COMPUTERIZED ACCOUNTING AND PERFORMANCE OF SELECTED WHOLESALE COMPANIES IN

MOGADISHU, SOMALIA

BY

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A THESIS SUBMITTED TO THE COLLEGE OF HIGHER DEGREES AND RESEARCH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE MASTER OF ARTS IN BUSINESS ADMINISTRATION (ACCOUNTING AND FINANCE) OF KAMPALA INTERNATIONAL UNIVERSITY

SEPTEMBER, 2014

DECLARATION

I declare that this thesis is my original work and has not been presented for a degree or

any other academic award in any university or institution of learning.

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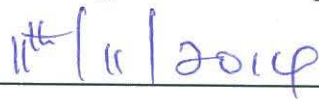
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APPROVAL

I confirm that the work reported in this thesis entitled "**Computerized Accounting and Performance of Selected Wholesale Companies in Mogadishu, Somalia**" was carried out by the candidate under my supervision. I supervised the student during the research process. I also reviewed and guided the student's research work.

Dr. Kibuuka Muhammad, T.

Name and signature of the Supervisor

11th | 11 | 2014

Date

DEDICATION

I wish to dedicate this work to my parents including my mother FATIMA ABDULAHI and my uncle TAHLIL HAJI HMED for great support contribution during the course of my studies and research period

I equally dedicate this work to the rest of my family especially my all brothers & sisters who rendered their support materially, spiritually in this course.

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First and foremost, I would like to thank Almighty Allah for his guidance and protection since my early childhood up to now.

I would like to give heart-felt thanks to the following individuals for their varied contribution to the success of this study.

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I cannot also forget to thank my dear family members most especially my mother Fatima Abdulhi and my uncle Tahlil Haji Ahmed and my all brothers and sisters for their material, moral and financial support throughout my hard times at KIU.

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ABREVIATIONS

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
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
SMEs	Small and Medium Enterprises
SOEs	State-Owned Enterprises
SPSS	Statistical Package for Social Sciences

ABSTRACT

This study established the relationship between computerized accounting systems and performance of selected wholesale companies in Mogadishu, Somalia. The study was based on these three objectives; 1) to examine the effectiveness of computerized accounting systems; 2) to assess the performance of selected wholesale companies; and 3) to find out whether there is significant relationship between computerized accounting systems and performance of selected wholesale companies in Mogadishu, Somalia. A descriptive correlational and cross sectional survey design involving both qualitative and quantitative approaches was employed. Using Slovene's formula, a sample size of 114 was used to collect data from employees of the selected wholesale companies through purposive and systematic random sampling techniques. a researcher made questionnaire was used to collect data, which was analyzed using frequencies and percentages, mean scores and ranks, Pearson's Linear correlation coefficient and Linear regression analysis. The findings revealed that computerized accounting was effective in the selected wholesale companies (overall mean= 2.78); performance of the selected wholesale companies was also found to be high (overall mean = 2.71); the relationship between effectiveness of computerized accounting and performance of the selected wholesale companies in Mogadishu was also positive and significant (at r =.988; R^2 = 0.978; and sig. = 0.000). Basing on the individual items under computerized accounting, this study found out that effectiveness in data validation; financial security and financial information and reporting have positive and significant relationship with performance of the selected wholesale companies. This finding is demonstrated by the β values of 0.379; 0.217 and 0.264 at significant values of 0.003; 0.000; and 0.009 respectively at standardized significant value of 0.05. However, data storage and accuracy did not have any significant relationship with performance of selected wholesale companies as its significant value computed in 0.121 and this is greater than the standardized significant value of 0.05, so the null hypothesis was accepted. The researcher concluded that computerized accounting in the selected wholesale companies in Mogadishu is effective; the performance of the selected wholesale companies is high; and that there is a strong, positive and significant relationship between computerized accounting and the performance of the selected wholesale companies in Mogadishu. The study recommends that the management of the selected companies should work hand in hand with their accountants to ensure improvements are ensured in the areas of data validation financial reporting and information as well as data storage and accuracy such that improvement in performance of the companies can be enhanced.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

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 (Frankwood& Sangster, 2005). According to these authors, since then both businesses and economies have greatly evolved. 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 scholar 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.

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 performance and reduce cases of fraud and theft, invention of accounting software revolutionized accounting processes (Weber, 2011). He 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. He 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 were 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 performance of organization or companies. At the same time owners of small businesses, 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 (Frankwood& 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.

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).

1.2.2 Theoretical Perspective

This study is based on the Diffusion of Innovationstheory by Everett Rogers (1962). This theory seeks to explain how, why, and at what rate new ideas and technology spread through cultures. Rogers argues that diffusion is the process by which an innovation is communicated through certain channels over time among the participants in a social system. Rogers proposes that four main elements influence the spread of a new idea: the innovation itself, communication channels,

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time, and a social system. This process relies heavily on human capital. The innovation must be widely adopted in order to self-sustain. Within the rate of adoption, there is a point at which an innovation reaches critical mass. The categories of adopters are: innovators, early adopters, early majority, late majority, and laggards. Diffusion manifests itself in different ways in various cultures and fields and is highly subject to the type of adopters and innovation-decision process (Stone, 2004).

Like innovations, adopters have been determined to have traits that affect their likelihood to adopt an innovation. A bevy of individual personality traits have been explored for their impacts on adoption, but with little agreement (Everett, 1983). Ability and motivation, which vary on situation unlike personality traits, have a large impact on a potential adopter's likelihood to adopt an innovation. Unsurprisingly, potential adopters who have are motivated to adopt an innovation are likely to make the adjustments needed to adopt it. Potential adopters who frequent metropolitan areas are more likely to adopt an innovation. Finally, potential adopters who have the power or agency to create change, particularly in organizations, are more likely to adopt an innovation than someone with less power over his choices (Stone,2000).

Stone (2000) noted that organizations face more complex adoption possibilities because organizations are both the aggregate of its individuals and its own system with a set of procedures and norms. Three organizational characteristics match well with the individual characteristics above: tension for change (motivation and ability), innovation-system fit (compatibility), and assessment of implications (observability). Organizations can feel pressured by a tension for change. If the organization's situation is untenable, it will be motivated to adopt an innovation to change its fortunes. This tension often plays out among its individual members.

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Innovations that match the organization's pre-existing system require fewer coincidental changes and are easy to assess are more likely to be adopted. The wider environment of the organization, often an industry, community, or economy, exerts pressures on the organization, too. Where an innovation is diffusing through the organization's environment for any reason, the organization is more likely to adopt it. Innovations that are intentionally spread, including by political mandate or directive, are also likely to diffuse quickly (Wejnert, 2002).

Since this study attempted to examine the effectiveness of computerized accounting and it is a new idea and an element of technology that spreads through certain channels over time among the participants in a social system; that affect their likelihood to adopt an innovation, there was need to determine its influence on performance of selected wholesale businesses in Mogadishu, Somalia.

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 is a beneficial use of current technological advances (Brynjolfsson and Hitt, 2003). Thus, effectiveness of computerized accounting in the selected wholesale companies in Mogadishu will be investigated inform of data validation, security, storage and accuracy, information and reporting.

Business performance in general can be measured in different perspectives and these involve learning and growth perspective;the business process perspective; the customer perspective (Spathis*et al.* (2002). Bearing these perspectives in mind, performancehas been defined as measure of productivity and efficiency of the wholesale business companies as regards to their outputs, costs, efficiency,

growth, innovations in services and customer base. 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 business performance of wholesalers as regards to productivity and efficiency. ·

1.2.4 Contextual Perspective

In Somalia, Mogadishu in particular, many SMEs still make decisions to use manual accounting information systems (MAIS) although computerized accounting information system is said to be having comparative advantage over the manual accounting information system as it is user-friendly, low cost microcomputers and the need to facilitate information to the end users (Lief, 2000). As a result of this, growing SMEs in Mogadishu face increased financial challenges and consequently, there is a greater need for careful attention to AIS and financial reporting (Mohamed, 2007). Over the years, software suppliers have been adding more innovative features to their finance packages, such as web interfaces and better integration with supply chain and other applications, and they have also altered products to make them more useable for non-accountants (Mohamed, 2007).

According to Mohamed (2007), some business owners in Mogadishu now use computerized accounting to record, report and analyze their company's financial information and in doing this, companies often generate several pieces of financial information from business transactions, and compile this information into general ledgers and journals.

Similarly, Loigorri (2006)also indicated that individuals and companies including wholesale companies in Mogadishu day by day hire accountants to help them carry out the mathematical requirements of accounting and balancing of books.

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Although there is introduction of information technology into accounting, these accounting protocols are being performed manually. However, today many accountants and non-accountants like to use computer software to perform these duties. As many of the SMES including wholesale companies in Mogadishu employ accounting information system, many of those companies continue to close down as there have been increasing frauds in financial reporting (Mohamed, 2007). Thus, there was need to establish the role of computerized accounting information system to the performance of wholesale business in Mogadishu.

1.3 Statement of the Problem

The performance of many small and medium enterprises including wholesale businesses in Mogadishu has been poor (Mohamed, 2007). Many of the SMEs fail to sell goods worthy five dollars per day; 60% of them incur losses daily as they do not have appropriate books of accounts and so on. As a result, over 20% of the SMEs employing inappropriate accounting information systems collapse before their third birthday and about 30% of them crawl to reach their third birthday. One of the factors responsible for the high rate of business failure in this area is poor records and financial management. It was therefore because of this reason that this study attempted to establish the relationship between computerized accounting information systems and performance selected wholesale business in Mogadishu such that the companies could be in better position to improve on their quality of financial reporting and accounting operations.

1.4 Purpose of the Study

The purpose of this study was to examine and correlate between computerized accounting systems and performance of wholesale businesses; and assess the effectiveness of computerized accounting systems employed by wholesale businesses in Mogadishu, Somalia.

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1.5 Specific Objectives

(i) To examine the effectiveness of computerized accounting employed by selected wholesale businesses in Mogadishu, Somalia.

(ii) To assess the performance of selected wholesale businesses in Mogadishu, Somalia.

(iii) To find out whether there is significant relationship between effectiveness of computerized accounting and performance of wholesale businesses.

1.6 Research Questions

(i) What is the effectiveness of computerized accounting employed by the selected wholesale businesses in Mogadishu?

(ii) What is the level of performance of the selected wholesale businesses in Mogadishu?

(iii) Is there any significant relationship between computerized accounting and performance of wholesale businesses in Mogadishu?

1.7 Research Hypotheses

There is no significant relationship between computerized accounting systems and performance of wholesale businesses.

1.8 Scope of the Study

1.7.1 Geographical Scope

This study was carried out in five selected wholesale businesses that employ computerized accounting systems in Mogadishu, Somalia. These wholesale businesses include Omar Wholesale Company Ltd, Raliya Wholesale Company Ltd; Mohamed Ilkweyn Wholesale Company Ltd; IndhoDerro Wholesale

Company Ltd and Shafia Wholesale Company Ltd. These wholesale businesses had been targeted for this study because they are among the few wholesale businesses that have shifted away from manual accounting systems to computerized accounting systems in Mogadishu, Somalia. Thus, the impact of computerized accounting systems on their business performance needed to be established.

1.8.2 Content scope

This study established the relationship between computerized accounting systems and performance of selected wholesale businesses in Mogadishu, Somalia. Effectiveness of computerized accounting systems employed by selected wholesale businesses in Mogadishu was determined as regards to its data validation, financial security; data storage and accuracy; and financial information and reporting. Level of business performance of selected wholesale businesses in Mogadishu was determined through profit level, customer base, better technology and business growth and expansion.

1.8.3 Theoretical Scope

Diffusion of innovationsis a theory that seeks to explain how, why, and at what rate new ideas and technology spread through cultures. Everett Rogers, a professor of communication studies, popularized the theory in his book *Diffusion of Innovations*; the book was first published in 1962, and is now in its fifth edition (2003). Rogers argues that diffusion is the process by which an innovation is communicated through certain channels over time among the participants in a social system. The author also noted that like innovations, adopters have been determined to have traits that affect their likelihood to adopt an innovation.

Since this study attempted to examine the effectiveness of computerized accounting and it is a new idea and an element of technology that spreads through

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certain channels over time among the participants in a social system; that affect their likelihood to adopt an innovation, there was need to determine its influence on performance of selected wholesale businesses in Mogadishu, Somalia.

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 wholesale 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 performance of the selected wholesale companies could be established.

1.9 Significance of the study

The management of the selected wholesale 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 enables 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 wholesale companies and other SMEs 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 performance.

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 performance 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 performance of selected wholesale 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.

Performance in this study refers to the measure of growth and expansion, customer base, and level of profitability, innovation and the use of modern technology in business operations.

Wholesale 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 wholesalers and related subordinated services. In general, it is the sale of goods to anyone other than a standard consumer.

Accounting Information Systems (AIS) as combination of the study and practice of accounting is the whole of the related components which are accounting policy, record keeping, accounting package, and competence.

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CHAPTER TWO

LITERATURE REVEIW

2.1 Introduction

This chapter presets 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 is established.

2.2 Theoretical Review

Diffusion of Innovationstheory by Everett Rogers (1962)is the appropriate theory for this study. This theory seeks to explain how, why, and at what rate new ideas and technology spread through cultures. Rogers argues that diffusion is the process by which an innovation is communicated through certain channels over time among the participants in a social system. Rogers proposes that four main elements influence the spread of a new idea: the innovation itself, communication channels, time, and a social system. This process relies heavily on human capital. While reviewing the theory, (Stone, 2004) stated that the innovation must be widely adopted in order to self-sustain. Within the rate of adoption, there is a point at which an innovation reaches critical mass. The categories of adopters are: innovators, early adopters, early majority, late majority, and laggards. Diffusion manifests itself in different ways in various cultures and fields and is highly subject to the type of adopters and innovation-decision process.

Everett (1983) also noted that like innovations, adopters have been determined to have traits that affect their likelihood to adopt an innovation. A bevy of individual personality traits have been explored for their impacts on adoption, but with little agreement. Ability and motivation, which vary on situation unlike personality

traits, have a large impact on a potential adopter's likelihood to adopt an innovation. Unsurprisingly, potential adopters who have are motivated to adopt an innovation are likely to make the adjustments needed to adopt it. Potential adopters who frequent metropolitan areas are more likely to adopt an innovation. Stone (2000) also noted that potential adopters who have the power or agency to create change, particularly in organizations, are more likely to adopt an innovation than someone with less power over his choices.

Further still, Stone (2000) pointed out that organizations face more complex adoption possibilities because organizations are both the aggregate of its individuals and its own system with a set of procedures and norms. Three organizational characteristics match well with the individual characteristics above: tension for change (motivation and ability), innovation-system fit (compatibility), and assessment of implications (observability). Organizations can feel pressured by a tension for change. If the organization's situation is untenable, it will be motivated to adopt an innovation to change its fortunes. This tension often plays out among its individual members. Innovations that match the organization's pre-existing system require fewer coincidental changes and are easy to assess are more likely to be adopted. The wider environment of the organization, often an industry, community, or economy, exerts pressures on the organization, too. Where an innovation is diffusing through the organization's environment for any reason, the organization is more likely to adopt it. Innovations that are intentionally spread, including by political mandate or directive, are also likely to diffuse quickly (Wejnert, 2002).

As this examined the effectiveness of computerized accounting and it is a new idea and an element of technology that spreads through certain channels over time among the participants in a social system; that affect their likelihood to adopt an

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innovation, there was need to determine its influence on performance of selected wholesale businesses in Mogadishu, Somalia.

2.3 Conceptual Framework

Figure 1: Conceptual Framework

Independent Variable   **Dependent Variable**

Computerized Accounting	Business Performance
• Data Validation • Security • Storage and accuracy • Information and reporting	• Profit • Customer base • Better technology • Business growth and expansion

Intervening Variables

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┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
│  • Competence of the Accountant      │
│  • Managerial Competence             │
│  • Motivation of the accountant      │
└ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
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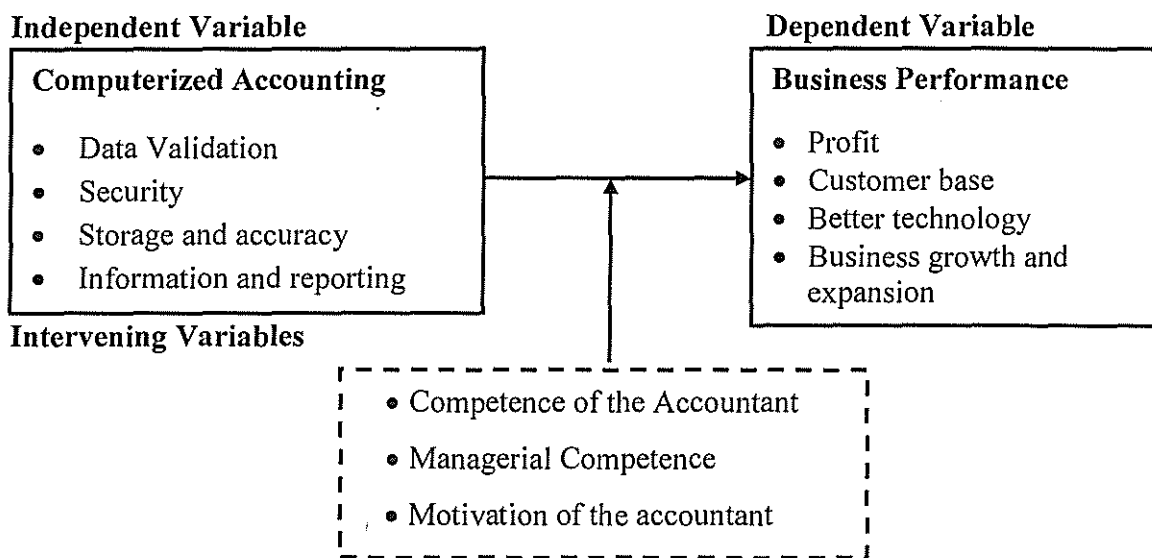
Source: Conceptualized by the Researcher

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 performance as regards to increased profit, increased customer base, improved technology and business growth and expansion. 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

Data Validation

Plsek (2003) 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 (2004) 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 (2002) 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.

Romney *et al.* (2009) 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, 2004).

In emphasizing issues related to financial insecurity resulting from computerized accounting, Abu-Musa (2004) 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, 2003). 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 ac curacy, 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 (Nicolaou, 2000).

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 performance 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 performance of Ghanaian SOEs improved after privatization. They also find that overall performance 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, 2005).

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 organisational 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 Business Performance

Profit Level

Scholars have examined the importance of performance evaluation and practices for an organization (Gruber et al., 2010). Much research also focuses on the performance of small firms and, more recently, medium firms as well (Jarvis et al., 2000). Regular indicators used in measuring business performance are profit, return on investment (ROI), and design quality and product improvement (Laura et al., 1996).

Song *et al.* (2005) established level of performance of SMEs in terms of their profitability ratio. According to the authors, SMEs are often very reluctant to publicly reveal their actual performance in terms of profitability ratio, and scholars have deliberated on the need for subjective measures in evaluating business performance. It is important to consider the aspects of differentiation that may be potentially confounded between subjective (also described as perceived/perception performance) and objective measures.

According to Thomas *et al.* (2008), it is legal for small firms' managers to manipulate some data on their profit levels so as to show that they are better than others. The scholars warned that to control such manipulation through subjectively adjusting measures is detrimental to the image and popularity such organizations. Moreover, many managers of small and private firms consider objective performance measures to be confidential, and guard them from public scrutiny (Gruber et al., 2010). Such managers tend to have a low level of awareness about the desirability of providing accurate and reliable data and feedback to researchers.

Another issue in researching small firms is the difficulty of interpreting some objective performance data. For example, performance may be considered as "poor" if the data shows losses or low profit. Such misinterpretation can occur if, for example, firms have many commitments to research and development (R&D), including product and market development for future growth. These misinterpretations may be due to variations in profitability data and may lead to the comparison of objective measures among small firms in different industries (Dawes, 1999).

Customer Base

According to Wall *et al.* (2004), managers are often encouraged to evaluate business performance through general subjective measures such as number of active customers that can reflect more-specific objective measures. According to the authors, although such measures may seem to be subjective, they can be an effective ways to examine business performance, as they allow comparison across firms and contexts, such as industry type, time horizons, cultures or economic conditions (Song *et al.*, 2005).

It has also been noted that when subjective measures based on the number of customers are employed, managers can use the relative performance of their industry as a benchmark when providing a response (Dawes, 1999). Objective performance measures, in contrast, can vary based on industry and can obscure the relationship between independent variables and business performance (as a dependent variable) (Dawes, 1999).

Moreover, the objective data available to the researcher may not be compatible with the intended level of analysis (Wall et al., 2004); in these cases, subjective data based on the number of customers an organization has can be a good alternative if the measures focus on the firm's current condition (for example, Kim, 2006a; Kim, 2006b).

Better Technology

However, Franco-Santos *et al.* (2007) recommend measuring business performance through the adaptability of an organization towards modern technology, as it is an important tool within many research areas, particularly in business and social science studies. This system analyses and investigates each quality that affects a firm's business performance, categorizing business performance into two broad areas: operational business performance (OBP) and strategic business performance (SBP). Mann & Kehoe (1994) also noted the major function of modern technology is to focus on investigating all an organization's functions at high and low levels of activity; it is appropriately applied to measuring the performance of small and medium enterprises (SMEs). This system is also appropriate for both quantitative (for example, questionnaires) and qualitative (for example, structured interview) research methods.

Business Growth and Expansion

In establishing measurement of performance and expansion through business expansion and growth, Smith & Reece (1999) indicated that in general, business performance is defined as "the operational ability to satisfy the desires of the company's major shareholders" and it must be assessed to measure an organization's accomplishment. Many studies examine the relationship of organizational practice and processes to affect the "bottom line", and vice versa (Wall et al., 2004).

Many studies show a preference for subjective measures based on business growth and expansion during the assessment of business performance due to difficulties in obtaining objective financial data. Managers often refuse to provide accurate, objective performance data to researchers. Even if objective data is made available, the data often do not fully represent firms' actual performance, as managers may manipulate the data to avoid personal or corporate taxes (Alasadi&Abdelrahim, 2008).

Similarly, Thomas et al. (2008) clearly showed the importance of measuring the performance of SMEs by using their expansion and growth capacity. The authors believed that research on SMEs is particularly susceptible to these difficulties, although difficulties can also occur when the research examines business units of multi-industry and privately held firms.

2.6 Computerized Accounting and Business Performance

Wood & Sangster (2008) are some of the key authors who established the relationship between computerized accounting system and performance. They recommended that CAIS should be evaluated from three key dimensions: managerial, organizational and environmental context if performance is to be attained. This implies that the efficacy of CAIS depends on both its aims and

contingency factors of each firm (Sajady*et al*, 2012). From this point, assessment is based on users' satisfaction systems' reliability, quality and improvement of task (Gelinas, &Wriggins 1990). Sajady*et 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 performance (Greenhalgh, *et al.,* 2004).

In establishing the relationship between the computerized accounting and performance 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 Wholesale/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 Wholesale (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 performance, 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 businesses performance 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 wholesale business companies. Thus, there is 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 wholesale 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 performance. The only study that tries to employ quantitative approach was that of Appiah-Kubi (2001) 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 is 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 the descriptive correlational and a cross sectional survey design. This research design enabled 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 performance of wholesale business in Mogadishu, Somalia was established.

3.3 Research Population

The research population involved all the employees in the five wholesale companies and these included: Omar Wholesale Company Ltd, Raliya Wholesale Company Ltd; Mohamed · Ilkweyn Wholesale Company Ltd; IndhoDerro Wholesale Company Ltd and Shafia Wholesale Company Ltd. in Mogadishu. The total research population was 160 and this involved employees and managers of the selected wholesale 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 performance of their companies in terms of profits, customer base, innovation, growth and expansion. The distribution of the total target population according to the companies selected is presented in Table 1.

Table 1: Distribution of Population per Each Wholesale Company

Wholesale Companies	Management Department	Finance Department	Advertising Department	Selling Department	Total
Omar Wholesale Co.	2	2	14	16	34
Raliya Wholesale Co.	2	2	10	16	30
Mohamed Ilkweyn Wholesale Co.	2	2	12	20	36
IndhoDerro Wholesale Co.	2	2	10	17	31
Shafia Wholesale Co.	2	2	11	14	29
Total	10	10	57	83	160

Source: Adopted from the Records Obtained from the Human Resource Managers of the selected Wholesale 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 could be trusted and believed. The detail on the determination of sample size using Slovene's formula is shown in the next page;

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

Where

n= Sample size

N=Total population size

I^2= 0.05 level of significance

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

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 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 computations

3.5 Sampling Procedure

The sampling technique used in this study involved both systematic random sampling and purposive sampling. Selling agents or attendants and those involved in advertising in the selected wholesale companies were selected through systematic random technique because they were 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 performance of the selected wholesale companies. The only criterion for their selection was their consent to participate in the study.

3.6 Data Collection Instruments

Questioner survey and interview were used. Both data collection instruments were used in this study are discussed here after.

3.6.1 Questionnaire Survey

Questionnaires were used to collect data from respondents. The research questionnaire was self-administered to various respondents sampled. The questionnaire was made to obtain responses about respondent's perceptions on computerized accounting systems and performance of the selected wholesale businesses in Mogadishu. The questionnaire enabled respondents to indicate the extent to which they agreed 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 the performance of wholesale 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 performance of wholesale businesses 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

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 constructing the questionnaires and interview guide, they were submitted to the two experts to ensure their validity through their duties' basis. This was based on 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 following formula was used to determine the Content Validity Index (CVI).

$$CVI = \frac{\text{Number of items rated as relevant}}{\text{Total number of items rated in the questionnaire}}$$

Table 3: Determination of Validity of Instrument

	Relevant items	Not relevant items	Total
Rater 1	25	3	28
Rater 2	25	3	28
Total	**50**	**6**	**56**

$$CVI = \frac{50}{56} = 0.89$$

Table 3 demonstrates that the computed CVI was 0.89 and this was greater than the estimated alpha coefficient of 0.7o. Thus the instruments were considered valid.

To achieve accuracy or reliability, pre-testing of the instruments was done. This was done with similar wholesale businesses in some neighboring town. 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.

Table 4: Reliability Test Results

No of Items in the Questionnaire	Cronbach's Alpha
28	0.866

The findings in Table 4 shows that computed cronbach Alpha obtained from the reliability test was 0.866 and this was greater than the estimated alpha of 0.70 thus, the instruments were considered reliable.

3.8 Data Gathering Procedures

BeforetoDataCollection

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 Wholesale companies. List of people from the selected wholesale companies for this study were 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.

DuringDataGathering

Data collection involved distribution of self-administered questionnaires to respondents and interviewing others. The researcher together with the research assistants was 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 wholesale businesses every day to ensure that respondents quicken the process of filling in the questionnaires. Questionnaire 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.

AfterDataGathering

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 the level of performance of the selected wholesale companies in Mogadishu, mean values ranging from 1-4 were used.

3.10 Measurement of Variables

The data the independent variable (computerized accounting systems) was 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

The data on dependent variable (business performance) was interpreted using the following mean ranges:

Mean Range	Response Mode	Interpretation
3.26-4.00	Strongly Agree	Very High
2.51-3.25	Agree	High
1.76-2.50	Disagree	Low
1.00-1.75	Strongly Disagree	Very Low

To establish the relationship between effectiveness in computerized accounting systems and performance of the selected wholesale companies in Mogadishu, the Pearson's Linear Correlation Coefficient was used and the influence of each item

under computerized accounting on performance was tested using Multiple 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).

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

AnonymityandConfidentiality: 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.

Ascriptionsofauthorships: 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.

Scientificadjudication: 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.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter is about data presentation, analysis and interpretation. It begins with demographic characteristic of respondents and presents the research findings objective by objective.

4.2 Profile of Respondents

Respondents' demographic characteristics involved their residence, gender, age group, education level, marital status, religious affiliations and their nationality. The details regarding these are shown in Table 5.

Table 5: Profile of Respondents

Gender	Frequency	Valid Percent
Male	68	59.6
Female	46	40.4
Total	**114**	**100.0**
Age		
20-39 Years	78	68.4
40-59 Years	29	25.4
60 Years and above	7	6.2
Total	**114**	**100.0**
Education		
Secondary	25	21.9
Diploma	31	27.2
Bachelor	46	40.4
Masters and above	12	10.5
Total	**114**	**100.0**
Experience		
1-3 Years	24	21.1
4-6 Years	57	50.0
7 Years and above	33	28.9
Total	**114**	**100.0**
Department		
Management	10	8.8
Finance Department	10	8.8
Selling Department	58	50.9
Advertisement	36	31.6
Total	**114**	**100.0**
Company		
Omar Wholesale Company Ltd	24	21.1
Raliya Wholesale Company Ltd	21	18.4
Mohamed Ilkweyn Wholesale Company Ltd;	24	21.1
IndhoDerro Wholesale Company Ltd	22	19.3
Shafia Wholesale Company Ltd	23	20.2
Total	**114**	**100.0**

Source: Primary Data, 2014

Table 5 shows that majority (59.6%) of the respondents in this study were males while 40.4% 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 5 also indicates that 68.4% of the employees of the elected wholesale companies were the youth (20-39 years old); 25.4% of them were those from the age group of 40-59 years; and 6.2% of the respondents were from the age group of 60 years ad above. The employees of the selected wholesale companies were the youth and this explains their dominance as respondents in this study. Nevertheless, all employees were given equal opportunity to participate in this study regardless of their age bracket.

Further still, Table 5 also shows that majority (40.4%) of the respondents were bachelor degree holders; after them were the diploma holders (27.2%); then followed by those who stopped at secondary school (21.9%); and the least (10. 5%) participants in this study had master degrees and other qualifications above masters. 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 business performance as regards to their indicators.

On years of working experience, Table 5 also shows that majority (50%) of the respondents have been working in the selected wholesale companies from 4 -6 years; they were followed by those who have been working at the selected wholesale companies from 7 years and above; and the least participants in this study had from 1-3 years. Since majority of the employees selected had experience from 4 years, they were able to give comparative analysis about the

advantages of computerized accounting information and its impact on performance.

Table 5 further indicates that respondents were sampled from different departments of the selected wholesale companies. However, majority (50.9%) of the respondents were from selling department; they were followed by those in advertisement department (31.6%); then those from the management and finance departments formed 8.8% each. This enabled tracking of information about the two research variables easier.

Lastly, it is also indicated in Table 5 that respondents were proportionally elected from all the five selected wholesale companies in Mogadishu. This helped in finding out the general impression on computerized accounting and its relevance to the performance of the selected wholesale companies in Mogadishu.

4.3 Effectiveness of Computerized Accounting in Wholesale Companies

The first objective of this study was to examine the effectiveness of computerized accounting system in the selected wholesale companies in Mogadishu. To achieve this objective, 15 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 wholesale businesses 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 6.

Table 6: table showing the level of Effectiveness of Computerized Accounting in Selected Wholesale Companies in Mogadishu

COMPUTERIZED ACCOUNTING	Mean	St. Dev.	Ranks	Interpretation
DATA VALIDATION				
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 pre-specified limit of withdrawal.	2.87	.753	1	Effective
Computerized accounting has ensured the accuracy and reliability of input data in this company	2.75	.720	2	Effective
Through computerized accounting, 'Error Detection' and 'Error Correction' procedures are ensured in this company	2.68	.782	3	Effective
Error correction procedures make suggestions for entering correct data input	2.59	.812	4	Effective
It also compares the same input data with some predefined standards or known data	2.49	.763	5	Effective
Mean Average	**2.68**	**0.766**		**Effective**
SECURITY				
Security provided by computerized accounting system is far superior compared to any security offered by the manual accounting system.	3.05	.832	1	Effective
In computerized accounting system only the authorized users are permitted to have access to accounting data.	3.01	.466	2	Effective
Mean Average	**3.03**	**0.649**		**Effective**
STORAGE AND ACCURACY				
Computerized accounting in this company makes it absolutely clear that only valid transactions are stored in the database	2.82	.737	1	Effective
Withdrawal of money by a particular customer, are stored in transaction database of computerized personal wholesaling system	2.67	.833	2	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	2.57	.755	3	Effective
Mean Average	**2.69**	**0.775**		**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	2.98	.662	1	Effective
The financial reporting of this company is flexible in computerized accounting system as compared to manual accounting system	2.84	.740	2	Effective
Financial reports of this company are prepared on basis of required information content according to decision usefulness of the report	2.55	.602	3	Effective
The stored data is processed making use of the Query facility to produce desired information.	2.48	.672	4	Effective
Mean Average	**2.71**	**0.669**		**Effective**
Overall Average Mean	**2.78**	**0.715**		**Effective**

Source: Primary Data, 2014

Table 6 indicates that respondents generally rated computerized accounting systems in the selected wholesale companies effective and this is affirmed by the overall mean average of 2.78 at standard deviation of 0.751 that refers to effective in the rating scale. Computerized accounting was most effective in security that was rated at the mean average of 3.03 at standard deviation of 0.649; this was followed by information and reporting that was rated at the mean average of 2.71 at standard deviation of 0.669; this was then followed by storage and accuracy that was rated at the mean average of 2.69 at standard deviation of 0.775; and lastly, it was on data validation as it was rated at the mean average of 2.68 at the deviation 0.766.

Security as an element of computerized accounting was the most effective in the selected wholesale companies in Mogadishu because accounting provided by the computer system is far superior compared to any security offered by the manual accounting system (mean = 3.05); and in computerized accounting system only the authorized users are permitted to have access to accounting data (mean= 3.01).

Information and financial reporting as elements of computerized accounting followed security because computerized accounting systems of the selected companies are capable of generating reports of any balance as when required and for any duration which is within the accounting period (mean = 2.98); the financial reporting of the selected wholesale companies is flexible in computerized accounting systems as compared to manual accounting systems (mean = 2.81); financial reports of the selected companies can be prepared on the basis of the required information content according to the decision usefulness of the report (mean = 2.55). However, respondents still disagreed that the stored data is processed making use of the Query facility to produce desired information (mean = 2.48).

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Storage and accuracy as indicators of computerized accounting were also effectively rated because computerized accounting in the selected wholesale companies makes it absolutely clear that only valid transactions are stored in the database (mean of 2.82); withdrawal of money by a particular customer are stored in transaction database of computerized personal banking system (mean = 2.67); and the information content of reports generated by the computerized accounting system is accurate and has been quite reliable for the decision making of the selected companies (mean of 2.57).

Finally, data validation through computerized accounting was also effectively rated because 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 pre-specified limit of withdrawal (mean = 2.87); computerized accounting has ensured the accuracy and reliability of input data in the selected wholesale companies (mean = 2.75); through computerized accounting, 'Error Detection' and 'Error Correction' procedures are ensured in the selected companies (mean = 2.68); error correction procedures make suggestions for entering correct data input (mean = 2.59). However, respondents rated one of the elements under computerized accounting ineffectively as they disagreed that computerized accounting also compares the same input data with some predefined standards or known data (mean = 2.49).

The information obtained through interview guide on effectiveness of computerized accounting system was also in line with the one obtained through questionnaires as over 80% of the respondents interviewed revealed that the computerized accounting information systems in their companies was generally more effective than the manual accounting systems. Before establishing

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effectiveness of computerized accounting systems in the selected wholesale companies in Mogadishu, key informants were asked on when they adapted to computerized accounting systems. Table 7 summarizes the information on when the selected wholesale companies adapted to computerized accounting information systems.

Table 7: Showing Years of Adapting to Computerized Accounting

Wholesale Companies	Years of Adapting
Omar Wholesale Co.	2010
Raliya Wholesale Co.	2011
Mohamed Ilkweyn Wholesale Co.	2010
IndhoDerro Wholesale Co.	2011
Shafia Wholesale Co.	2012

Source: Primary Data, 2014

Table 7 shows that the selected wholesale companies have at least taken more than four years in using computerized accounting systems. Thus, the employees should have been well versed with information regarding computerized accounting.

After finding out when the selected wholesale companies adapted to computerized, the key informants investigated in this field were asked to give reasons for the adaption of the computerized accounting information systems. 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

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(iv)   To minimize unnecessary interference and manipulation with company finances

(v)   To ensure easy detection of errors related to data entry

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 wholesale 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 wholesale 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

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least experience of three years in similar position. This suggests that they were effective enough to perform their roles and duties professionally.

4.4 Level of Performance of Selected Wholesale Companies in Mogadishu

The second objective of the study assessed the level of performance of the selected wholesale companies in Mogadishu. To achieve this objective, 14 questions on the indicators of business performance were asked and each question was based on the 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). The following mean ranges and their descriptions were used in the interpretation of the results; from 1.00-1.75 for very low; 1.76-2.50 for low; 2.51-3.25 for high; 3.26-4.00 for very high. The findings regarding these are presented in Table 8.

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Table 8: the Level of Performance of the Selected Wholesale Companies in Mogadishu

PERFORMANCE	Mean	St. Dev	Rank	Interpretation
PROFIT LEVEL				
Misappropriation of funds and theft have also reduced and this has led to better profit levels	3.02	.763	1	High
The profit level of this company has been progressively increasing since the adopting of computerized accounting	2.82	.757	2	High
Frauds have been reduced leading to higher level of profitability	2.75	.846	3	High
Mean Average	**2.86**	**0.789**		**High**
CUSTOMER BASE				
Our customers are loyal to the goods and services we offer	2.97	.637	1	High
We now have more customers than it was in the last three years	2.71	.792	2	High
The percentage increase of our customers has been matching the planned target in the last five years	2.34	.794	3	High
Mean Average	**2.67**	**0.741**		**High**
USE OF TECHNOLOGY				
We train our key employees on the use of modern technology	2.88	.627	1	High
We use better and modern technology to improve on service delivery	2.61	.731	2	High
Technology has made us very competitive with our sister companies	2.38	.906	3	High
We tend to adapt to new technology as soon as it is introduced	2.21	.828	4	High
Mean Average	**2.52**	**0.773**		**High**
BUSINESS GROWTH AND EXPANSION				
The amount of goods we deal in has also increased since we adopted to computerized accounting system	3.03	.745	1	High
We have opened up many branches in the city and other towns	2.93	.640	2	High
The number of our employees have also increased as well because expansion of services delivery scope	2.82	.908	3	High
We have also diversified our business activities	2.34	.742	4	High
Mean Average	**2.78**	**0.759**		**High**
Overall Mean Average	**2.71**	**0.766**		**High**

Source: primary data, 2014

Table 8 clearly shows that the performance of the selected wholesale companies

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in Mogadishu is generally high as the overall mean average computed was 2.71 at a standard deviation of 0.766. Business performance was highest observed in profit level (mean average = 2.86 at a standard deviation of 0.789); this was followed by expansion and growth rate of the companies (mean average = 2.78 at standard deviation of 0.759); then, customer base (mean average = 2.67 at standard deviation of 0.741); and lastly, it was on the use of modern technology (mean average = 2.52 at standard deviation of 0.773).

Performance in relation to profit level was highest rated because misappropriation of funds and cases of theft have reduced and this has led to better profit levels (mean = 3.02); the profit level of the selected companies has been progressively increasing since the adopting of computerized accounting (mean = 2.82); frauds have been detected and this leads to higher level of profitability (mean = 2.75).

Performance as regards to expansions and the growth of the selected wholesale companies was also high because the amount of goods the companies deal in have increased since they adopted to computerized accounting system (mean = 3.03); the selected companies have opened up many branches in the city and other towns (mean=2.93); the number of employees in the selected wholesale companies have also increased as well because expansion of services delivery scope (mean= 2.82). However, the selected companies have diversified their business activities (mean = 2.34).

Then performance in terms of customer base was also highly rated because the customers of the selected wholesale companies are loyal to the goods and services they offer (mean = 2.97); the companies now have more customers than it was in the last three years (mean = 2.71). However, the percentage increase of the

customers of the selected wholesale companies has not been matching the planned target in the last five years (mean = 2.34).

Lastly, performance in terms of the use of modern technology was highly rated because the selected wholesale companies train their key employees on the use of modern technology (mean = 2.88); they use better and modern technology to improve on service delivery (mean = 2.61). However, technology has not yet made the companies very competitive with their sister companies (mean = 2.38); and that the companies do not adapt to new technology as soon as it is introduced (mean = 2.21).

The information obtained from key informants through interview showed that the performance of the selected wholesale companies in Mogadishu is generally high. Respondents also reflected improvement in performance of the elected wholesale companies in relation to having opened up branches in the city; profit level; increase in customer base.

On the number of branches being opened, it was found out that Omar and Mohamed Ilkweyn Wholesale Companies had opened up 4 branches in the city since 2010; Raliya and Shafia Wholesale Companies had opened up 3 branches in the city since 2011 and had already established plans to open up more; IndhoDerro Wholesale Company had opened up 2 branches in the city since 2011. These findings indicate that the wholesale companies have been able to expand their businesses operation in the last few years.

Regarding the profit levels of the selected wholesale companies, this study found out that the selected wholesale companies had better profit levels than it was in the last three years. Although none of the selected wholesale company could reveal the exact rate of increase in their profit levels, many of the companies

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ranged from 5 % to 10 % in the last four years. Many of the respondents attributed the improvement in profit level to having opened up man branches.

One of the key informants interviewed was quoted saying:

"*We have moved significant steps forwards with this business. We have been very competitive within the city and we want to keep moving forward. Moving forward for us means that we must be able to please our current customers with our services and be able to attract more of 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 the performance of their companies in the city. This clearly indicates that the companies have made improvements in their performance as regards to their profit levels, customer levels and expansion and growth among others.

4.5 Relationship between Computerized Accounting and Performance of the selected Wholesale Companies in Mogadishu

The last research objective established the relationship between computerized accounting systems and performance of selected wholesale 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 9.

Table 9: Relationship between Computerized Accounting and Performance of the selected Wholesale Companies in Mogadishu

		Computerized Accounting	Performance of Wholesale Companies
Computerized Accounting	Pearson Correlation	1	.988**
	Sig. (2-tailed)		.000
	N	114	114
Performance of Wholesale Companies	Pearson Correlation	.988**	1
	Sig. (2-tailed)	.000	
	N	114	114
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Primary Data, 2014

Table 9 indicates that there is a positive and significant correlation between effective use of computerized accounting systems and performance of the selected wholesale companies in Mogadishu. This finding can be seen in the r-values of 0.988 and a small significant value of 0.000. This research finding means that any variation in effectiveness of computerized accounting systems will lead to 0.988 variation in performance of wholesale companies as regards to their profit level, growth and expansion, customer base and use of modern technology.

Based on the study on the relationship between effectiveness in computerized accounting and performance of the selected wholesale companies in Mogadishu, it can be said that the null hypothesis that stated that there is no significant relationship between computerized accounting systems and performance of the selected wholesale 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 10 and 11.

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Table 10: Regression Model Summary of Independent variables

Model Summary				
Model	R	R Squared	Adjusted R Square	Std. Error of the Estimate
1	.989[a]	.978	.977	.11134
a. Predictors: (Constant), Data Validation, Security, Storage and Security, Information and Reporting				

Source: Primary Data, 2014

Results in Table 10 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 performance of the selected wholesale companies in Mogadishu. This finding is shown by the R^2 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.

Table 11: Regression Coefficient between Computerized Accounting and Performance of the Selected Wholesale Companies

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	T	Sig.
1 (Constant)	-.093	.053		-1.754	.082
Data Validation	.367	.121	.379	3.047	.003
Security	.244	.039	.217	6.204	.000
Storage and Accuracy	.140	.089	.151	1.562	.121
Information and Reporting	.256	.096	.264	2.663	.009
a. Dependent Variable: Performance of Wholesale Companies					

Source: Primary Data, 2014

The data presented in Table 11 shows the contribution of different items under computerized accounting towards performance of the selected wholesale

companies in Mogadishu. It shows that effectiveness in data validation; security and information and reporting have positive and significant relationship with performance of the selected wholesale companies as regards to profit level, expansion and growth, customer base and use of modern technology. This finding is demonstrated by the β values of 0.379; 0.217 and 0.264 at significant values of 0.003; 0.000; and 0.009 at standardized significant value of 0.05.

However, data storage and accuracy do not have any significant relationship with performance of selected wholesale companies as its significant value computed in 0.121 and this is greater than the standardized significant value of 0.05.The item under computerized accounting with the highest influence on performance of the selected wholesale companies in Mogadishu is data validation as its β value is 0.379 and this is followed by the effectiveness on financial information and reporting with its β value 0.264 and lastly it is as financial security as its β value is 0.217. However, based on the element with the strongest with business performance, it can be said that effectiveness in financial security has the strongest relationship with performance of the selected wholesale business in Mogadishu as it significance value is as low as 0.000; this is followed by the data validation as its significance value is a low as 0.003; and lastly, financial information and reporting as its significance value is relatively high at 0.009 at standardized significance value of 0.05.

Respondents interviewed also accepted that computerized accounting systems have positive and significant relationship with the performance of the selected wholesale companies. Many of the mentioned that as computerized accounting systems reduces frauds and theft as well as other forms of financial loses, more profit can be realized and, this can be ploughed back in to business for its expansions and growth.

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the key research findings, draws conclusions and forwards recommendations. These are derived from objectives and they are established below.

5.2 Discussion of Findings

5.2.1 Computerized Accounting in the Selected Wholesale Companies

This study found out that the computerized accounting systems in the selected wholesale companies in Mogadishu is generally effective and this was evident in the overall mean average of 2.78 that refers to high in the rating scale. Computerized accounting was most effective in security as it was rated at the mean average of 3.03; this was followed by information and reporting that was rated at the mean average of 2.71; this was then followed by storage and accuracy that was rated at the mean average of 2.69; and lastly, it was on data validation as it was rated at the mean average of 2.68.

Comparing the research findings on effectiveness of computerized accounting systems 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 wholesale 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. The study findings in case of selected wholesale 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. 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 wholesale companies in Mogadishu, this study in has brought out something quite new s it has clearly established the extent of effectiveness in the selected wholesale companies by mean values and this was not yet done by any of the authors whose works was reviewed in this study.

Ensuring effective computerized accounting systems is very vital is the selected wholesale companies are to maintain their business at high level. This is because through effectiveness of computerized accounting systems, critical financial loses can be minimized and this can take the company to the next level of business.

5.2.2 Performance of the Selected Wholesale Companies in Mogadishu

On performance of the selected wholesale companies in Mogadishu, this study found out that the performance of the selected wholesale companies in Mogadishu was generally high as the overall mean average computed was 2.71 and this refers to high in the rating scale. Business performance was highest observed in profit level (mean average = 2.86); this was followed by expansion and growth rate of the companies (mean average =2.78); then, customer base (mean average = 2.67); and lastly, it was on the use of modern technology (mean average = 2.52).

Relating the research findings on performance of the selected wholesale companies with the ones by other authors whose works have been reviewed in this study, it can be said that this study findings on performance of the selected wholesale companies in Mogadishu is in agreement with the one by those of Song et al. (2005); Wood (2006); and Gruber *et al.* (2010) who noted that the performance of small firms and medium firms should be based on profit, return on investment (ROI), turnover or number of customers. Similarly, Laura *et al.* (1996) also showed that the level of design quality and product improvement should also be used to measure the performance of SMES such as wholesale companies.

The study findings in case of the selected wholesale companies in Mogadishu is also in agreement with the one by Franco-Santos *et al.* (2007) recommend measuring business performance through the business performance measurement (BPM) system, as it is an important tool within many research areas, particularly in business and social science studies. This system analyses and investigates each quality that affects a firm's business performance, categorizing business performance into two broad areas: operational business performance (OBP) and strategic business performance (SBP).

The study findings in case of the selected wholesale businesses in Mogadishu is also in agreement with the one by Dawes (1999) who indicated that another issue in researching small firms is the difficulty of interpreting some objective performance data. For example, performance may be considered as "poor" if the data shows losses or low profit. Such misinterpretation can occur if, for example, firms have many commitments to research and development (R&D), including product and market development for future growth. These misinterpretations may

be due to variations in profitability data and may lead to the comparison of objective measures among small firms in different industries.

Although the studies in case of f the selected wholesale companies in Mogadishu share something common with the ones by the above mentioned authors, the study in selected wholesale companies in Mogadishu has also brought out something quite new as it has indicated that the performance of the companies is generally high at the mean of 2.71 and such extents were not yet pointed by other authors hose works have been analyzed in this study.

5.2.3 Relationship between Computerized Accounting Systems and Performance of Selected Wholesale Companies

Considering the relationship between the two variables, this study found out that effectiveness in computerized accounting leads to improvement in performance of the selected wholesale companies as regards to their profit level, expansion and growth, customer base and usability of modern technology. This finding is supported by the r-values of 0.988; R^2 value of 0.978; and a small significant value of 0.000. based on the influence of each aspect under computerized accounting on performance of wholesale 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 performance of the selected wholesale companies as regards to profit level, expansion and growth, customer base and use of modern technology. This finding is demonstrated by the β values of 0.379; 0.217 and 0.264 at significant values of 0.003; 0.000; and 0.009 at standardized significant value of 0.05. However, data storage and accuracy did not have any significant relationship with performance of selected wholesale companies as its significant value computed in 0.121 and this is greater than the standardized significant value of 0.05.

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Relating the research findings on the relationship between computerized accounting and the performance of the selected wholesale 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 performance is to be attained. This study is also in agreement with the ones by Sajady et al (2012) who indicated that level of performance relies on the efficacy of CAIS.

Authors such as Gelinas, *et al.* (1990) also have similar findings with the ones in case of the selected wholesale 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 wholesale 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 wholesale 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 98.8 % improvement in performance of selected wholesale 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 performance 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.

5.3 Conclusions

On computerized accounting, this study concludes that the computerized accounting systems as regards to data validation, security, storage and accuracy, and financial information and reporting is effective. This is because financial security as an element of computerized accounting in the selected wholesale companies in Mogadishu far superior compared to any security offered by the manual accounting system; computerized accounting system only the authorized users are permitted to have access to accounting data; computerized accounting systems of the selected companies are capable of generating reports of any balance as when required and for any duration which is within the accounting period; the financial reporting of the selected wholesale companies is flexible in computerized accounting systems as compared to manual accounting systems; financial reports of the selected companies can be prepared on the basis of the required information content according to the decision usefulness of the report; computerized accounting in the selected wholesale companies makes it absolutely

clear that only valid transactions are stored in the database; withdrawal of money by a particular customer are stored in transaction database of computerized system; the information content of reports generated by the computerized accounting system is accurate and has been quite reliable for the decision making of the selected companies; 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 pre-specified limit of withdrawal; computerized accounting has ensured the accuracy and reliability of input data in the selected wholesale companies; through computerized accounting, 'Error Detection' and 'Error Correction' procedures are ensured in the selected companies; and error correction procedures make suggestions for entering correct data input.

Concerning the performance of the selected wholesale companies in Mogadishu, this study concludes that the performance of the selected wholesale companies in Mogadishu is high. This is because misappropriation of funds and cases of theft have reduced and this has led to better profit levels; the profit level of the selected companies has been progressively increasing since the adopting of computerized accounting; frauds have been detected and this leads to higher level of profitability; the amount of goods the companies deal in have increased since they adopted to computerized accounting system; the selected companies have opened up many branches in the city and other towns; the number of employees in the selected wholesale companies have also increased as well because expansion of services delivery scope; the customers of the selected wholesale companies are loyal to the goods and services they offer; the companies now have more customers than it was in the last three years; the selected wholesale companies train their key employees on the use of modern technology and the companies use better and modern technology to improve on service delivery.

Regarding the relationship between computerized accounting systems and performance of the selected wholesale companies, this study concludes that the two variables are positively and significantly related. Thus, any improvement in effectiveness in computerized accounting systems in the selected wholesale companies will lead to improvement in the performance of the companies in areas of profit level, expansion and growth, customer base and use of modern technology.

5.4 Recommendations

As computerized accounting systems significantly influences performance of the selected wholesale companies in Mogadishu, the following recommendations have been forward:

(i)   The management of the selected wholesale companies together with their accountants should ensure that data validation matches the current universal standards as computerized accounting systems in the selected wholesale 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 wholesale 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 performance level will be witnessed among the selected wholesale companies.

(iii)   As the percentage increase of customers in the selected wholesale companies in Mogadishu does not still match the planned target, the management should redesign and redefine its strategies for marketing and promotion such that more new customers can be added to the existing ones. This strategy can ensure higher performance in terms of customer base, profitability ratio and subsequently lead to expansion and growth of the companies.

(iv)   To be more competitive in the wholesaling, the selected companies should also adapt to modern technology to easy work and ensure effectiveness. This program should be spearheaded by the administration and in some cases training of the employees on the use of modern technology should be made possible.

5.5 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 wholesale companies

(ii)   Computerized accounting systems and performance of public sectors in Mogadishu

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APENDICES

APPENDIX 1 A: TRANSMITTAL LETTER

OFFICE OF THE DEPUTY VICE CHANCELLOR (DVC)
COLLEGE OF HIGHER DEGREES AND RESEARCH (CHDR)

Date_____

Dear Sir/Madam,

RE: INTRODUCTION LETTER TO CONDUCT RESEARCH IN YOUR INSTITUTION

Mr. MOHAMED IIYS H. AHMED is a true student of Kampala International University pursuing a Master of Business Administration (Accounting and Finance)

He is a currently conducting a field research for his research proposal entitled, Computerized Accounting and Performance of Wholesale Businesses in Mogadishu, Somalia.

Your institution has been identified as a valuable source of information pertaining to his research project. The purpose of this letter then is to request you to avail him with the pertinent information he may need.

Any data shared with him will be used for academic purposes only and shall be kept with utmost confidentiality.

Any assistance rendered to him will be highly appreciated.

Yours truly,

_____

Deputy Vice Chancellor, CHDR

APPENDIX 1B: TRANSMITTAL LETTER FOR THE RESPONDENTS

Dear Sir/ Madam,

Greetings!

I am a Master of Master of Business Administration (Accounting and Finance) Student at Kampala International University. Part of the requirements for the award is a research report. My study is entitled, Computerized Accounting and Performance of Wholesale Businesses in Mogadishu, Somalia.

Within this context, may I request you to participate in this study by answering the questionnaires? Kindly do not leave any option unanswered. Any data you will provide shall be for academic purposes only and no information of such kind shall be disclosed to others.

May I retrieve the questionnaire within ten days (10)?

Thank you very much in advance.

Yours faithfully,

Mr. MOHAMED IIYS H. AHMED

APPENDIX II: CLEARANCE FROM ETHICS COMMITTEE

Date_____

Candidate's Data

Name_____

Reg.# _____

Course _____

Title of Study _____

_____

Ethical Review Checklist

The study reviewed considered the following:

____ Physical Safety of Human Subjects

____ Psychological Safety

____ Emotional Security

____ Privacy

____ Written Request for Author of Standardized Instrument

____ Coding of Questionnaires/Anonymity/Confidentiality

____ Permission to Conduct the Study

____ Informed Consent

____ Citations/Authors Recognized

Results of Ethical Review

____ Approved

____ Conditional (to provide the Ethics Committee with corrections)

____ Disapproved/ Resubmit Proposal

Ethics Committee (Name and Signature)

Chairperson _____

Members' _____

APPENDIX III: INFORMED CONSENT

I am giving my consent to be part of the research study of Mr. MOHAMED IIYS H. AHMED that will focus on Computerized Accounting and Performance of Wholesale Businesses in Mogadishu, Somalia.

I shall be assured of privacy, anonymity and confidentiality and that I will be given the option to refuse participation and right to withdraw my participation anytime.

I have been informed that the research is voluntary and that the results will be given to me if I ask for it.

Initials:_____

Date_____

APPENDIX IV: QUESTIONNAIRE

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

Gender:

_____ Male

_____ Female

Age:

_____ 20- 39

_____ 40- 59

_____ 60 and above

Education level:

_____ Primary

_____ 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

Name of Your Company

_____ Omar Wholesale Company Ltd

_____ Raliya Wholesale Company Ltd

_____ Mohamed Ilkweyn Wholesale Company Ltd;

_____ IndhoDerro Wholesale Company Ltd

_____ Shafia Wholesale Company Ltd

Part 2: Questionnaire to determine the Effectiveness of Computerized Accounting Systems and Performance of Wholesale Companies

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 authorised 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 customer, are stored in transaction database of computerized personal wholesaleing 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
	PERFORMANCE OF WHOLESALE COMPANIES IN MOGADISHU				
	Profit Levels				
1	The profit level of this company has been progressively increasing since the adopting of computerized accounting	4	3	2	1
2	Frauds have been detected and this leads to higher level of profitability	4	3	2	1
3	Misappropriation of funds and theft have also reduced and this has led to better profit levels	4	3	2	1
	Customer base				
4	We now have more customers than it was in the last three years	4	3	2	1
5	The percentage increase of our customers in the wholesale has been matching the planned target in the last five years	4	3	2	1
6	Our customers are loyal to the goods and services we offer	4	3	2	1
	Use of technology				
7	We use better and modern technology to improve on service delivery	4	3	2	1

8	We tend to adopt to new technology as soon as it is introduced	4	3	2	1
9	We train our key employees on the use of modern technology	4	3	2	1
10	Technology has made us very competitive with our sister companies	4	3	2	1
	Business growth and expansion				
11	We have opened up many branches in the city and other towns	4	3	2	1
12	The number of our employees have also increased as well because expansion of services delivery scope	4	3	2	1
13	We have also diversified our business activities	4	3	2	1
14	The amount of goods we deal in has also increased since we adopted to computerized accounting system	4	3	2	1

APPENDIX V: INTERVIEW GUIDE

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

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

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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)

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4. What accounting software does the company use and why?

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

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6. How has been the performance of this company as regards to profit level,
   customer base, growth and expansion, use of modern technology etc)

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

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8. If your performance has been generally god, can you attribute these
   improvements in performance to the adoption of computerized accounting
   systems?

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

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APPENDIX VI: TIME FRAME FOR RESEARCH PROJECT

ACTIVITY	DURATION			
Months	May, 2014	June, 2014	July-August, 2014	Sept, 2014
Proposal writing	▓▓▓			
Proposal Editing	▓▓▓			
Data collection		▓▓▓		
Data Arrangement		▓▓▓		
Data analysis and presentation			▓▓▓	
Edit and final submission				▓▓▓
Defense				▓▓▓

APPENDIX VII: THE BUDGET

Particular	Quantity	Amount
Stationary	Paper 4 Reams	60,000/=
	Ink 1 Cartridge	40,000/=
	Binding materials 8	56,000/=
Research Assistants	4 @ 100,000	400,000/=
Transport costs		500,000/=
Data Analysis	.	300,000/=
Up keep		250,000/=
Miscellaneous		150,000/=
	Total	**1,756,000**