized accounting systems as regards to data validation, security, storage and accuracy, information and reporting can significantly influence business decision-making as regards to need for achievement, ability to focus and pursue a goal and optimism. However, this linear interaction between the two variables can be ensured if the accountant in the organization is competent enough, the structure and structure of management is the desired one and the accountant is well motivated.

2.4 Computerized Accounting Systems

Computerized accounting information systems in this study has been reviewed in terms of data validation, security, storage and accuracy, information and reporting.

Data Validation

Plsek (2013) shows the importance of data validation as an instrument of computerized accounting. According to the scholar, to ensure effectiveness in data validation at the developmental stage of the CAIS, the firm's decision makers consider the choice between custom-built or off the shelf alternatives. Here, decision makers, due in part to skills and practical experience are more likely to adopt user friendly CAIS.

In addition, Swann (2012) noted that effectiveness in data validation is set to inspire participation and overcome real-world hitches, decision makers' choice must aimed at: (1)

“system design for, by and with users”, (2) improving the quality of work life of staff, (3) adopting technically efficient and job satisfaction systems, and (4) making efficient use of resources.

Heeks (2011) proposes a model to understand failures data validation in computerized accounting information systems (CAIS) by firms in developing countries. The model offers both country context and hard-soft gaps as significant risk to IS failure. Local conditions in developing countries are neglected in the design of IS, implying a considerable design-actuality gap. As well, the “hard” rational design and “soft” political actualities may differ on key dimensions: information, technology, processes, objectives, staffing, management systems and other resources. These gaps, in turn, may result in IS failure.

Financial Security

Regarding financial security as an element of computerized accounting systems, Stefanou (2006) suggests a fit between factors such as technology, environment, and organizational as well as social and ethical, required to promote the initiation, adoption and effective implementation of CAIS.

Levander, A. and I. Raccuia (2011) also find that natural and political disaster, software errors and equipment malfunctions are major challenges to CAIS. Swann (2004) also emphasize malicious attack from outsiders as the most important security threat in the Chinese banking sector. Dhillon (1999), however, suggests that threats are caused by insiders especially when it blends with legitimate transactions, implying that firm’s employees pose the most serious risk to security (Abu-Musa, 2014).

In emphasizing issues related to financial insecurity resulting from computerized accounting, Abu-Musa (2014) indicated financial risks impact of the occurrence of these events ranges from disrupted operations to fiduciary losses and failure (Abu-Musa, 2004). Consequently, firms create, maintain and update security solutions such as firewalls, encryption techniques, access control mechanisms and intrusion detection systems to combat security breaches (Gordon, &Lucyshyn, 2013). These security measures, in turn, enhance the quality of the CAIS, thus producing relevant, reliable and useful financial and managerial accounting reports for decision-making. Research, however, suggests that many corporations in the US

adopted computer technology before implementing appropriate safeguards (White & Pearson, 2001).

Data Storage and Accuracy

In establishing the advantage of computerized accounting information systems as regards to data storage and accuracy, Nicolaou (2000) showed that computerized Accounting Information Systems (CAIS) denotes an electronic-based system that processes economic information and supports decision tasks in the context of financial management and control of firm activities Luce, R.D. & Suppes (2010).

Borrowing from Rogers' conceptual framework (1995), the rate of adoption of CAIS is determined by five attributes: (1) relative advantage, (2) compatibility, (3) complexity, (4) trialability, and (5) observability. For example, CAIS that enhances planning and evaluation of the firm's financial position and decision-making by processing economic data in a more reliable, relevant, understandable and comparable form to both internal and external stakeholders are more likely to be adopted and implemented by firms.

Research findings, however, are mixed up on the effectiveness of data storage and accuracy resulting from computerized accounting. Here, studies show that structural adjustment programmes including international accounting practices adoption may not enhance financial management controls of SOEs in developing countries (Uddin & Tsamenyi, 2005).

Financial Information and Reporting

Research suggests financial information and reporting through computerized accounting systems promotes cost-effectiveness (Brynjolfsson et al, 2003), ease of sharing knowledge, thereby improving operations (Romney and Steinbart, 2009) and managers' decision-making processes (Sajady, Dastgir and Nejad, 2012).

Tsamenyi, Onumah, and Tetteh-Kumah (2010) however, show that overall decision-making of Ghanaian SOEs improved after privatization. They also find that overall decision-making improvements were associated with key organizational changes (including accounting and control system) that enabled effectiveness in financial information and reporting. Little, however, is known on CAIS in SOEs in developing countries, especially in Ghana (Uddin, and Tsamenyi, 2013).

Thus, the academic literature reveals the need to undertake more-in-depth field studies in order to discover the conception, motivation, assessment, benefits and challenges surrounding CAIS in SOEs in developing countries. More importantly, CAIS issues from SOEs in developing countries may provide fertile ground to analyse the complex interplay of action and context that underlies organizational change (Heeks, 2002). This in turn, may contribute towards formalizing CAIS in SOE in developing countries, indicating that CAIS research be extended to SOEs in developing countries, but not restricted to the private sector in both developing and developed countries.

2.5 Decision-Making in Organization

Decision-making is a multistage and multi-criteria process (Hall and Hofer, 2003) determined by the interplay between the expectations about the future of the decision-maker and the calculation and sequential recalculation of risk and reward (Clark and Marshall, 2002). Both elements depend on the information available i.e. the knowledge about the decision, the effects of its alternatives, the probability of each alternative, and so forth (Harris, 2008). This study investigated effectiveness in decision-making in terms of the need for achievement, ability to focus and persevere a goal, and decision-making optimism.

The need for achievement

A significant psychological explanation of entrepreneurial acts is the need for achievement. When Shapero (2012) talks about 'negative and positive' factors to start a business ('negative' or 'push' are: unemployment, frustration, etc.), he mentions at first place among the 'positive' or 'pull' factors the need to achieve or innovate, alongside with the desire to gain control over one's destiny.

Moreover, Brockhaus (2010) found empirical support that the entrepreneurs who were initially driven by 'push' factors have a higher failure rate. Furthermore, Simon (2009) considers the achievement motivation. From his perspective the main characteristic of the business initiators is the high need for achievement which he defines following McClelland (2007) as a preference for challenge, acceptance of personal responsibility for outcomes and innovativeness. Papadakis (2008) also underline that the two core aspects of entrepreneurship are the need for achievement and the attitude toward risk.

Ability to focus and pursue a goal

Furthermore, a recent empirical survey (Levander and Raccuia, 2011) on the predispositional cognitive abilities that are characteristic for entrepreneurs proves the hypothesis that entrepreneurs possess different cognitive and executive abilities than non-entrepreneurs. Their level of ADHD (Attention Deficit Hyperactivity Disorder i.e. hyperactivity) was observed to be higher than 4% (the average of an unselected population). ADHD-individuals were found to be highly over-represented among the entrepreneurs (12 out of 32), thus, explaining entrepreneurs' innovation and creativity abilities. The results show that entrepreneurs differ cognitively from general population by a striking difference in the capacity to focus attention on a single task. Attention is defined as the individual reception to environmental stimuli and the ability to process information (Levander and Raccuia, 2011). Thus, the survey concludes that it is the environmental stimuli and the ADHD that lead some individuals to react and to become entrepreneurs, motivating them for higher decision-making.

Optimism

Entrepreneurial insight is seeing something about an industry or a market that others miss or fail to understand (McGrath et al., 2012). But the scholars were uncertain on whether it is a true opportunity that entrepreneurs see or they simply inflate their 'gut feeling' and sense of rightness to the point where they overlook critical elements and discount uncertainties.

Palich and Bagby (2012) suggest that entrepreneurs operate by a unique set of cognitive processes, thereby supporting their optimism. Furthermore, the literature on entrepreneurial behaviour suggests that entrepreneurs are likely to be optimistic and that they frequently make judgements based on subjective factors (Cooper et al., 2008; McCarthy., 2013 and Timmons, 2010). Excessive optimism hinders acknowledging some risks and may lead to serious damage on the business and even to its complete failure.

2.6 Computerized Accounting and Decision-making

Wood & Sangster (2008) are some of the key authors who established the relationship between computerized accounting system and decision-making. They recommended that CAIS should be evaluated from three key dimensions: managerial, organizational and

environmental context if decision-making is to be attained. This implies that the efficacy of CAIS depends on both its aims and contingency factors of each firm (Sajadyet *al*, 2012). From this point, assessment is based on users' satisfaction systems' reliability, quality and improvement of task (Gelinas, &Wriggins 1990). Sajadyet *al* (2012), however, find no evidence to support the notion that implementation of CAIS is linked to enhance evaluation processes.

Nicolaou (2000) confirms this notion, emphasizing that the system fit explains the decision makers' perceived satisfaction with the accuracy and monitoring effectiveness of output information. In contrast, Nicolaou (2000) finds that the effect of system fit on decision makers' satisfaction with the perceived quality of information content in system outputs is marginally significant. Indicating that, the 'compatibility with organizational and professional norms, values, and ways of working' is paramount to perceived CAIS effectiveness as well as organizational decision-making (Greenhalgh, *et al.*, 2004).

In establishing the relationship between the computerized accounting and decision-making of organization, Green (2003) indicted that another issue worth addressing at the developmental and implementation stages is information security. The scholar shows that information security threats that can lead to the collapse of an organization include forced entry into computer rooms, destruction by fire and natural disasters, unauthorized access, disclosure, and modification or destruction of accounting data. Abu-Musa (2006) finds that entry of inaccurate data, destruction of reliable data, introduction of computer viruses to the system, employees' sharing of passwords, and misdirecting prints and distributing information to unauthorized people are the most significant perceived security threats to CAIS in both the Egyptian whole selling industry and Saudi firms.

Accordingly, studies by (Tsamenyi, *et al.*, 2010) also show that Ghanaian SOEs have benefited from a series of World Telecommunication/IMF led economic reforms aimed at promoting accountability through cost-effective operations. Specifically, the Provisional National Defence Council (PNDC) government pursued structural adjustment policies including privatization and reforms, under the auspices of the IMF and World Telecommunication (Uddin &Tsamenyi, 2005). The reforms, in particular, sought to strengthen accountability and transparency issues. For this reason, restructuring funds were made available to Ghanaian SOEs to acquire computer hardware and software, including

CAIS, to improve their management and accounting information systems (Appiah-Kubi, 2001).

There is also a growing body of literature suggesting that accounting controls systems in SOEs in developing countries, including Ghana, are ineffective due to political and trade union leaders' interventions (Uddin & Tsamenyi, 2005). This, in turn, results in misappropriation of funds by top management, poor decision-making, high profile Ghanaian SOEs failures including State Housing Corporations and huge public sector deficits (Appiah, 2011). The huge public sector deficit, in particular, impedes the economic development of Ghana. This said, Ghanaian SOEs contribute 87.3%, 93.7% and 86% to the mining sector, employment in utilities and total registered employment respectively (Appiah-Kubi, 2001).

2.7 Existing Gaps in the Literature

According to the literature reviewed, it can be noted that none of the studies carried out was on computerized accounting and decision-making in Somalia, Mogadishu in particular. Additionally, none of the works reviewed was authored by local researchers in Somalia. Furthermore, none of the works analyzed focused on telecommunication business companies. Thus, there was need to establish the relationship between the two study variables in case of Somalia, Mogadishu in particular; by a local researcher from Somalia; and have it on telecommunication business.

Additionally, most of the studies reviewed employed qualitative analysis thus, could not clearly bring out the extent at which computerized accounting systems impacts on business decision-making. The only study that tries to employ quantitative approach was that of Appiah-Kubi (2011) who indicated that Ghanaian SOEs contribute 87.3%, 93.7% and 86% to the mining sector, employment in utilities and total registered employment respectively. Thus, there was still need to add more quantitative literature in the relationship between the two variables.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter describes the methods adopted in order to answer the research questions detailed in chapter one. It looks at the research design, research population, sampling techniques, data collecting instruments and procedure of data collection, mode of data analysis and presentation as well as ethical consideration and limitations of the study.

3.2 Research Design

This study employed descriptive correlational and a cross sectional survey designs. Descriptive correlational was proposed for this study because it enables description of study findings using central tendencies such as mean and establishment of relationship between the study variables through correlation. The cross sectional survey design was used to collect data from a large sample of respondents in a short time. Thus, through this design, the relationship between computerized accounting systems and decision-making among the selected telecommunication companies in Mogadishu, Somalia was established.

3.3 Research Population

The research population involved all the employees in the three telecommunication companies and these included: Hormuud telecommunication Company, Africa Online and Nation Link in Mogadishu. The total research population was 160 and this involved employees and managers in the head quarters of the three selected telecommunication companies. Both employees and managers from the selected companies were targeted for this study because all of them had the information regarding computerized accounting system and decision-making processes of the companies. The distribution of the target population according to the companies selected is presented in Table 3.1 in the following page.

Table 3.1: Distribution of Population per Each Telecommunication Company

Telecommunication Companies	Management Department	Finance Department	Advertising Department	Selling Department	Total
Hormuud telecommunication	4	4	21	31	60
Africa Online	3	3	17	26	49
and Nation Link	3	3	19	26	51
Total	10	10	57	83	160

Source: Adopted from the Records Obtained from the Human Resource Managers of the selected Telecommunication Companies in Mogadishu, Somalia

3.4 Sample Size

Slovene's formula was used to compute the sample size. This formula was employed so as to sample fairly a large number of people as representation of the total population such that the research findings obtained can be trusted and believed. The details on the determination of sample size using Slovene's formula are shown below;

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

Where

n= Sample size

N=Total population size

e²= 0.05 level of significance

$$n = \frac{160}{1 + 160(0.05^2)} = 114$$

Following this formula, the established sample size was 114 respondents from population of 160 and this made fairly a large proportion of the target population involved for effective data collection on the topic under study.

Table 3.2: Population and Sample size Distribution

Category of respondents	Staff population(N)	Sample Size(n)	Sampling Technique
Managers	10	10	Purposive
Accountants and Cashiers	10	10	Purposive
Selling Department	83	58	Systematic random
Advertisement Department	57	36	Systematic random
Total	160	114	

Source: Researcher's computation

3.5 Sampling Procedure

The sampling techniques to be used in this study involved both systematic random sampling and purposive sampling. Selling agents or attendants and those involved in advertising in the selected telecommunication companies were selected through systematic random technique because they are many and any of them could be able to give the required information for this study. Thus, their names were obtained and written down on papers and the researcher selected only the employees whose names landed on odd numbers and left out those whose names landed on even numbers while considering the number of respondents from each category. For managers, accountants and cashiers, purposive sampling was used. They were selected through this method because they were few and could give technical information regarding computerized accounting systems and decision-making in the selected telecommunication companies. The only criterion for their selection was their consent to participate in the study.

3.6 Data Collection Instruments

Questionnaire survey and interview guides were used to collect data. These are discussed below:

3.6.1 Questionnaire Survey

Questionnaires were used to collect data from respondents. The research questionnaires were self-administered to various respondents sampled. The questionnaires were made to obtain responses about respondent's perceptions on computerized accounting systems and decision-making of the selected telecommunication companies in Mogadishu. The questionnaire enabled respondents to indicate the extent to which they agree with each question given. The questionnaire had three sections; section one had questions on the profile of respondents;

section two had questions on computerized accounting systems and section three had questions on decision-making in telecommunication companies in Mogadishu. All questions in sections two and three were closed-ended, based on four point Likert Scale, ranging between one to four, where 1=strongly disagree (meaning disagreeing with no doubt at all); 2=disagree (meaning disagreeing with some doubt); 3=agree (meaning agreeing with some doubt); and 4=strongly agree (meaning that agreeing with no doubt at all) and this was done by ticking (marking) one of the choices outlined above.

3.6.2 Interview Guides

Formal interviews were also used to gather necessary information from some key informants selected from different categories of people. Formal interviews were done with the help of interview guides while taking into account the gender, age, education background and others issues. This was done in order to obtain clear information about computerized accounting systems and decision-making of telecommunication companies in Mogadishu. Since interviews enabled detailed information and clarification on some issues of interest, they formed an important compliment to the information that was obtained through the use of questionnaires.

3.7 Validity and Reliability of the Instruments

Validity

To ensure the validity of the questionnaire and interview guide; some two experts in research were involved in instrumentation of the research instruments. In this regard, after formulating the questionnaires and interview guide, they were submitted to the two experts to ensure their validity through their duties' basis. This was based on the estimated alpha coefficient value of 0.7 and more. Thus, after the experts' judgment, the compilation of the resonances from raters was computed to determine the content validity index (CVI). The findings from the two experts were used to establish content validity index as shown in Table 3.3.

Table 3.3: Validity Test

	Relevant items	Not relevant items	Total
Rater 1	20	6	26
Rater 2	19	7	26
Total	39	13	52

$$CVI = \frac{RelevantItems}{TotalNumberofItems} = \frac{39}{52} = 0.75$$

Thus, since the CVI computed was above 0.7, the standard cronbach alpha, the instruments were considered valid this is also in line with Amin (2005) who noted that the overall CVI for the instrument should be calculated by computing the average of the instrument and for the instrument to be accepted as valid the average index should be 0.70 or above (Amin, 2005).

Reliability

To achieve accuracy or reliability, pre-testing of the instruments was done. This was done with similar telecommunication companies that do not form part of the study. Questionnaires were distributed to those categories of people as pilot test. The results from this pre-testing helped in rephrasing and adjustment of questions that were unclear so as to bring about clarity and reliability and the findings regarding these are presented in Table 3.4.

Table 3.4: Results of Reliability Test

Variable	Anchor	Cronbach Alpha Value
Data validation	4-Point	.7013
Storage and accuracy	4-Point	.9134
Financial Security	4-Point	.8724
Financial information and reporting	4-Point	.7612
The need for achievement	4-Point	.7210
Ability to focus and peruse a goal	4-Point	.7212
Decision-making optimism	4-Point	.7412

Source: Pilot Research, 2016

As it can be seen in Table 3.4, the reliability test was done and the Cronbach Alpha Values of the various constructs investigated were above 0.7, the standard Cronbach Alpha Values thus, the items were reliable enough.

3.8 Data Gathering Procedures

Before to Data Collection

Before data collection, an introductory letter was obtained from the College of Higher Degree and Researcher (CHDR) of Kampala International University. This letter introduced the researcher and research intention to the authorities at Mogadishu and selected

Telecommunication companies. List of people from the selected telecommunication companies for this study was then sought such that sampling process could begin. All the selected people were met physically such that the researcher and research assistants could introduce themselves and create rapport with them and brief them about the intention of the study.

During Data Gathering

Data collection involved distribution of self-administered questionnaires to respondents and interviewing others. The researcher together with the research assistants were involved in this process such that data collection could be done faster. Respondents were kindly requested to fill in the questionnaires within one 10 days. The researcher visited the selected telecommunication companies every day to ensure that respondents quicken the process of filling in the questionnaires. Questionnaires that were filled in were immediately collected to avoid them being misplaced by respondents. While collecting research instrument, verification on whether respondents finished answering all the questions or not was done there and then. This ensured that respondents answered all the questions.

After Data Gathering

After data collection, data processing began immediately. The researcher began tallying responses, coded them using SPSS (Statistical Package for Social Sciences) so that Pearson's product moment correlation and multiple regression analysis could be established. Tables were then used to present the data and data analysis together with its discussion was done. The final work was presented to the supervisor so that errors being made could be rectified. The fair copy at the end of it all was presented for approval and defended before the viva voce.

3.9 Data Analysis

The Statistical Package for Social Sciences (SPSS) version 16 was used for data analysis. Data on the profile of respondents was analyzed through frequencies and percentages. To determine the effectiveness of computerized accounting and decision-making of the selected telecommunication companies in Mogadishu, mean values and standard deviations ranging from 1-4 were used.

The interpretations for the data for both the independent and dependent variables (computerized accounting and decision-making) were interpreted using the following mean ranges:

Mean Range	Response Mode	Interpretation
3.26-4.00	Strongly Agree	Very effective
2.51-3.25	Agree	Effective
1.76-2.50	Disagree	Ineffective
1.00-1.75	Strongly Disagree	Very ineffective

To establish the relationship between effectiveness in computerized accounting systems and decision-making of the selected telecommunication companies in Mogadishu, the Pearson's Linear Correlation Coefficient was used and the influence of each item under computerized accounting on decision-making was tested using simple linear regression analysis. Qualitative data was analyzed by developing different themes generated from research objectives.

3.11 Ethical Considerations

The following strategies were adapted to ensure the moral justification of the investigation.

Authorization: This involved getting clearance from the ethical body/ethics committee and consent of the respondent (Appendices II and III respectively).

Informed consent: The researcher sought for authorization from potential respondents. The researcher ensured free will consent from participants.

Anonymity and Confidentiality: The names or identifications of the respondents were anonymous and information collected from them treated with utmost confidentiality.

Integrity: The researcher acted honestly, fairly and respectful to all other stakeholders that were involved in this study.

Ascriptions of authorships: The researcher accurately attributed the sources of information in an effort to celebrate the works of past scholar or researchers. This ensured that no plagiarism occurred.

Scientific adjudication: The researcher worked according to generally acceptable norms of research.

3.12 Limitations of the Study

Intervening or confounding variables would have been beyond the researchers control such

as honesty of the respondents and personal biases. To minimize such conditions, the researcher requested respondents to be as honest as possible and to be impartial/ unbiased when answering the questionnaires.

The research environments were classified as uncontrolled settings where **extraneous variables** might have influenced on the data gathered such as comments from other respondents, anxiety, stress, motivation on the part of the respondents while on the process of answering the questionnaires. The researcher created rapport with respondents such that these conditions could be minimized.

Instrumentation would have been another limitation of this study. The research tools used in this study were researcher-made. However, validity and reliability tests were done to arrive at a reasonable measuring tool.

The biasness from the respondents was dealt with by the researcher providing an introduction letter as confirmation that the data was also required for academic purposes. This improved their response and avoided biasness.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter presents, analyses and interprets data generated on computerized accounting and decision-making of the selected telecommunication companies operating in Mogadishu, Somalia. It begins with demographic characteristic of respondents, and then presents the findings regarding the effectiveness of computerized accounting information and level of decision-making among the telecommunication companies. Lastly, the relationship between accounting information system and decision-making in the selected telecommunication companies is established..

Table 4.1: Response Rate

Total Sample Size	Response Rate	Percent	Non-Response Rate	Percent
114	108	95	6	5

Table 4.1 indicates that out of 114 respondents sampled from the three selected telecommunication companies, 108 (95 %) of the respondents completed their questionnaires and returned them while the remaining 5 % of the respondents did not return their questionnaires as they were away for their business engagements and the time for data collection had elapsed. The impression from the above presentation is that majority of the respondents sampled participated in this study thus; the error of margin in this study is minimal.

4.1 Demographic Characteristics of Respondents

The demographic characteristics of respondents presented in the Table 4.2 reflect the gender, age group, education level, working experience and departments of the 108 respondents who participated in this study.

Table 4.2: Demographic Characteristics of Respondents

Gender of Respondents	Frequency	Percent
Male	61	56.5
Female	47	43.5
Total	108	100.0
Age Group of Respondents		
20-29 years	25	23.1
30-39 years	45	41.7
40-49 years	30	27.8
50 years and above	8	7.4
Total	108	100.0
Education Level of Respondents		
Secondary	7	6.5
Diploma	20	18.5
Bachelor	57	52.8
Master and above	24	22.2
Total	108	100.0
Working Experience of Respondents		
1-3 years	17	15.7
4-6 years	53	49.1
7 years ad above	38	35.2
Total	108	100.0
Working Department of Respondents		
Management	9	8.3
Finance	12	11.1
Advertising	54	50.0
Selling	33	30.6
Total	108	100.0

Source: Primary Data, 2016

The information presented in Table 4.1 shows that majority (56.5%) of the respondents in this study were males while 43.5% of them were females. Females were slightly fewer than men because most of the jobs of carrying products are mostly done by men. However, the information obtained from the one gender complimented the one given by the other.

Table 4.1 also indicates that 64.8% of the employees of the elected telecommunication companies were the youth (20-39 years old); 27.8% of them were those from the age group of 40-49 years; and 7.4% of the respondents were from the age group of 50 years ad above. The

majority of the employees of the selected telecommunication companies were the youth and this explains youth dominance in socio-economic activities in Somalia. Nevertheless, all employees were given equal opportunity to participate in this study regardless of their age bracket.

Further still, Table 4.1 also shows that majority (52.8%) of the respondents were bachelor degree holders; followed by those having master degree and other qualification above master degree (22.2%); next were the diploma holders (18.5%); and the least (6.5%) participants in this study had stopped in secondary school. In this regard, it can be said that majority of the respondents were better educated and could understand the concepts related to computerized accounting and decision-making as regards to their indicators.

On years of working experience, Table 4.1 also shows that majority (49.1%) of the respondents have been working in the selected telecommunication companies from 4 -6 years; they were followed by those who have been working at the selected telecommunication companies from 7 years and above as they formed 35.2 %; and the least participants in this study had from 1-3 years as they formed 15.7 % of the respondents. Since majority of the employees selected had experience from 4 years and above, they were able to give comparative analysis about the advantages of computerized accounting information and its impact on decision-making.

Table 4.1 further indicates that respondents were sampled from different departments of the selected telecommunication companies. However, majority (50 %) of the respondents were from advertising department; they were followed by those in selling department (30.6%); then those from the finance department (11.1%); and management departments formed 8.3% of the participants. This enabled tracking of information about the two research variables easier from different perspectives.

4.2 Effectiveness of Computerized Accounting in Telecommunication Companies

The first objective of this study was to examine the effectiveness of computerized accounting system in the selected telecommunication companies in Mogadishu. To achieve this objective, 14 questions were asked about the indicators of a good computerized accounting system and each question was based on a four points scale ranging between one to four, where 1= strongly disagree (meaning very ineffective); 2=disagree (meaning ineffective); 3=agree (meaning effective) and 4= strongly agree (meaning very effective). For each question, respondents were asked to rate the effectiveness of computerized accounting in the selected telecommunication companies in Mogadishu by ticking one number from the four options. To help in the interpretation, mean ranges were used from 1.00-1.75 indicating very ineffective; 1.76-2.50 for ineffective; 2.51-3.25 for effective; and 3.26-4.00 for very effective. The responses regarding this are indicated in Table 4.3.

Table 4.3: Computerized Accounting among Selected Telecommunication Companies in Mogadishu

	N	Mean	Std. Dev	Interpretation
Computerised Accounting Information				
Data Validation				
Computerized accounting has ensured the accuracy and reliability of input data in this company	108	2.55	.81	Effective
Once the Personal Identification Number (PIN) is validated, the amount of withdrawal being made is also checked to ensure that it does not exceed a prespecified limit of withdrawal	108	2.48	.83	Ineffective
It also compares the same input data with some predefined standards or known data	108	2.42	.86	Ineffective
Through computerized accounting, 'Error Detection' and 'Error Correction' procedures are ensured in this company	108	2.37	.86	Ineffective
Error correction procedures make suggestions for entering correct data input	108	2.29	.85	Ineffective
Mean Average under Data Validation		2.42	.84	Ineffective
Security				
Security provided by the computerised accounting system is far superior compared to any security offered by the manual accounting system	108	2.96	.76	Effective
In computerized accounting system only the authorized users are permitted to have access to accounting data.	108	2.81	.73	Effective
Mean Average under Security		2.89	.75	Effective

Storage and Accuracy				
Computerized accounting in this company makes it absolutely clear that only valid transactions are stored in the database	108	2.96	.74	Effective
The information content of reports generated by the computerized accounting system is accurate and has been quite reliable for the decision making of this company	108	2.52	.88	Effective
Withdrawal of money by a particular customer, are stored in transaction database of computerized personal system	108	2.40	.83	Ineffective
Mean Average under Storage and Accuracy		2.63	.82	Effective
Information and Reporting				
Computerized accounting system of this company is capable of generating reports of any balance as when required and for any duration which is within the accounting period	108	2.55	.91	Effective
The stored data is processed making use of the Query facility to produce desired information.	108	2.47	.87	Ineffective
Financial reports of this company can be prepared on the basis of the required information content according to the decision usefulness of the report	108	2.40	.89	Ineffective
The financial reporting of this company is flexible in computerised accounting system as compared to manual accounting system	108	2.35	.90	Ineffective
Mean Average under Information and Reporting		2.44	.89	Ineffective
Overall Mean Average under Computerised Accounting		2.60	.83	Effective

Source: Primary Data, 2016

Table 4.3 indicates that respondents generally rated computerized accounting systems in the selected telecommunication companies effective and this finding is supported by the overall mean average of 2.60 at standard deviation of 0.83 that refers to effective in the rating scale. Computerized accounting was most effective in security that was rated at the mean average of 2.89 at standard deviation of 0.75; this was followed by storage and accuracy that was rated at the mean average of 2.63 at standard deviation of 0.83; next was information and reporting that was rated at the mean average of 2.44 at standard deviation of 0.89; and lastly, it was on data validation as it was rated at the mean average of 2.42 at the standard deviation 0.84.

The construct which was most effectively rated under computerized accounting in the selected telecommunication companies was security because respondents agreed that security provided by the computerised accounting system is far superior compared to any security

offered by the manual accounting system (mean 2.96; SD=.76); and they agreed that in computerized accounting system, only the authorized users are permitted to have access to accounting data (mean= 2.81; SD=.73).

Storage and accuracy was also effectively rated as an element of computerized accounting among the selected telecommunications because respondents agreed that computerized accounting in the selected telecommunication companies makes it absolutely clear that only valid transactions are stored in the database (mean of 2.96; SD=.74); that the information content of reports generated by the computerized accounting system is accurate and has been quite reliable for the decision making of this company (mean of 2.52; SD=.88). however, one item under data storage and accurate among the selected telecommunication companies was lowly rated as respondents disagreed that withdrawal of money by a particular customer, are stored in transaction database of computerized personal system (mean of 2.40; SD=.83).

However, information and reporting under computerised accounting was ineffectively rated because respondents disagreed that the stored data is processed making use of the query facility to produce desired information (mean of 2.47; SD=.87); they also disagreed that financial reports of the selected telecommunication companies can be prepared on the basis of the required information content according to the decision usefulness of the report (mean of 2.40; SD=.89); that the financial reporting of this company is flexible in computerised accounting system as compared to manual accounting system (mean of 2.35; SD=.90). Nevertheless, one item under information and reporting was effectively rated as respondents agreed that computerized accounting system is capable of generating reports of any balance as when required and for any duration which is within the accounting period (mean of 2.55; SD=.91).

Data validation under accounting information was also ineffectively rated because respondents disagreed that once the Personal Identification Number (PIN) is validated, the amount of withdrawal being made is also checked to ensure that it does not exceed a prespecified limit of withdrawal (mean of 2.48; SD=.83); they also disagreed that computerised accounting compares the same input data with some predefined standards or known data (mean of 2.42; SD=.86); that through computerized accounting, 'Error Detection' and 'Error Correction' procedures are ensured in this company (mean of 2.37; SD=.86); and that error correction procedures make suggestions for entering correct data input (mean of

2.29; SD=.85). However, respondents highly rated one of the items under data validation highly as they agreed that computerized accounting has ensured the accuracy and reliability of input data in this company (mean of 2.55; SD=.81).

In addition to the above findings based on questionnaires, oral interviews were also used by the researcher in order to seek for further clarification on respondents' views on how they would respond to computerized accounting information in the selected telecommunication companies operating in Mogadishu, Somalia. The researcher discovered that the views of respondents in this regard were similar to those that were revealed through questionnaires as about 90 % of the key informants interviewed rated the operation of accounting information systems in their companies effectively.

On the importance of computerized accounting to the telecommunication companies, the following were some of the key reasons given by the key informants in face-to-face interviews.

- (i) To ensure reduction in frauds and theft as well as misappropriation
- (ii) To ensure financial data accuracy and reliable storage of financial information and reporting
- (iii) To ensure maximum financial security
- (iv) To minimize unnecessary interference and manipulation with company finances
- (v) To ensure easy detection of errors related to data entry

One of the key informants interviewed was quoted saying:

Our biggest aim of introducing computerized accounting information in this company was related to ensuring absolute financial security. It has not been able to keep, update and verify financial information based on manual approach. Till now, financial security remains uncompromised aspect in the use of computerized accounting information in this company.

Another key informant was also quoted saying:

Accounting information system without sound financial security leaves any company or organization in a risky or shaky position to progress. Companies with insecure financial information are destined to collapse and are often faced with

massive fraud and cases of theft. We do not want this to happen to our company at any moment.

Such similar statements were also mentioned by other key informants interviewed on different constructs of computerized accounting information. They signify that the selected telecommunication companies have put a lot of emphasis and prioritized on financial security provided by the computerized accounting information besides others.

These reasons mentioned by the key informants suggest that computerized accounting was introduced so as to bridge the existing gaps in manual accounting information systems. One of the informants was quoted saying:

“Without the introduction of computerized accounting systems, this company would have collapsed long ago. Since its introduction, we have been able to detect cases frauds and reduce cases of deliberate manipulation of finances since our computers are on network.”

Such similar statements were also mentioned by other key informants interviewed and they signified that accounting information systems in the selected telecommunication companies have been instrumental in reducing financial loses thus; it is effective in these companies.

To confirm the effectiveness of computerized accounting systems in the selected telecommunication companies in Mogadishu, the competence of the accountants in those companies was also investigated. According to the information obtained from the key informants, the selected companies had all employed professional accountants although they had differences in their education levels and experiences. Three of the accountants had master degrees and had done relevant accounting packages to match with international standards; five of them had bachelor degrees in accounting and had also done relevant accounting packages to meet international standards; 2 remaining accountants had diplomas in accounting and had also attended some short accounting courses; all the accountants had at least experience of three years in similar position. This suggests that they were effective enough to perform their roles and duties professionally.

4.3 Effectiveness in Decision-Making among the Selected Telecommunication Companies in Mogadishu, Somalia

The second research objective assessed the effectiveness of decision-making among the selected telecommunication companies in Mogadishu. To achieve this objective, 12 questions were asked about the indicators of a good decision-making and each question was based on a four points scale ranging between one to four, where 1= strongly disagree (meaning very ineffective); 2=disagree (meaning ineffective); 3=agree (meaning effective) and 4= strongly agree (meaning very effective). For each question, respondents were asked to rate the effectiveness in decision-making in the selected telecommunication companies in Mogadishu by ticking one number from the four options. Mean ranges were used to help in the interpretation of data thus, mean ranges from 1.00-1.75 indicated that majority of the respondents strongly disagreed with the item investigated thus decision-making among the selected telecommunication companies is very ineffective; mean ranges from 1.76-2.50 show that majority of the respondents investigated disagreed with the item investigated thus decision-making among the companies is ineffective; mean ranges from 2.51-3.25 show that majority of the respondents agreed with the items under investigation thus decision-making among the companies is effective; and 3.26-4.00 demonstrate that majority of the respondents strongly agreed with the items under investigation thus decision-making among the selected telecommunication companies is very effective. The responses regarding this are indicated in Table 4.4.

Table 4.4: Decision-Making among Selected Telecommunication Companies in Mogadishu

	N	Mean	Std. Dev	Interpretation
Decision-Making				
The Need for Achievement				
There is always the need to achieve or innovate, alongside with the desire to gain control over one's destiny in decision-making	108	2.65	.89	Effective
The company is driven by empirical support in decision-making such that 'push' factors have a higher failure rate	108	2.57	.91	Effective
The decision-making process of this company involves acceptance of personal responsibility for outcomes and innovativeness	108	2.54	.89	Effective
The company also considers preference for challenge in decision-making process	108	2.43	.95	Ineffective

The company decision-making of the company is driven by the need for achievement and the attitude toward risk	108	2.40	.96	Ineffective
Mean Average under Need for Achievement		2.52	.92	Effective
Ability to Focus and Pursue A Goal				
The management of this company is always considers being innovative and creative abilities in decision-making	108	2.77	.90	Effective
The management considers striking difference in the capacity to focus attention on a single task in decision-making	108	2.47	.90	Ineffective
There is always the environmental stimuli to lead individuals to react and motivate them for higher decision-making in decision-making	108	2.38	.88	Ineffective
Mean Average under Focus and Pursue a Goal		2.54	.89	Effective
Optimism				
In decision-making, the management always has the insight of seeing something new about an industry	108	2.97	.87	Effective
The management also markets that others miss or fail to understand in decision-making	108	2.75	.83	Effective
The sense of rightness in decision-making is always backed by looking at critical elements and discount uncertainties	108	2.60	.92	Effective
The management is always aware that excessive optimism hurdles acknowledging some risks and may lead to serious damage on the business and even to its complete failure while making decisions	108	2.32	.92	Ineffective
Mean Average under Optimism		2.66	.89	Effective
Overall Mean Average under Decision-Making		2.57	.90	Effective

Source: Primary Data, 2016

Considering the overall mean average of 2.57 and standard deviation of .90, it can be noted that the decision-making among the selected telecommunication companies in Mogadishu, Somalia has generally been rated effectively by respondents. Considering the three constructs under decision-making, it can be noted that decision-making among the selected telecommunication companies was most effective in terms optimism (mean of 2.66; SD=.89); this was followed by the ability to focus and pursue a goal (mean of 2.54; SD=.89); and lastly, it was in terms of the need for achievement (mean of 2.52; SD=.92).

Decision-making among the selected telecommunication companies was effective as regards to optimism because majority of the respondents agreed that in decision-making, the management always has the insight of seeing something new about an industry (mean of 2.97; SD=.87); they also agreed that the management markets that others miss or fail to

understand in decision-making (mean of 2.75; SD=.83); they further agreed that the sense of rightness in decision-making is always backed by looking at critical elements and discount uncertainties (mean of 2.60; SD=.92). However, one item under decision-making in terms of optimism was lowly rated by respondents as majority of the respondents disagreed that the management is always aware that excessive optimism hurdles acknowledging some risks and may lead to serious damage on the business and even to its complete failure while making decisions (mean of 2.32; SD=.92).

Decision-making as regards to the ability to focus and pursue a goal among the selected telecommunication companies was also effectively rated because respondents agreed that the management of the selected telecommunication companies always consider being innovative and creative abilities in decision-making (mean of 2.77; SD=.90). Much as the ability to focus and pursue a goal among the selected telecommunication companies was effectively rated, two items under the construct were ineffectively rated as respondent disagreed that the management considers striking difference in the capacity to focus attention on a single task in decision-making (mean of 2.47; SD=.90) and that there is always the environmental stimuli to lead individuals to react and motivate them for higher decision-making in decision-making (mean of 2.38; SD=.88).

Lastly, decision-making as regards to the need for achievement among the selected telecommunication companies was effectively rated by respondents as majority of the respondents agreed that there is the need to achieve or innovate, alongside with the desire to gain control over one's destiny in decision-making (mean of 2.65; SD=.89); they also agreed that the companies are driven by empirical support in decision-making such that 'push' factors have a higher failure rate (mean of 2.57; SD=.91); and that the decision-making process of the selected companies involve acceptance of personal responsibility for outcomes and innovativeness (mean of 2.54; SD=.89). Nevertheless, some items under decision-making as regards to the need for achievement were ineffectively rated as respondents disagreed that the selected companies consider preference for challenge in decision-making process (mean of 2.43; SD=.95); and that the decision-making of the companies is driven by the need for achievement and the attitude toward risk (mean of 2.40; SD=.96).

Apart from the above findings based on questionnaires, oral interviews were also used by the researcher in order to seek for further clarification on respondents' views on how they would

respond to effectiveness of decision-making in the selected telecommunication companies operating in Mogadishu, Somalia. The researcher also discovered that the views of respondents in this regard were similar to those that were administered through questionnaires as about 80 % of the key informants interviewed viewed their decision-making process effective.

On the basis of decision making in the selected telecommunications, it was found out that the management undertakes strategic planning and this considers the need for achievement, the ability to focus and pursue a goal and optimism. However, the management puts more emphasis on the ability to focus and pursue a goal than other constructs for effective decision-making. One of the key informants was quoted saying:

We have moved significant steps forwards with this business because of making strategic decisions. Effective decision-making has given us a chance to be very competitive within the city and we want to keep moving forward. Moving forward for us means that we must be able to find out our weaknesses and strength and build from them.

Similar statements of this nature were also made by other key informants interviewed as many of them tried to show their position as regards to decision-making processes of their companies in the city. This clearly indicates that the companies have made improvements in their decision-making as regards to the need for achievement, the ability to focus and pursue a goal and optimism among others.

It was also found out that decision-making in the selected telecommunication companies involved consultative process. Before making any strategic decision, different departments are consulted and given the task to significantly propose constructive ideas for creative and innovative ideas. One of the key informants was quoted saying:

We have been in position to make important decisions based on diversified views of different stakeholders. We also consider our strengths and weaknesses as a way of our survival skills. These considerations have made us strong and tough while making strategic decisions in both good times and bad ones.

In some of the telecommunication companies, the decision-making body takes some days off work for retreat in times of making strategic decisions for the company. One of the key informants was quoted saying that:

In a competitive environment, one needs to be reflective enough while making strategic decisions. We always go out to some place for about four to five days when it comes to making strategic decisions for our company. This moment gives us an opportunity to concentrate and focus on things that matter to our company.

The information obtained from the key informants about the decision-making processes in the three selected telecommunication companies through interviews confirms that the decision-making of the companies is somewhat effective.

4.5 Relationship between Computerized Accounting and Decision-Making among the Selected Telecommunication Companies in Mogadishu

The last research objective established the relationship between computerized accounting systems and decision-making in the selected telecommunication companies in Mogadishu. The Pearson's Linear Correlation coefficient was employed so as to establish this relationship between the two variables. The findings regarding these are presented in Table 4.5.

Table 4.5: Relationship between Computerized Accounting and Decision-making of the selected Telecommunication Companies in Mogadishu

		Computerised Accounting	Decision-making
Computerised Accounting	Pearson Correlation	1	.986**
	Sig. (2-tailed)		.000
	N	108	108
Decision-making	Pearson Correlation	.986**	1
	Sig. (2-tailed)	.000	
	N	108	108
**. Correlation is significant at the 0.05 level (2-tailed).			

Source: Primary Data, 2016

Table 4.5 indicates that there is a positive and significant correlation between effective use of computerized accounting systems and decision-making of the selected telecommunication companies in Mogadishu. This finding can be seen in the r-values of 0.986 and a small significant value of 0.000. This research finding means that any variation in effectiveness of

computerized accounting systems will lead to 0.986 variations in decision-making of telecommunication companies as regards to the need for achievement, ability to focus and pursue a goal and optimism.

Based on the study on the relationship between effectiveness in computerized accounting and decision-making of the selected telecommunication companies in Mogadishu, it can be said that the null hypothesis that stated that there is no significant relationship between computerized accounting systems and decision-making of the selected telecommunication companies in Mogadishu is rejected as the correlation between the two variables reveals that there is a positive and significant relationship between the study variables. To confirm the study finding on the positive correlation between the two variables of this study, regression analysis was also established and the findings regarding these are presented in Table 4.6 and 4.7.

Table 10: Regression Model Summary of Independent variables

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.986 ^a	.978	.977	.12918
a. Predictors: (Constant), Data Validation, Security, Storage and Accuracy and Information and Reporting				

Source: Primary Data, 2016

Results in Table 4.6 indicate that effectiveness in computerized accounting systems as regards to security, data validation, storage and security, information and reporting positively and significantly lead to 97.8 % variation in the decision-making of the selected telecommunication companies in Mogadishu. This finding is shown by the R² value of 0.978. In this case, it can be said that the other remaining 2.2% variations can be explained by other factors that were not investigated in this study. R. value of 0.986 is the correlation coefficient between the observed value of independent variable and the predicted value based on the regression model. A value close to zero tells that the independent variable is not linearly related to the dependent variable. Since the observed R. Value is quiet large at 0.986, this indicates that the linear regression model fits well. The adjusted R. Square (0.977) is the proportion of the variability in the dependent variable explained by the linear regression.

Table 4.7: Regression Coefficient between Computerized Accounting and Decision-making of the Selected Telecommunication Companies

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.199	.057		-3.458	.001
	Data Validation	.219	.082	.198	2.665	.009
	Security	.267	.043	.224	6.238	.000
	Storage and Accuracy	-.025	.083	-.024	-.299	.765
	Information and Reporting	.607	.087	.614	6.984	.000
a. Dependent Variable: Decision-Making						

Source: Primary Data, 2016

The data presented in Table 4.6 shows the contribution of different items under computerized accounting towards decision-making of the selected telecommunication companies in Mogadishu. It shows that effectiveness in data validation, security and information and reporting have positive and significant relationship with decision-making of the selected telecommunication companies as regards to decision-making in terms of the need for achievement, ability to focus and pursue a goal and optimism. This finding is demonstrated by the β values of .198 and significant value of .009 for data validation; β values of .224 and significant value of .000 for security; and β values of .614 at significant values of .000 for financial information and reporting at standardized significant value of 0.05.

However, data storage and accuracy do not have any significant relationship with decision-making of selected telecommunication companies as its significant value computed is .765 and this is greater than the standardized significant value of 0.05. The item under computerized accounting with the highest influence on decision-making of the selected telecommunication companies in Mogadishu is financial information and reporting as its β value is 0.614 and this is followed by the effectiveness on financial security with its β value .224 and lastly it is as financial data validation as its β value is 0.198.

In addition to the research findings on the relationship between computerized accounting and decision-making based on questionnaires, oral interviews were also used by the researcher in order to seek for further clarification on respondents' views on how they would respond to the relationship between computerized accounting and decision-making in the selected

telecommunication companies operating in Mogadishu, Somalia. The researcher found out that the views of respondents regarding the relationship between the two variables was similar to those that were reflected in correlation and regression analysis as about 90 % of the key informants agreed that computerized accounting information can be useful tool for effective and strategic decision-making.

Majority of the key informants revealed the importance of financial information and reporting in making strategic decisions for improved decision-making and growth. According to them, both weak and strong financial information and reporting give clear view of the operations of the company thus can be used as yard stick for establishing better.

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter discusses the key research findings, draws conclusions and forwards recommendations to ensure effective accounting information and decision-making. These are derived from objectives and they are established below.

5.1 Discussion of Findings

5.1.1 Computerized Accounting in the Selected Telecommunication Companies

This study found out that the computerized accounting systems in the selected telecommunication companies in Mogadishu is generally effective and this was evident in the overall mean average of 2.60 at standard deviation of 0.83 that refers to high in the rating scale. Computerized accounting was most effective in security as it was rated at the mean average of 2.89 at standard deviation of 0.75; this was followed by storage and accuracy that was rated at the mean average of 2.63 at standard deviation of 0.83; this was then followed by information and reporting that was rated at the mean average of 2.44 at standard deviation of 0.89; and lastly, it was on data validation as it was rated at the mean average of 2.42 at the standard deviation 0.84. The study findings obtained through interview guides also confirmed the one obtained through questionnaires as about 80% of the key informants supported that accounting information was has been instrumental in detecting frauds, loses and theft in their companies.

Comparing the research findings on effectiveness of computerized accounting systems in selected telecommunication companies operating in Mogadishu with the one by other authors whose works have been analyzed in this study, it can be said that the study in case of selected telecommunication companies in Mogadishu is in agreement with the ones by Plsek (2003) who indicates that to ensure effectiveness in computerized accounting systems, decision makers, due in part to skills and practical experience should adopt to user friendly CAIS.

Similarly, White and Pearson (2001) also noted to ensure effectiveness in CAIS, there is need to produce relevant, reliable and useful financial and managerial accounting reports for decision-making as it is in the case of many corporations in the US adopted. Although the works established by these mentioned authors is in agreement with the one carried out in case

of selected telecommunication companies in Mogadishu, this study has brought out something quite new as it has clearly established the extent of effectiveness in the selected telecommunication companies by mean values and this was not yet done by any of the authors whose works were reviewed in this study.

The study findings in case of selected telecommunication companies in Mogadishu are also in agreement with the one by Swann (2004) who indicated that to inspire participation and overcome real-world hitches, decision makers' choice on computerized accounting must be aimed at: (1) "system design for, by and with users", (2) improving the quality of work life of staff, (3) adopting technically efficient and job satisfaction systems, and (4) making efficient use of resources.

Ensuring effective computerized accounting systems is very vital if the selected telecommunication companies are to maintain their business at high level. This is because through effectiveness of computerized accounting systems, critical financial losses can be minimized and this can take the company to the next level of business. Thus, all efforts should be put in place to ensure that effectiveness is ensured as regards to financial data validation, financial security, financial storage and accuracy and financial information and reporting.

5.1.2 Decision Making in the Selected Telecommunication Companies Operating in Mogadishu

On the decision-making process in the selected telecommunication companies operating in Mogadishu, this study found out that the decision-making among the selected telecommunication companies in Mogadishu, Somalia has generally been effective and this finding was supported by the overall mean average of 2.57 and standard deviation of .90 and this refers to effective in the rating scales. Considering the three constructs under decision-making, this study found out that the decision-making among the selected telecommunication companies was most effective in terms optimism (mean of 2.66; SD=.89); this was followed by the ability to focus and pursue a goal (mean of 2.54; SD=.89); and lastly, it was in terms of the need for achievement (mean of 2.52; SD=.92). Similar findings were also obtained through interview guides as key informants revealed having consultations and retreats while making strategic decisions for their companies.

Comparing the study findings on decision-making in case of selected telecommunication companies in Mogadishu, Somalia with those that ones whose views are reviewed in the literature, it can be said that the study finding in case of selected telecommunication companies is in agreement with the one by Shapero (2012) who talks about 'negative and positive' factors to start a business ('negative' or 'push' are: unemployment, frustration, etc.), he mentions at first place among the 'positive' or 'pull' factors the need to achieve or innovate, alongside with the desire to gain control over one's destiny.

The study finding on decision-making in the selected telecommunication companies is in agreement with the one by Brockhaus (2010) who found empirical support that the entrepreneurs who were initially driven by 'push' factors have a higher failure rate. In similar way, studies in case of the selected telecommunication companies in Mogadishu is in agreement with the ones by Papadakis et al. (2008); Levander and Raccuia (2001) as their study underlined that the two core aspects of entrepreneurship are the need for achievement and the attitude toward risk. Their study results also showed that entrepreneurs differ cognitively from general population by a striking difference in the capacity to focus attention on a single task. Attention is defined as the individual reception to environmental stimuli and the ability to process information. Even the results much provide a reliable expectations for the results that mandate and lead to improved computerization.

The study finding on decision-making in selected telecommunication companies in Mogadishu is also in agreement with the ones by McGrath et al., (2012) as all of them showed that entrepreneurial insight is something about an industry or a market that others miss or fail to understand. But the scholars were uncertain on whether it is a true opportunity that entrepreneurs see or they simply inflate their 'gut feeling' and sense of rightness to the point where they overlook critical elements and discount uncertainties.

As it is in case of the selected telecommunication companies in Mogadishu, Palich and Bagby (2005); Cooper et al., (2008); McCarthy et al., (2013) and Timmons (2010) noted that entrepreneurs operate by a unique set of cognitive processes, thereby supporting their optimism. Furthermore, the literature on entrepreneurial behavior suggests that entrepreneurs are likely to be optimistic and that they frequently make judgments based on subjective factors. The scholars also noted that excessive optimism hurdles acknowledging some risks and may lead to serious damage on the business and even to its complete failure.

The study findings on decision-making in the selected telecommunication companies could be in agreement with the ones by scholars whose work is reviewed in the literature because effective decision-making is aimed at ensuring sustainability of any organization thus, all organizations or companies including the selected telecommunication companies could have considered the same objectives while making strategic decisions for their companies.

5.1.3 Relationship between Computerized Accounting Systems and Decision-making of Selected Telecommunication Companies

Considering the relationship between the two variables, this study found out that effectiveness in computerized accounting leads to improvement in decision-making of the selected telecommunication companies as regards to the need for achievement, ability to focus and pursue a goal and optimism. This finding is supported by the r -values of 0.986; R^2 value of 0.978 and a small significant value of 0.000. Considering the influence of each aspect under computerized accounting on decision-making of telecommunication companies in Mogadishu, this study found out that effectiveness in data validation; financial security and financial information and reporting have positive and significant relationship with decision-making of the selected telecommunication companies as regards to the need for achievement, ability to focus and pursue a goal and optimism. This finding is demonstrated by the β values of .198 and significant value of .009 for data validation; β values of .224 and significant value of .000 for security; and β values of .614 at significant values of .000 for financial information and reporting at standardized significant value of 0.05. However, data storage and accuracy did not have any significant relationship with decision-making of selected telecommunication companies as its significant value computed in .765 and this is greater than the standardized significant value of 0.05.

Considering the research findings being established, it can be noted that the null hypothesis that stated that there is no significant relationship between computerized accounting and decision-making has been rejected since this study found out that there is significant and positive association between the two study variables.

Relating the research findings on the relationship between computerized accounting and the decision-making of the selected telecommunication companies in Mogadishu with the ones whose works have been analyzed in the literature, it can be seen that the findings in case of

Mogadishu is in agreement with some of the studies being reviewed in the literature. The studies carried out by Wood and Sangster (2008) for example is somewhat in agreement with the one being carried out in Mogadishu as the authors noted that CAIS should be evaluated from three key dimensions: managerial, organizational and environmental context if decision-making is to be attained. This study is also in agreement with the ones by Sajady et al (2012) who indicated that level of decision-making relies on the efficacy of CAIS.

The study findings in case of selected telecommunication companies in Mogadishu is also in agreement with the one by Swann (2004) who indicated that to inspire participation and overcome real-world hitches, decision makers' choice on computerized accounting must aimed at: (1) "system design for, by and with users", (2) improving the quality of work life of staff, (3) adopting technically efficient and job satisfaction systems, and (4) making efficient use of resources.

Authors such as Gelinas, et al. (1990) also have similar findings with the ones in case of the selected telecommunication businesses in Mogadishu as they noted that the usefulness of computerized accounting systems can be accessed on the basis of users' satisfaction systems' reliability, quality and improvement of task.

The study findings in case of selected telecommunication companies in Mogadishu is also in agreement with the one by Green (2003) who indicted that another issue worth addressing at the developmental and implementation stages is information security. The scholar shows that information security threats that can lead to the collapse of an organization include forced entry into computer rooms, destruction by fire and natural disasters, unauthorized access, disclosure, and modification or destruction of accounting data. Abu-Musa (2006) finds that entry of inaccurate data, destruction of reliable data, introduction of computer viruses to the system, employees' sharing of passwords, and misdirecting prints and distributing information to unauthorized people are the most significant perceived security threats to CAIS in both the Egyptian wholesaling industry and Saudi firms.

Much as the studies by the above mentioned authors has something similar to the one carried out in case of the selected telecommunication companies in Mogadishu, there is some new discovery in this study as this study has clearly pointed out that improvement in effectiveness in computerized accounting information can lead to 98.6 % improvement in decision-making

of selected telecommunication companies in Mogadishu and this was not yet established by authors whose studies are reviewed in the literature. Another new discovery in this study is that it has clearly pointed out the extent of improvement in decision-making resulting from each element of computerized accounting systems like data validation, security, storage and accuracy and financial information and reporting. Such measurements have not been established by other authors whose works have been reviewed in this study.

5.2 Conclusions

Considering the research findings, the following research conclusions have been drawn:

5.2.1 Computerized Accounting in the Selected Telecommunication Companies

On the computerized accounting information systems among the three selected telecommunication companies, this study concludes that the computerized accounting systems in the selected telecommunication companies in Mogadishu are generally effective. Computerized accounting was most effective in terms of financial security, followed by financial storage and accuracy, then, information and reporting and finally it was in terms of data validation. The accounting information systems of the three selected telecommunication companies were effective because financial security provided by the computerised accounting system is far superior compared to any security offered by the manual accounting system; in computerized accounting system, only the authorized users are permitted to have access to accounting data; computerized accounting in the selected telecommunication companies makes it absolutely clear that only valid transactions are stored in the database; the information content of reports generated by the computerized accounting system is accurate and has been quite reliable for the decision making of this company; computerized accounting system in the companies is capable of generating reports of any balance as when required and for any duration which is within the accounting period; and the computerized accounting has ensured the accuracy and reliability of input data in this company.

5.2.2 Decision Making in the Selected Telecommunication Companies Operating in Mogadishu

Considering the decision-making of the three selected telecommunication companies, this study concludes that the decision-making among the selected telecommunication companies in Mogadishu, Somalia is effective. Decision-making among the selected telecommunication companies was most effective in terms optimism; this was followed by the ability to focus

and pursue a goal; and lastly, it was in terms of the need for achievement. The decision-making of the telecommunication companies is somewhat effective because in decision-making, the managements always have the insight of seeing something new about an industry; the management markets that others miss or fail to understand in decision-making; the sense of rightness in decision-making is always backed by looking at critical elements and discount uncertainties; the selected telecommunication companies always consider being innovative and creative abilities in decision-making; there is the need to achieve or innovate, alongside with the desire to gain control over one's destiny in decision-making; the companies are driven by empirical support in decision-making such that 'push' factors have a higher failure rate; the decision-making process of the selected companies involve acceptance of personal responsibility for outcomes and innovativeness.

5.2.3 Relationship between Computerized Accounting Systems and Decision-making of Selected Telecommunication Companies

Basing on the relationship between the study variables, this study concludes that effectiveness in computerized accounting leads to improvement in the decision-making of the selected telecommunication companies as regards to the need for achievement, ability to focus and pursue a goal and optimism. Thus, any variation in the effectiveness of accounting information will lead to improvement in the effectiveness of decision-making by 98.6%.

5.3 Recommendations

As computerized accounting systems significantly influences decision-making of the selected telecommunication companies in Mogadishu, the following recommendations have been forward:

- (i) The management of the selected telecommunication companies together with their accountants should ensure that data validation matches the current universal standards as computerized accounting systems in the selected telecommunication companies cannot still compare the same input data with some predefined standards or known data. This can be done by through consultation with experts in the field and if it is put in place will minimize the existing loopholes in the companies and lead to improvement in financial profitability.
- (ii) This study also recommends that with the help of experts in accounting, the management of the selected telecommunication companies and their accountants

should learn the principles of storing data such that it can be well processed to make use of the Query facility to produce desired information. If this gap is also filled in, cases of false financial information and reporting are likely to be minimized at higher level thus realization of higher decision-making level will be witnessed among the selected telecommunication companies.

- (iii) The management of the three selected telecommunication companies should be discreet and rely on neutral position while making decisions. This is because excessive optimism hinders acknowledging some risks and may lead to serious damage on the business and even to its complete failure while making decisions.

5.4 Areas for Further Research

The following areas have been recommended to future researchers for further research:

- (i) The competency of accountants and authenticity of financial information and reporting in telecommunication companies
- (ii) Computerized accounting systems and decision-making of public sectors in Mogadishu

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APPENDICES

APPENDIX 1: QUESTIONNAIRE TO RESPONDENTS

Dear respondent,

I am a student of Kampala International University, pursuing Master Degree in Business Administration. You have been purposively selected to participate in this study titled: **Computerised Accounting and Decision-Making of the Selected Telecommunication Companies in Mogadishu, Somalia**; a study which is being carried out as part of an education research in partial fulfillment of Master of Business Administration of Kampala International University. Your cooperation in filling this questionnaire will lead to the success of the survey. All responses shall be for academic purposes only and will be treated with confidentiality. Thus you do not need to write your name. Please fill this questionnaire and the research assistant will pick it within 5 days.

Thank you.

.....

PART I: FACE SHEET: Profile of Respondents (Please tick any which applies)

Gender:

☐ Male
☐ Female

Age:

☐ 20- 39
☐ 40- 49
☐ 50- 59
☐ 60 and above

Education level:

☐ Secondary
☐ Diploma
☐ Bachelors
☐ Masters and above

Years of Experience

☐ 1-3 Years
☐ 4-6 Years
☐ 7 Years and above

Work Department

☐ Management
☐ Finance Department
☐ Advertising Department
☐ Selling Department

Part 2: Questionnaire to determine the Effectiveness of Computerized Accounting Systems and Decision-Making

Direction: Please write your preferred option on the space provided before each item. Kindly use the rating guide below:

Response Made	Rating	Description
Strongly Agree	4	You agree with no doubt at all.
Agree	3	You agree with some doubt
Disagree	2	You disagree with some doubt
Strongly Disagree	1	You disagree with no doubt at all

EFFECTIVENESS OF COMPUTERIZED ACCOUNTING	SA 4	A 3	DA 2	SDA 1
Data Validation				

1	Computerized accounting has ensured the accuracy and reliability of input data in this company	4	3	2	1
2	It also compares the same input data with some predefined standards or known data	4	3	2	1
3	Through computerized accounting, 'Error Detection' and 'Error Correction' procedures are ensured in this company	4	3	2	1
4	Error correction procedures make suggestions for entering correct data input	4	3	2	1
5	Once the Personal Identification Number (PIN) is validated, the amount of withdrawal being made is also checked to ensure that it does not exceed a prespecified limit of withdrawal.	4	3	2	1
	Security				
6	In computerized accounting system only the authorized users are permitted to have access to accounting data.	4	3	2	1
7	Security provided by the computerised accounting system is far superior compared to any security offered by the manual accounting system.	4	3	2	1
	Storage and Accuracy	4	3	2	1
8	Withdrawal of money by a particular person are stored in transaction database of computerized personal system	4	3	2	1
9	Computerized accounting in this company makes it absolutely clear that only valid transactions are stored in the database	4	3	2	1
10	The information content of reports generated by the computerized accounting system is accurate and has been quite reliable for the decision making of this company	4	3	2	1
	Information and Reporting				
11	The stored data is processed making use of the Query facility to produce desired information.	4	3	2	1
12	Financial reports of this company can be prepared on the basis of the required information content according to the decision usefulness of the report	4	3	2	1
13	The financial reporting of this company is flexible in computerised accounting system as compared to manual accounting system	4	3	2	1
14	Computerized accounting system of this company is capable of generating reports of any balance as when required and for any duration which is within the accounting period	4	3	2	1
	DECISION-MAKING				
	THE NEED FOR ACHIEVEMENT				
1	The decision-making process of this company involves acceptance of personal responsibility for outcomes and	4	3	2	1

	innovativeness				
2	The company also considers preference for challenge in decision-making process	4	3	2	1
3	There is always the need to achieve or innovate, alongside with the desire to gain control over one's destiny in decision-making	4	3	2	1
4	The company is driven by empirical support in decision-making such that 'push' factors have a higher failure rate				
5	The company decision-making is driven by the need for achievement and the attitude toward risk				
	ABILITY TO FOCUS AND PURSUE A GOAL				
6	The management of this company always considers being innovative and creative abilities in decision-making	4	3	2	1
7	The management considers striking difference in the capacity to focus attention on a single task in decision-making	4	3	2	1
8	There is always the environmental stimuli to lead individuals to react and motivate them for higher decision-making in decision-making	4	3	2	1
	Optimism				
9	In decision-making, the management always has the insight of seeing something new about an industry	4	3	2	1
10	The management also markets that others miss or fail to understand in decision-making				
11	The sense of rightness in decision-making is always backed by looking at critical elements and discount uncertainties	4	3	2	1
12	The management is always aware that excessive optimism hurdles acknowledging some risks and may lead to serious damage on the business and even to its complete failure while making decisions	4	3	2	1

APPENDIX 1: INTERVIEW GUIDE

1. When did this company adopt to computerized accounting systems?

.....
.....

2. Why prompted the company to adopt to this accounting systems?

.....
.....
.....

3. Since its adoption, what have been the benefits or advantages of these accounting systems to the company? (advantages regarding accuracy, security, validation of data, reporting etc)

.....
.....

4. Is the program run by a competent person? (Prompting the qualification of the accountant and experience).

.....
.....

5. How has been the decision-making of this company as regards to the need for achievement; ability to focus and pursue a goal; optimism)

.....
.....

6. According to your answer to question 6, why do you say so?

.....
.....

7. If your decision-making has been generally good, can you attribute these improvements in decision-making to the adoption of computerized accounting systems?

.....
.....

8. According to your answer to question 8, why do you say so?

.....
.....

APPENDIX III: PROPOSED BUDGET

SER. NO.	Description	ITEM	QUANTITY REQUIRED	UNIT COST(SHS)	TOTAL COST(SHS)
1		Internet Everywhere Package(airtime For data card)	3	25,000	75,000
2		Travelling	15	5,000	75,000
3		Airtime	3	25,000	75,000
4		Pre-testing questionnaires	10	10,000	100,000
5		Research assistants allowances	2	200,000	400,000
6		Stationery	3 Reams	12,000	36,000
7		Secretarial services	1Secretaries	150,000	150,000
8		Data analysis(SPSS)	1	50,000	100,000
9		Production of research reports	4	15,000	60,000
		GRAND TOTAL			711,000

APPENDIX IV: WORK PLAN

No.	Activity	Time in months (2015-16)									
		J	A	S	O	N	D	J	F	M	
1	Identification of the Topic										
2	Writing of the Proposal										
3	Submission of the Proposal										
4	Hearing of the Proposal by the Thesis Panel & allocation of Supervisor										
5	Correcting the Proposal after hearing and data collection										
6	Data Processing and analysis and Writing the Final Thesis report										
7	Defense										



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