THE IMPACT OF ACCOUNTING INFORMATION SYSTEM ON EFFECTIVENESS OF MANUFACTURING FIRMS IN KENYA

BY

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DECLARATION

I declare that this is my own research work and has never been submitted for the award of any degree in this or any other institution of higher learning

Signature………………………… Date………………………………

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This research project has been submitted with my consent as the official University supervisor.

Signature………………………… Date………………………………

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DEDICATION

This research project is dedicated to my family and friends for their continued moral support and encouragement throughout my studies.

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I acknowledge the Almighty God for seeing me through the entire research project. Many thanks go to my Supervisor Prof. Josiah O. Aduda for his guidance, relentless support and patience during this entire period. I am indebted to you for your guidance and mentorship.

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ABSTRACT

Accounting processes have moved from manual process to being automated. Economic competition has created a lot of pressure on the cost of information which a company needs to access and utilize during decision making. The objective of the research aimed to carry out a study on how manufacturing firms in Kenya utilize accounting information technology in their financial reporting process. The research analyzed how Accounting Information System (AIS) affect manufacturing firm's effectiveness. The study adopted descriptive design of study and Questionnaires were used to collect data which was presented to managers and senior accountants. Data collected was presented in the form of tables and graphs. The sample of the study consisted 51 manufacturing companies in Kenya selected through non-proportional quota sampling technique. Data collected was analyzed using Microsoft Excel and Correlation and regression analysis was used to analyze the data. The study found that there exist a positive relationship between accounting information systems and organization efficiency. The results are consistent with empirical reviews which indicated that there exist a relationship between AIS and organizational performance. The study concluded that accounting information system has an impact on the efficiency of manufacturing firms in Kenya in terms of effective management, decision making and controlling operations. The key recommendation of this study is that manufacturing companies desiring to increase their efficiency in terms of profitability and adaptability to market changes can achieve that by investing in a good accounting information system in their financial accounting processes.

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LIST OF ABBREVIATIONS

AIS	–	Accounting Information System
BOD	-	Board of Directors
CFAS	-	Computerized Financial Accounting Systems
ERP	-	Enterprise Resource Planning
GAAP	-	Internationally Generally Accepted Accounting Principles
IASB	-	International Accounting Standard Board
IFMIS	-	Integrated Financial Management Information Systems
IFRS	-	International Financial Reporting Standards
IS	-	Information Systems
IT	-	Information Technology
KRA	-	Kenya Revenue Authority (KRA)
MIS	-	Management Information Systems
NGOs	-	Non-Governmental Organization
SMEs	-	Small and Medium Enterprises
SPSS	-	Statistical Package for Social Science

CHAPTER ONE

INTRODUCTION

1.1 Background of study

Accounting information system (AIS) is responsible for recording, analyzing, monitoring and evaluating the financial condition of companies, processing of documents necessary for tax purposes and providing information support to many other organizational functions, (Amidu et al., 2011). In the context of manufacturing firms accounting information is important because it helps the firm's manager make decisions in critical areas such as costing, expenditure and cash flows by proving information to support monitoring and control (Mitchell et al.; Son et al., 2006).

Manufacturing Firms have transformed from using manual processes to account financial transactions and have welcomed the use of information technology (Maria, 2010). In the recent past computerized accounting has become the order of the day since it has more advantages compared to the manual process. However, the two methods ensure that the fundamental principles of accounting and all concepts are adhered to. Bolon (1998) elaborated that technical aspect of utilization of initially developed software and codes makes automation of some of the processes a reality.

This study is anchored on the contingency theory that suggests that AIS need to be designed in a way which is flexible and able to meet different environment and the structure of the organization. A universal accounting information system that can be used to meet all situations encountered by organizations does not exist (Chenhall, 2003). The second theory is the agency theory which permits the integration of incentive problems, conflict of interest, and control principle during implementation of AIS is the regulation of incentive snags, (Kaplan and Norton, 1993). The third theory under consideration in this study is behavioral theory which involves learning. It focuses on observable behavior and not mental activities. It focuses more on how environmental factors and how they affect behavior through learning, (McLeod, 2016).

The manufacturing sector in Kenya including mining, steel, and textile, among others has seen a lot of growth in both size and complexities (Chege, Ngui & kumuyi, 2014). Business operations including import processes, value chain and also customer relations have been automated. Kenya Revenue Authority has made it mandatory that the application of information systems is a necessity for organizations and more so those in the manufacturing sector to survive.

1.1.1 Accounting Information Systems

Watts, (1999) elaborated that accounting is a process of recording, categorizing and summarizing business transactions in a manner which is significant in monetary terms. Information technology (IT) on the other hand involves the utilization and application of computers, telecommunication resources in the storage, transition, retrieval and manipulation of data. The areas in which AIS can be used include stock accounting, sales ledger, purchase ledger, payroll, cost accounting and financial modeling.

According to Nzomo ,2013) definition, AIS is a device integrated in a field of information technology (IT) responsible in the generation of reliable and more accurate financial reporting used by business leaders to make decisions. From this definition, accounting information system (AIS) is considered a tool that assists management perform its roles of planning, controlling and directing through provision of reliable data. The great development in IT has unlocked the chance of producing data and utilizing financial accounting information from a strategic view (Elena, Raquel & Clara, 2011)

1.1.2 Organizational Effectiveness

Daft (1983) well-elaborated organizational effectiveness as "the extent a business manages to realize its set goals". On the other hand, Oguntimehin (2001) explained that a firms' effectiveness is the capacity to vintage desired outcome. From the two definitions, it is clear that organizations effectiveness is an aspect of meeting set goals and objectives and also it is the degree in which a firm is able to achieve expected results.

The measure of organizations effectiveness as stated by Campbell (1977) can be looked on how information is being processed by a firm, flexibility in operations, adaptability to changes economic environment and profitability. A firm which is able to achieve goals set based on the different criteria and perspectives will be said to be effective.

1.1.3 The Relationship between Financial Accounting Information Systems and Firm Effectiveness

Onaolapo and Odetayo (2012) affirmed that an AIS system majorly has got an impact on the extent of effectiveness of organizations. From their study, investing in a good accounting information system will lead to increased efficiency in transfer of financial information within different department and also with external parties and in the long run improved performance. The main major reason for invested in accounting information is to help in proper and strategic decision making (Penemon & Nagida, (1990). Bolon (1998) concluded that AIS ought to be of capacity to forecast future schedules. The forecast is in form of sales forecasts, production forecast, stock forecasts and revenue forecasts. Financial costs can also be forecasted with the use of AIS in an organization.

Maria (2010) study on roles of information technology (IT) in accounting established that there is a tendency for decentralization and change in accounting role efficiency with the use of IT. The rise of globalization and change in technologies has led to rapid change in business operation (freshman, 2002). Nzomo (2014) in his study also agreed that the benefits AIS can be appraised by the effect it brings on the process of decision making, performance control and internal control. It in evitable therefore, that AIS has a relationship with firms efficiency.

1.1.4 Manufacturing companies in Kenya

The manufacturing sector in Kenya is majorly geared to consumer goods with food products being 22.42% and tobacco and beverages at 10.48 % (Chege, Ngui & kumuyi, 2014). Processing of food and agricultural products is the leading activities in the sector followed by textile and cement. The discovery of oil in the northern region has seen the development of refinery companies. The sector grew in 2015 at 3.5% and in 2014 at 3.2%, this is however a slower rate compared to Kenya's general economy.

The GDP of Kenya is 10.3% attributed to the manufacturing sector being third after transport and communication and agriculture according to Kenya national bureau of standards (KNBS) 2016. The annual growth rate of the sector has been on the decline with 3.8% in 2015. The decline is majorly because of poor economic polies by the government, competition from imports, high operation costs and low value addition. Manufacturing companies are mostly located within Nairobi, Mombasa and Kisumu cities. They provide a great source of employment to people living in these cities most of which is manual labor.

Employment in the sector has seen a growth of up to 1.48 per cent in the period 2005-09. This is in line with Kenya's vision 2030.

The challenges the sector is facing include the reorientation of the Chinese economy from export driven to consumer driven. Stiff competition from global competitors is a great challenge since retailers prefer importing than buying locally because of lower prices. High level of taxation in Kenya hinders investors from investing in the country and also high cost of operations posters a great challenge. The incorporation of information technology in the operations of manufacturing companies will help in creating solutions to most of these challenges.

1.2 The Research Problem

Capital expenditure (CAPEX) on information systems (IS) has been on the rise recently in many organizations locally and globally. Operations within different departments in a firm have seen a change from being manual and shifted to being automated with the utilization of computer software. Competition and external conditions have increased the importance of real time information gathering, processing, utilization and storage. Cost reduction can only be a reality when proper analysis is carried out for decision making. Accounting information systems is core to the achievement of firms' goals; this means that an organization is as good as its enterprise resource planning (ERP).

Accounting information is a tool for effective administration; bad AIS will jeopardize the effectiveness of administration (Onaolapo & Odetayo, 2012). The world has moved from an information age towards a knowledge based one. Knowledge is being acknowledged as a very important asset in many organizations (Curtis, 1995). Business leaders therefore need to but acquisition of strategic knowledge at their center stage for prosperity. Choe (1996) alluded that knowledge in itself is not impersonal compared to money. Knowledge is embodied on people; this can only be a reality if a firm invests on information search and proper analysis. Institutions must therefore know how manage intellectual assets which is concerned with development and exploitation on intellectual assets (Huber, 1999). Nzomo (2014) stated that information technology (IT) and transparency in the financial sector is a key driving force in organizations strategy and performance.

Management of manufacturing firms in Kenya depends on information generated from AIS used by the firm. The manufacturing organizations are complex in nature with departments like supply chain, manufacturing, sales and marketing, finance and human resources handling a lot of transactions. Integration with other stakeholders is unavoidable hence the processes have to be real time and accurate in nature. The importance of AIS is a major reason why the government, business owners and researches need to invest more on researching this area. Onaolapo and Odetayo (2012) carried a study on how accounting information system affects organizational effectiveness for construction firms in Ibadan Nigeria. They recommended that the leadership of construction firms Automated AIS and engage those who are computer literate. Studies have been carried out in Kenya concerning accounting information in the financial sector, automobile and the public sector but there is a gap on the manufacturing sector.

Locally, limited research has been carried out on the impact of accounting information systems on the effectiveness of organizations. Some of the research already conducted include; Odero (2014) study with the objective of establishing the consequences of accounting information systems quality on financial performance of SMEs. Sugut (2014) studied the effect of computerized financial accounting on the value of financial statements of Non-Governmental Organization (NGOs). Biwott (2015) carried out a research study on integrated financial management information systems (IFMIS) implementation and its impact on public procurement. Researchers have not carried out studies on how accounting information systems affect the efficiency of manufacturing firms in Kenya. This study therefore intended to address the research question: Does the use of Accounting Information System affect the efficiency of manufacturing firms in Kenya?

1.3 Research Objective

The key objective of this study is to examine impact of accounting information system on effectiveness of manufacturing firms in Kenya.

1.4 Importance of the Study

The research will be of great significance directly to manufacturing companies and other organizations in Kenya on how utilization of computerized accounting process can affect their efficiency and performance. Business leaders can therefore, utilize the findings and recommendations from the study to make decisions on Enterprise resource planning (ERP) implementation. Government agencies and small medium enterprises (SMEs) will use the findings in formulation of policies.

The research study will provide other researches in laying a foundation on investigating further studies on the subject matter. It will provide a theoretical basis concerning successful adoption of accounting information systems. Research findings from the study will give a good basis other researches what they will likely expect and the processes to following order to be successful. Opportunities for further research will be facilitated by the findings of the study on accounting information system within an economy.

The study will give practical and empirical guidance on implementation of accounting Information systems in business firms. It will ensure availability of information for investment decisions on the system to implement and challenges to be faced and how to avoid. Regulatory bodies like International Accounting Standard Board (IASB) and tax authorities will use data from the research during formulation regulatory frameworks and improving internal controls

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This second chapter involves the appraisal of scholarly work done by selected scholars on accounting information systems locally, regionally and internationally. Research outcome, attributes and conclusions from research they conducted will be highlighted. The section is split into theoretical literature, empirical literature, studies carried out in the same field and summary.

2.1 Theoretical Literature Review

Theoretical framework is philosophical basis in which the actual research takes place (Odero, 2014). From this therefore, it creates the link between the theoretical orientations and actual components the investigation is taken. Mertens (1998) stated that theoretical framework has a significant implication on research methodology decisions. It is clear from the two researches that theories on the area of research play a great role on setting the base on what direction the study will take. According to Mackay (1993), it is relevant to establish a method compatible with the nature of problem under investigation for a research to be successful. Developing a good research methodology is the starting point for a study, the action plan, process development and design is equally important. The method used determined the data collection techniques and analysis processes to be applied (Crotty 1998).

2.1.1 Contingency Theory

The contingency theory suggested by Fred Edward Fiedler stressed the importance of the personality of leaders and also the situation the leader is operating in. The theory suggests that AIS need to be designed in a way which is flexible and able to meet different environment and the structure of the organization. A universal accounting information system that can be used to meet all situations encountered by organizations does not exist.

Gordon and Miller (1976) study on contingency Outline in the design structure of AIS, laid a good framework. The study elaborated that implementation of accounting information systems be it independent or incorporated in an enterprise resource planning (ERP) and should be focused on the uniqueness of a firm. Environment uncertainty sets a direction on management accounting systems (Gordon & Narayanan(1984).Managers will have to look for external information when choosing an information system .Langfiled & Smith(1997) did a study on accounting information systems and effect on organization strategy, they concluded that AIS is greatly a consequence of strategy. Chenhall (2003) also from his a study affirmed that firms AIS is in line with organizations current situational strategy.

Despite the studies, contingency theory has not been a great look by organizations implementing accounting information systems. Managers have been implementing AIS projects based on what competitors use and not how their internal operations and structure is. The research clearly looked at the needs of information systems in financial aspect of manufacturing firms in Kenya. The study also highlighted empirical evidence on AIS in the manufacturing sector within Nairobi’s industrial area.

2.1.2 Agency Theory

Agency theory elaborates the difficulties that come up because of the difference between principals and agent on organizational goals. It is majorly used in firms’ shareholders and company management. Ezzamel and Watson (1993) wrote that agency problems arise mostly because of information asymmetries. They continue to explain that an agency problem is catalyzed by managers not bearing substantial percentage of wealth effects during decision making.

Jensen and Meckling (1976) alluded that potential agency conflict is brought up by the discrepancy between managers and investors interest on the separation of ownership control. Conflicts therefore arise because of the ideological difference between owners of firms and the managers employed to run the firm. They continued to suggest that having managing directors who own a good share of the company's shares will likely reduce the problems than total non-shareholders. Shareholders and firms leadership are assumed to be directed by personal interest, this translates to conflicting goals. A good way of reducing conflict of interest is utilization of compensation contracts (David, Julie Smith; et al 1999). Compensation contracts help in determining the sharing of the financial outcome between the agent and principal. This provides a basis of rewarding agents based on the effort put in achieving objectives.

In this research, agency theory was used to elaborate the elements of financial information accounting and systems of compensation. The theory will also help in explaining the difference on designing accounting systems infrastructure view from both agent and principal. The theory will help in explaining the different behaviors of individuals in the organization.

2.1.3 Behavioral Theory

Behavioral theory involves learning; it focuses on observable behavior and not mental activities. It focuses more on how environmental factors and how they affect behavior through learning, (McLeod, 2016). Initial accounting research used behavioral theory to explain the bivariate associations like budget participation and other criterion variables for example performance. The theory nowadays is used by researchers in contingency firms' and that of individual behavior. Contingency theory explains that firms structure and control system design relate to specific organizational design.

According to Kren and Liao (1988), the control systems actual characteristics must be matched to the contextual variables defining firms' environment. The explicit assumption is a good match is related in a positive way to firms' performance. In general, the understanding of system design and effectiveness starts with analysis of physiognomies of individual organizations and the environment (Merchant and Simons, 1986). The characteristic of the firm under study and its environment formed the basis of this research study.

2.2 Defining Criteria of Effectiveness

According to Campbell (1977), various ways of measuring organizational effectiveness exists. Some of the criteria he listed include: profitability, productivity, growth rate, sales turnover, contribution, organizational stability and consistency. These factors affect the market worth of manufacturing companies. The analysis of the factors of organization financial performance is necessary for all investors. Financial pointers based in AIS are sufficient in determining the value of the firm and its market position (Branch, 2000).Natural system viewpoint focus on the output variables including morale, employee satisfaction and interpersonal skills. Rational perspective on the other hand puts more focus on attainment of goals and objectives like efficiency, quality and productivity. The open system perspective looks at environmental factors including adaptability, profitability and flexibility in processing of information (Downs, 1957).The effectiveness of an organization varies with time. It is also different depending on the group of people being analyzed. Effectiveness equally is affected by self-interest stated as a universalistic which can cause conflict among subgroups within a firm.

2.3. Determinants of Financial Accounting Efficiency in Manufacturing Companies.

This section will discuss different factors leading to organizational efficiency of firms.

2.3.1 Accounting Information System

Accounting information systems (AIS) play a fundamental role in a firms' service, information and systems quality leading to increased performance (Basel,Wan & Rosni, 2016). Hamdan (2013) concluded in his study that the employment of AIS is the recipe towards financial results because of the capability to reflect actual financial status to interested parties and a real time update on financial transactions like banking facilities. Proper design of AIS will support organizations strategies in ways that will increase performance through efficiency of departmental functions (chenhall, 2003). Efficiency is in terms of the ability to report accurate transactions therefore setting basis for proper decision making based on the information.

AIS perform a vital role in organizational Internal Control implementation and management. Azhar (2016) concluded that organization can apply AIS to prevent and reduce fraud and errors in generation of information and therefore, internal control needs to be used within the system. The objective of having an internal control in any organization is to make sure that everybody involved in daily operations follow set up procedures (Hall, 2011).

As a determinant of performance, AIS is core, it ensures that coordination between different departments is possible. Reports generated from the automated system are more reliable than manual records. Accuracy is increased through use of IT and timely preparation of financial reports is also made into reality. Cost reduction is enhanced more through automation since they can easily be captured into the system and management can easily take charge on ways of reducing.

2.3.2 Financial Accounting Leadership

McMahon(1999) illustrated that financial records like sales journal, purchase journal, cash receipts and cheque books, petty cash record, general journal and other important accounting documents should be kept and frequently conserved in a reliable accounting system. An organization in that regard need to establish their process of how accounting information will be recorded and maintained. Statutory standards also play a key role on financial processing and disclosure, for instance the International Accounting Standard Board (IASB) in July 2009 published a new regulation to be followed by small and medium enterprises (SMEs) in preparation of financial reports and was incorporated in the international financial reporting standards (IFRS). This has influenced the scope in which SMEs volume of disclosures and implementations because they have limited access to security markets and have fewer external uses of financial reports.

Sian and Roberts (2006) explained that majorly financial statements of SMEs is more concerned with current liquidity position and short term cash flow and not forecasts with long-term horizon. Firms in the manufacturing sector will need to ensure that efficiency achieved in that the information achieved from the systems can be relied during decision making. Financial record on date of delivery of imports of raw materials, letter of credits, collection of debts, payments to creditors, statutory obligations, financial and operation costs . Information on these key organizational transactions should be duly available when needed and accurate in all details. Users of financial information in SMEs generally are interested in short-term assessments on cash flow, liquidity and solvency (McMahon, 1999).

2.3.3 Human Resources

Flamholtz, Kannan-Narasimhan & Bullen (2004) concluded that it very Important for organizations to have specialized personnel in their organization. They explained that firms need to invest on their workforce with equal emphasis as physical assets and financial investments. To increase organizational efficiency, managers have to set aside resources in terms of time and money in training staff. Training and educating staff will put them on speed on new skills and also get updated on changes of carrying out their roles. The study objective was to examine whether decisions on accounting information systems (AIS) investment is affected by the nature of staff an organization have. The qualitative nature of accounting information is greatly affected by human resources, the higher the quality of the staff in terms of skills and expertise the better the financial information an organization has.

Hansson (1997) study examined the price of knowledge-based firms in relation to firms that does not give focus to their employees. The results of the study concluded that firms who give consideration to their staff development and welfare have more chance of increased performance. Human resource and AIS have a great link (Daft, 1983). The findings from the study clearly indicated that employees have an economical and financial impact both the long-run and short-run financial performance of a firm.

The nature of human resource an organization will utilize in the process of AIS implementation will determine the final results desired. Management should factor in the quality of employees taking charge of AIS processes. Human resource qualities in terms of education, experience, motivation, reliability among other factors are key for a firm to achieve effectiveness it desires through the use of computer aided accounting processes.

2.3.4 Internal Controls

Internal controls is an organizational process of assuring shareholders that financial statements being reported to them meet the operational effectiveness, unfailing financial reporting and compliance with guidelines and policies. Shareholders invest in reliable AIS with the aim of ensuring that particulars being reported by management are free from errors and biasness. Nzomo (2013) alluded that internal controls incorporates policies, guidelines and procedures in provision of reliable financial reports.

Azhra (2016) concluded that internal controls systems (ICS) have an effect on the quality of AIS. Internal control process is carried out by comparing the actual performance and the standards set and analyzing the variances achieved (Rue and Bayars, 2007). Control is the edge assigned to a use and the system being used to analyze data (Effy, 2009). The implementation is directed towards ensuring that “wrong” data does not set foot to the organizations’ database.

O’Brien and Marak (2010) stated that control in its nature is an activity that can appraise and make modifications needed from records input, processing and final output. Internal control systems (ICS) according to (azhar, 2013) is a process majorly influenced by shareholders and is designed to give assurance and able of ensuring firms goals are achieved through the effectiveness and efficiency of departmental operations represented in financial statements that are dependable and conform to laws and regulations. ICS is the process implemented to improve achievable assurance about the achievement of a company (Romney and Steinhart, 2009). Romney and Steinhart continued to elaborate that an effective internal control system (ICS) should exist in any company's AIS to assist attain improved performance and increase profitability and to a great extent reduce risks.

According to Lander (2004) the process of designing an internal control process should be under the leadership of financial division and the board of directors (BOD) and implemented by all line managers within the company. This ideally will give more assurance that relying on the financial statements by external users is in accord with the internationally generally accepted accounting principles (GAAP). A reliable financial accounting reporting process will in most cases led to increased efficiency of operations towards meeting operational objectives and compliance with set laws and policies (Bodnar, 2010).

The primary objectives for internal control systems are: to uphold assets, to ensure dependability of financial statements, to increase organizational efficiency and to ensure compliance adherence (Hurt, 2008). Asset security involves maintenance of records in a sufficient detail to accurately and equitably reflect the firm's assets position, acquisition and disposition and financial reports prepared according to GAAP. Effy (2009) Internal control systems (ICS) help in the attainment of information confidentiality. Accounting information system performance towards achievement of organization efficiency can be determinant through analysis of how a firm achieves its internal controls objectives.

2.4 Empirical Literature Review

Locally, a study by Nzomo (2013) investigating the impact of AIS on automobile company effectiveness in Kenya employed the descriptive research design. The study collected primary and also secondary data for analysis. Primary data was acquired using interviews and questionnaires. The findings of the research indicated that (AIS) is a significant mechanism for companies‟ effective management.

Biwott (2015) carried out a research study on integrated financial management information systems (IFMIS) implementation and its impact on public procurement. His objective was to establish IFMIS implementation procedure at the national government and also to find out the factors affecting the implementation at the public sector. The research adopted cross-sectional survey research design and targeted a population of 18 ministries under the national government. Data was collected using primary source and a questionnaire based on five-point Likert scale, oral interviews was also utilized. Qualitative data got was examined using both content analysis and SPSS for quantitative. The researcher concluded that a moderate level of IFMIS implementation in Kenyan public sector.

Odero (2014) did a research with the objective of establishing the consequence of AIS quality on firms' financial performance of SMEs. Target population was within Nairobi County and adopted descriptive study design. A sample of 50 enterprises was considered. Data gathered analysis using SPSS version 20. The researcher concluded that there exists a very strong positive connection between AIS quality with financial performance of SMEs.

Otieno and Oima (2013) pursued an investigation the result of computerized financial accounting systems (CFAS) on audit threat administration. The study engaged an exploratory survey design which was longitudinal and cross-sectional by questionnaires. A sample of 41 public enterprises was used within in Kisumu County. A descriptive analysis was engaged. The finding was that there is a positive association amid the computerized accounting system employed and audit risk administration policy within the enterprises.

Sugut (2014) did a study on effect brought by computerized financial accounting on the value of financial statements of Non-Governmental organization (NGOs). The target population was NGOs within Nairobi County in Kenya. The research design employed descriptive survey and primary data collection. The sample comprised 100 NGO is selected through non-proportional quota sampling. Data analysis carried out through SPSS and presentation in tables and graphs.

Njeru (2016) carried an assessment of how IFMIS implementation leads to effective management practice in Lamu and Nairobi counties. He employed a correlation research design. Primary data he analyzed using SPSS. The study used random stratified and purposive sampling method. The research finding showed that IFMIS leads to effective administration practice. Management of human capital 51.6%, delivery of service 49.4% and procurement 18%.

Njihia and Mwirigi (2014) studied the effect of ERP systems on firm performs in commercial banks in Kenya. Study design used was descriptive and questionnaires used to collect primary data. Collected data examined using SPSS V 20 and presented in graphs and tables. Chi square test was used in testing hypothesis. The findings of the study were that financial resource existence, employee perception, management support and regulatory requirements affect implementation of ERP hence firms' performance.

Internationally, Onaolapo & odetayo (2012) carried out a study with the objective of finding out the consequence of AIS on firms' effectiveness towards resolution making. The study was carried out in Abuja Nigeria. The research adopted a purposive sampling technique. Descriptive and also the inferential tools of statistics were used in analysis. They concluded that AIS has an effect on organizational effectiveness.

Azhar (2016) did a research study with the aim of getting empirical evidence on the influence of internal control system to be applied inside an accounting information system. The study was carried in Pandadjaran University Indonesia. The study used a population of 59 samples and used primary and secondary data. Data analysis was done with the aid of structured equation modeling. The findings illustrated that internal control affects information quality.
Alshebeil (2010), study aimed to find out the purpose of (AIS) in attaining competitive advantage for the Jordanian banks. Findings of the study were, statistically substantial impact existed for AIS on realizing the magnitudes of competitive advantage through improved pricing and cost reduction of banking services.

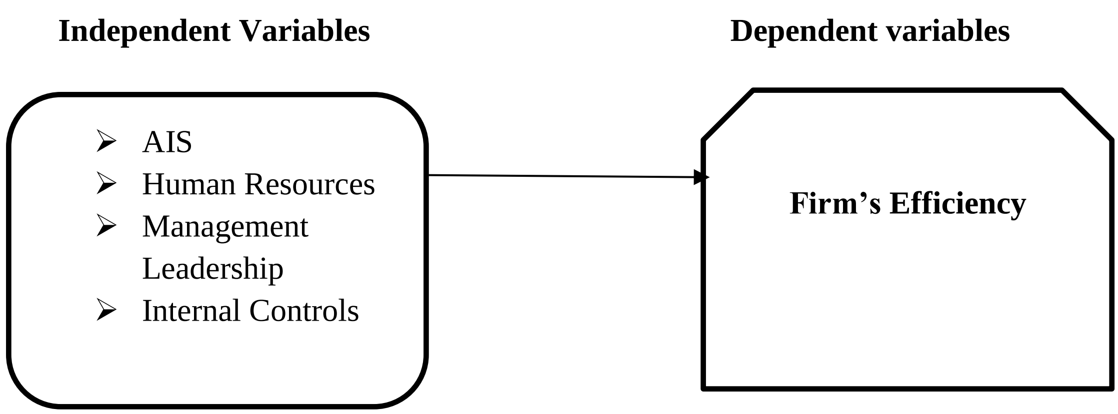
Ali, Bakar and Omar (2016) carried a study with the objective of investigation the effect of AIS on organizational performance being moderated by organizational culture. The data collection technique applied was questionnaire with a sample population of 273 respondents within Jordanian banking sector, data was analyzed using PLS SEM technique. The research findings concluded that service quality and system quality are significant accounting information system success factors.

Qatani and Hezabr (2015) studied on the use of AIS towards improvement of business organization value chain. A sample of 50 respondents was interrogated. The researchers used primary data and collected data through questionnaires. From the results they obtained, the two recommended that there is need for improvement of the level of basic components of AIS in Bahrain. Management need to emphasize on training and continuous employee education.

2.5 Conceptual Framework

Mugenda and Mugenda (2003) explained that the theoretical outline represents structure of concepts put together to aid in showing association between dependent and independent variables in a research study. The conceptual framework in figure below shows the various determinants of financial accounting efficiency in manufacturing companies including AIS, human resource training and capacity building, top management commitment, level of financial record implementation, organizational culture and information technology infrastructure and internal controls put in place to ensure information is without bias. Successful implementation of AIS leads to increased organizational effectiveness through accountability, cost reduction, transparency.

Figure 2.1: Conceptual Framework



2.6. Conclusion of Literature Review

In conclusion, scholars have carried out research on how AIS affect organizations effectiveness. The researchers looked at effectiveness in terms of productivity, cost reduction, growth rate, sales turnover, contribution, profitability and organizational stability. The determinants of accounting efficiency include: AIS used by a company, financial report management, human resources working in that firm and level of internal controls.

Theories which was used in this research study though not limited only to them included: contingency theory, agency theory and behavioral theory. Contingency theories explain AIS implementation should be based on the prevailing economic conditions a firm is facing. Agency theory, explains that the interest of the management whose main role is implementing AIS in the company should be in line with the objective of shareholders. Behavioral theory involves the how employees learn how the AIS work and uses it.

The majority of empirical studies analyzed adopted a descriptive research design. Secondary and primary data was also utilized in the research studies. Collection of data involved interviews and questionnaires. Data was analyzed using SPSS and presented using tables and graphs. This research is also going to adopt the same.

In summary, there exist some studies carried out on the subject. Most of the studies show that a positive relationship between use of a good AIS and organizational efficiency in terms of increased performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter will highlight on design, sampling design, sampling processes, collection of, data analysis and reporting, diagnostic tasks and test of significance employed in the research process.

3.2 Research Design

Robson (2002), defined research design as the procedure of revolving study questions into a research study project. Nachmias and Nachmias (1993) elaborated that a research design basically is the program guiding the researcher during the process of collecting, analyzing and interpreting the data. The types of research include experimental, descriptive, exploratory and interpretive (Kothari, 2008). This study adopted a descriptive survey design being suitable for both preliminary and exploratory study allowing data collection, summarizing, presentation and interpretation for the reason of interpretation. Primary data was collected using questionnaires. The research design enabled the researcher bring out an understanding on the impact of AIS leading to organizational effectiveness. The research study also adopted a descriptive method of presentation including the use of tables and graphs.

3.3 Population of the study

Mugenda & Mugenda (2011) defined population as a comprehensive set of entities, cases, and objects with mutual apparent features used in a research study. The population of this research consisted of manufacturing firms in Kenya of over 800 enterprises according to Kenya association of manufacturing (2016) published report.

3.4 Sample and Sampling Design

A sample of 51 manufacturing companies in Kenya was selected through quota sampling technique which is non-proportional. This is the analogue of stratified random sampling used to assure that the smaller groups are adequately represented Mugenda & Mugenda (2003). This method was suitable because it was less restrictive and met the research objectives. The researcher grouped the population into five strata according to the manufacturing sector namely: consumer goods, textile, construction and mining products, agricultural processing and pharmaceuticals. The process ensured that the sample included all the sectors in order to be represented and was selected purposively due to the suitability to provide required research information and analysis.

3.5 Data Collection

Primary data was obtained through questionnaires which was presented to organization managers and senior accountants to ensure reliability of data. The questionnaire was used to collect information about the respondents ‘effect of accounting information system on manufacturing firms efficiency measured on a 5 point Likert scale , nature of human resources in the organization, leadership and internal controls. The questionnaire was structured into two parts , part A dealing with accounting information system, nature of human resources, organization leadership and internal controls and part B dealt with organizational effectiveness. Using questionnaires in data collection is superlative since it assures confidentiality to the respondents thus will act without any fear or bias.

3.5.1 Reliability and Validity of Data

Data reliability was warranted by examining the instruments for reliability of alpha values. Analysis was also conducted by getting alpha value for each variable being studied Cronbach, (1946). McMillan and Schumacher (1993), reliability ensured that consistency of data exists and the spread to which the results remain over various forms of similar instruments. According to Borg and Gall (1989) validity help in identifying if the instrument measures what is designed to. Validity of data involved going through the questionnaire to make sure it contains the information required.

3.6 Diagnostic Test

Data was tested to ensure that it is good enough and are consistent. Test of normality was used to determine if data set is well modeled by a normal distribution and compute how random variable was set to be normally distributed therefore measuring goodness of fit. Correlation technique was measure how the data are related.

3.7 Data Analysis and presentation

Data analysis involved coding questions and using Microsoft Excel and SPSS software to analyze. Qualitative data was analyzed by means of descriptive statistics which include: percentage and mean. On the other hand, qualitative data will utilize content analysis. Data was presented using pie charts, bar graphs, tables and explanation in a prose format. This gave a clear presentation and proper analysis of the data.

3.7.1. Conceptual Model

The independent variable is accounting information systems and dependent variable organizational effectiveness. They can be represented with the linear expression:

Y= f(x1)………………………………………………………………………………….. (1)

Where;

Y= Organization effectiveness

X1= Accounting Information System

3.7.2 Analytical Model

The regression Model is in an algebraic expression of form

$Y= a+ b_1X_1 + b_2X_2+b_3X_3 + b_4X_4$……………………………………………………… (2)

Where;

Y = Organization effectiveness. (OE) This was be measured in terms of increase in profits, revenue growth and increased market share.

a = Constant

b = Regression slope

X_1 = Accounting Information System (AIS).This was measured in terms of ability to be used in recording financial data, speed, accuracy and quality.

X_2 = Human Resource (HR) this was measured in terms of qualification, reliability, honesty and motivation.

X_3 = Financial Leadership (FL) this was measured in terms of standards, relevance, reliability and understandability.

X_4 = Internal Controls (IC) this was measures interms of availability of data security systems,audit schedules and reports meeting IFRS quidelines.

Table 3.1 Operationalization of Variables

Variable Code	Indicators	Measure	Scale	Analysis Tool
OE	Increased Profitability	The organization been reporting increased profits	Likert	Mean
	Increased Revenue	The organization been having increased revenue	Likert	
	Increased market Share	The organization has been increasing its market share	Likert/Ordinary scale	
AIS	Reliability	Can the reports be used for decision making?	Likert	Mean
	speed	Does AIS improve speed of financial entry	Likert	
	Timeliness	Does the use of AIS help reduce report generation time	Likert	
FL	Timeliness	Do the financial reports meet timely deadlines?	Likert	Mean
	Understandability	Do the financial reports users understand the reports?	Likert	
	Relevance	Do the reports generated meet the financial obligations?	Likert/Ordinary scale	
	Reliability	Can the reports be used for decision making?	Likert	
HRM	Qualification	Employees have the materials and equipment needed to do their job	Likert	Mean
	Dependable	Employees know what is expected of them	Likert	
	Reliability	Employees are committed to doing quality work	Likert	
IC	Data Security	Are organization information secure from fraud and hacking?	Likert	Mean
	Audit schedules	Does the system generate audit schedules	Likert	
	Report meet IFRS guidelines	Does the reports generated adhere to IFRS guidelines?	Likert	

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The chapter discusses the interpretation and presentation of the research findings. The purpose of the study was to analyze the impact of Accounting Information System (AIS) on the effectiveness of manufacturing firms in Kenya. The researcher made use of frequency tables and figures to present data.

4.2 Data Collection

The data was collected and analyzed using both quantitative and qualitative data analysis methods. Quantitative method involved both descriptive and inferential analysis. The questions were inform of a Likert scale with a key of 1= strongly disagree 2= disagree 3 = neutral 4 = agree 5= strongly agree. Descriptive analysis such as frequencies and percentages was used to present quantitative data in form of tables and graphs.

Data from questionnaire were coded and logged in the computer using Microsoft Excel .This involved coding both open and closed ended items in order to run simple descriptive analyses to get reports on data status. Descriptive statistics involved the use of absolute and relative frequencies, measures of central tendency and dispersion.

4.3 Response Rate

The researcher administered questionnaires to 51 respondents selected through quota sampling technique which is non-proportional. 51 respondents gave back the questionnaires This represented a 100% response rate. The high response is because the questionnaires were semi-structured therefore easy for the respondents to fill and return it. Most of the questionnaires were also delivered and collected by hand, the direct contact to the respondents allowed a high response rate. This is a reliable response rate for data analysis as Babbie (2002) suggested that any response of 50% and above is adequate for analysis.

Table 4.1 Response Rate

	Number	**Percentage**
Responded	51	100%
Total	51	100%

Source: Research Findings

4.4 Data Validity and Reliability

The Validity of a questionnaire is basically the extent to which it measures what it claims to measure (Mugenda & Mugenda, 2003). In testing validity, the researcher prepared questionnaires and the supervisor then scrutinized and found it valid for data collection. As shown in table 4.2 Cronbach Alpha was established for every variable which formed a scale, the overall reliability of all items was 0.7866 this results are reliable as their reliability values exceeded the prescribed threshold of 0.6. Gliem and Gliem (2003) established the Alpha value threshold at 0.6.

Table 4.2: Cronbach Alpha

	AIS	*HR*	*FL*	*IC*	*OE*	
	1					
AIS	0.9078	1				
HR	0.04178	0.05343	1			
FL	0.09078	0.12035	0.05343	1		
IC	0.06354	0.07949	0.03808	0.07949	1	
OE	0.09078	0.12035	0.05343	0.12035	0.07949	1
Average (mean ri)	0.3806					
K x Mean	2.2836	R_{cc} =	K x mean (r_i)			
1 + mean	2.903					
Cronbach's Alpha	0.78663		1 + mean (r_i) x (k-			

4.5 Descriptive Statistics

4.5.1 Accounting information system

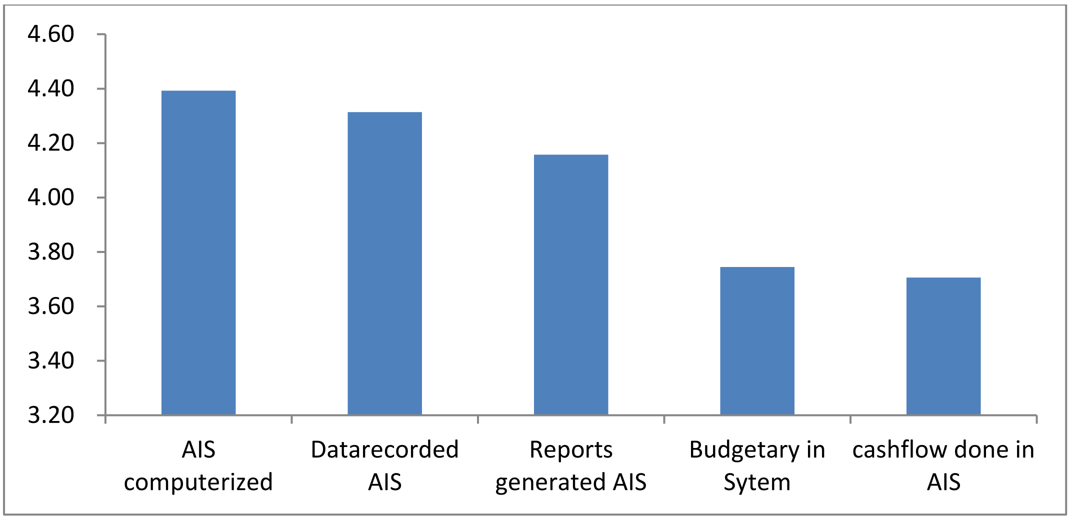
The researcher sought to know the respondents response on the availability and the nature of accounting systems. 88% agreed that the accounting system they are using is computerized, 86% responded that all financial data is recorded using the system. 83% of responded that financial reports are generated within the system,75% alluded that budgetary system is done with the help of accounting system and 74% responded that the system has the ability of helping in cash flow management.

Table 4.3 Accounting information system used and nature

	MEAN	PERCENTAGE
Accounting system is computerized	4.39	88%
Data is recorded using accounting system	4.31	86%
Financial Reports generated from system	4.16	83%
Budgetary system done within the system	3.75	75%
cash flow management done within the system	3.71	74%

Source: Research Findings

Figure 4.1 Accounting information systems



The researcher inquired what motivated the investment and implementation of accounting information systems. 89 % of the respondents said that their firms invested on AIS to facilitate better financial management processes. 83% agreed that the positive impact on company performance contributed in decision making while 86% wanted to improve the quality of their reports, 72% user friendliness of AIS and 60% responded that it was because of competitors' pressure.

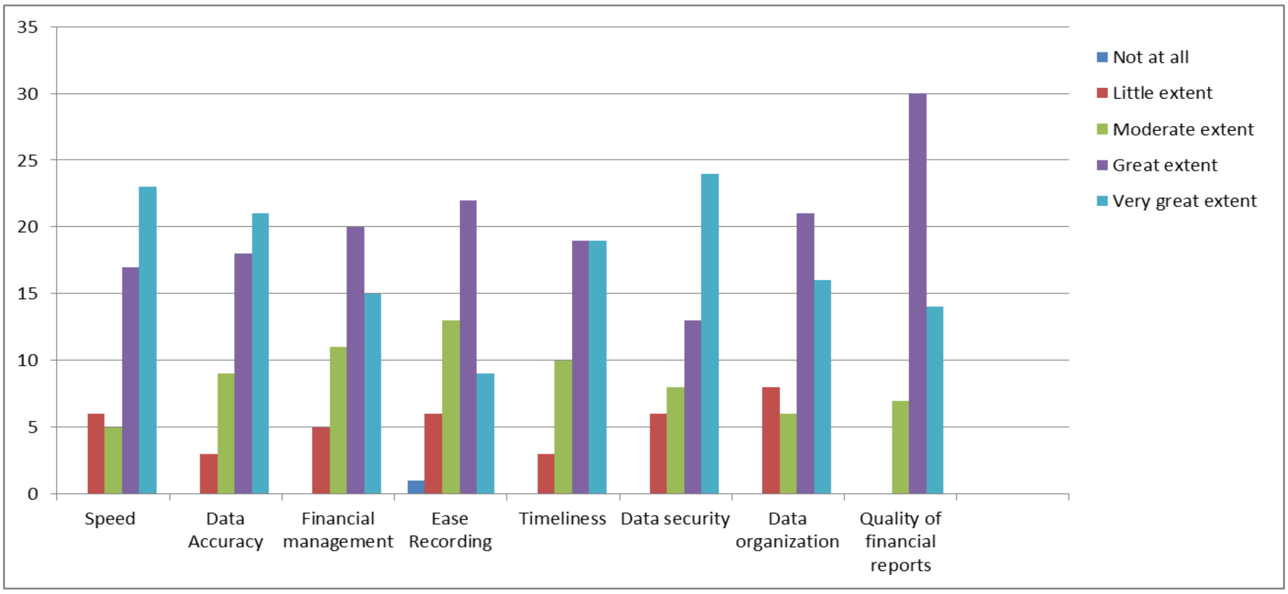
Table 4.4 Factors considered in choosing AIS

	MEAN	PERCENTAGE
Facilitate financial management	4.45	89%
Positive impact on company performance	4.16	83%
Improving quality of reports	4.29	86%
User friendly systems	3.61	72%
Competitors pressure	2.98	60%

Source: Research Findings

From the data collected on how the respondents rated their AIS, 23 of the respondents agreed that the system increased speed to a very great extent; this was at a mean of 4.12. 21 of the respondents said that data accuracy improved to a great extent. 20 alluded that management of financial reports improved very greatly with the use of AIS. Generally more than half of all the respondents agreed that ease of recording, timely delivery of financial reports, data security, organization of data and quality of financial reports has been positively impacted by the use of computerized accounting system as shown in the graph below.

Figure 4.2 AIS performance rating

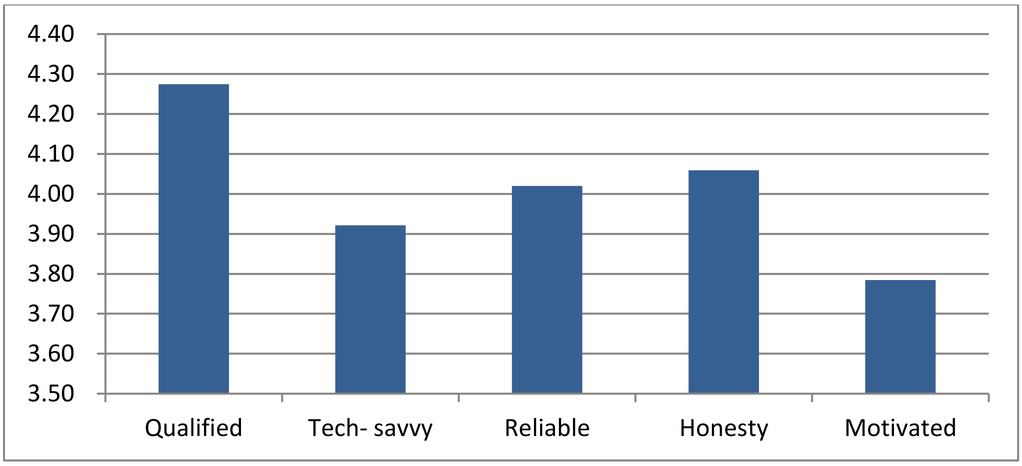


Source: Research Findings

4.5.2 Human Resources

The researcher sought to find out the nature of human resources within companies finance department. From the respondents 85% agreed that staff are qualified in terms of academic qualifications based on their level of professional qualifications and certification and period they have practiced. 78% noted that staff are tech-savvy meaning that they are able to use Accounting information systems with ease having been trained, certified and acquired enough experience, 80% agreed that human resource are reliable in delivering desired results,81% said staff are honest and 76% alluded that staff are motivated working in the organization and within the same department.

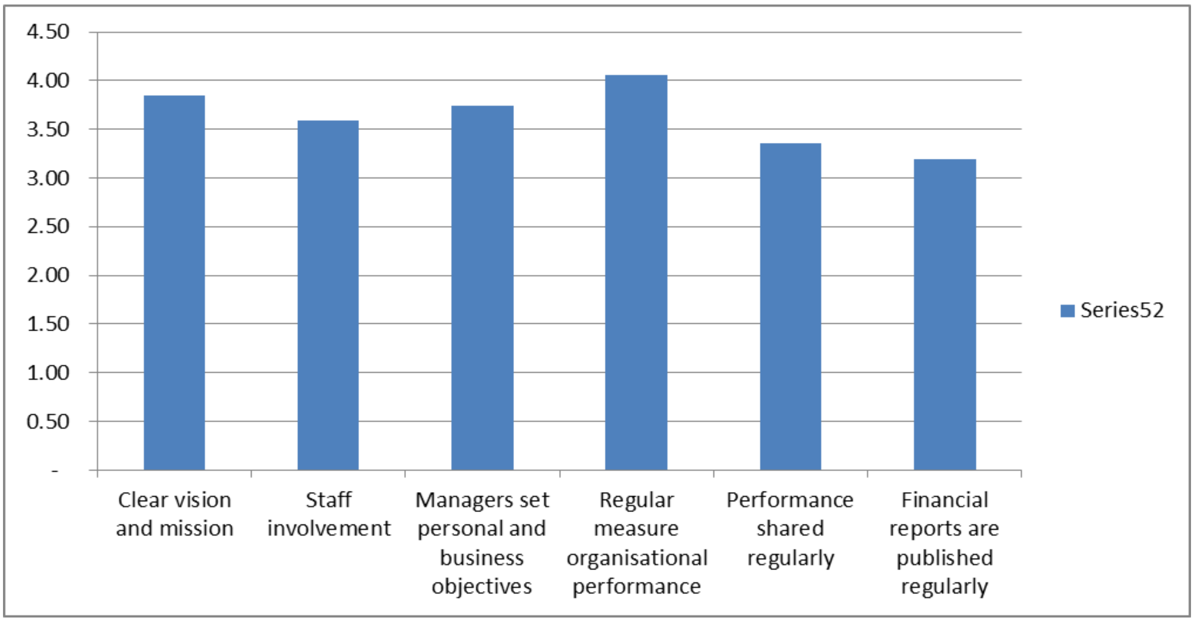
Figure 4.3 Nature of human resources



4.5.3 Financial Management Leadership

The researcher sought to find out if leadership has any influence on the quality of financial reports and the factors under consideration were if the company had a clear vision and mission, staff is involved in decision making, mangers set personal and business objectives, there is regular measurement of organizational performance, performance shared regularly and financial reports are published regularly. The respondents rated the above in this means of 3.84, 3.59, 3.75, 4.06, 3.35 and 3.2 respectively as presented in the chart below.

Figure: 4.4 leadership



Source: Research Findings

4.5.4 Internal Controls

The researcher collected data concerning the nature of internal controls practiced by the organization. Internal controls was in terms of accountability, data security where the system is able to detect fraud, data organization to ensure that it is in conformity with IFRS, data accuracy and availability of audit schedules. The respondents responded to the statements with a mean of 4.14, 4.06, 3.88, 4.12 and 3.88 respectively as shown in the table below.

Table 4.5: Internal Controls

Adequate Accountability	4.14	83%
Data Security	4.06	81%
Data Organization	3.88	78%
Data Accuracy	4.12	82%
Audit Schedules	3.88	78%

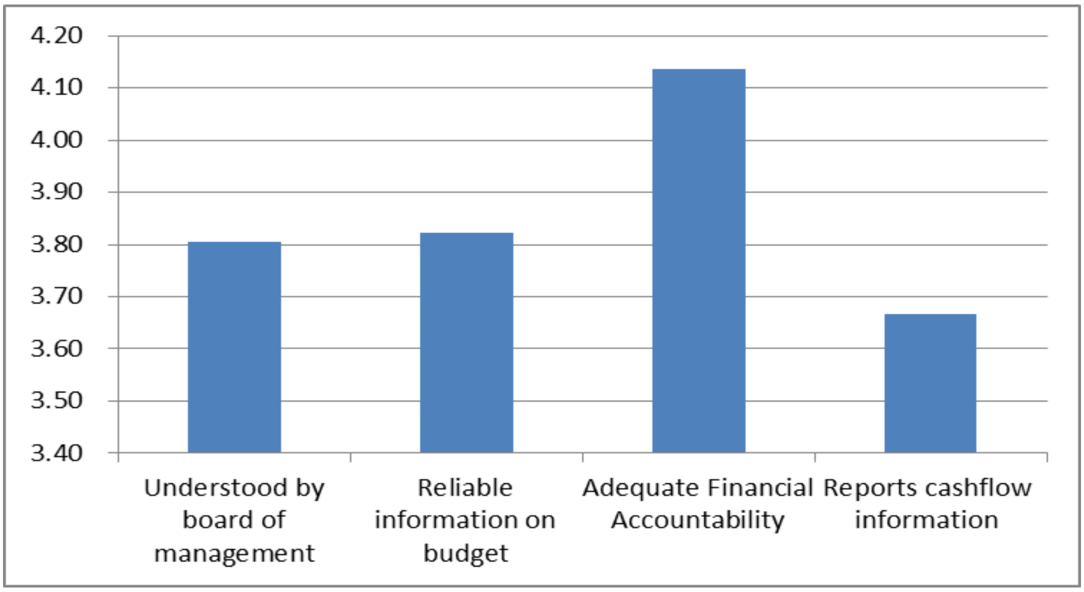
Source: Research Findings

4.5.4 Organizational Effectiveness

The researcher collected data on the firm general effectiveness by asking respondents closed questions in three dimensions quality of financial reports, change management and organizational performance.

The quality of financial reports was looked at in the dimensions of: whether board of management understood, reports contained reliable information on budgetary control, adequate financial accountability and availability of cash flow information. The respondents rated the questions with a mean of 4.14, 3.80, 3.82, 4.14 and 3.67 respectively. The graph below paints a clear picture same.

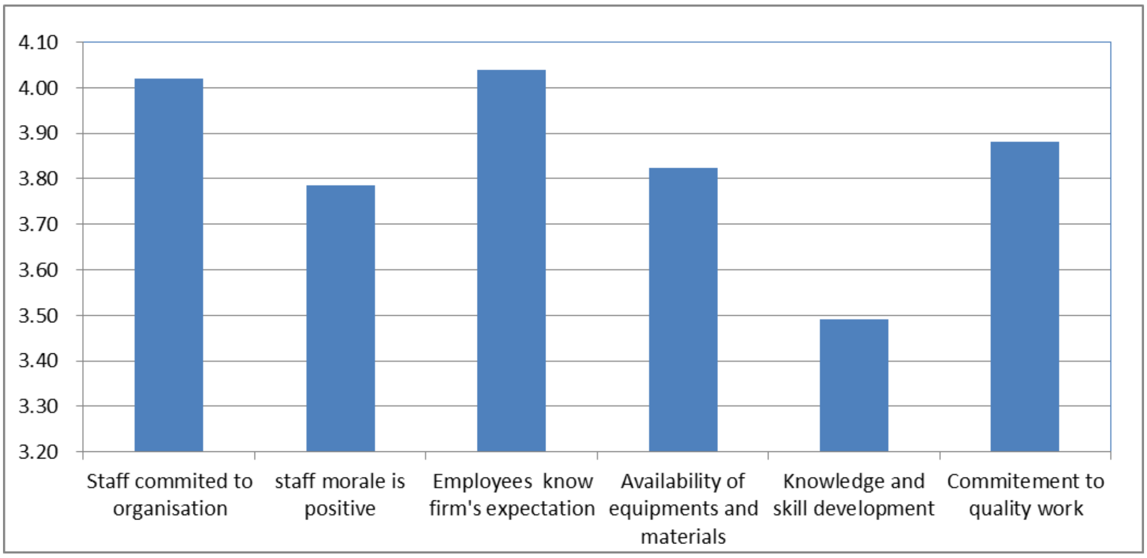
Figure 4.5 Financial report quality



Source: Research Findings

On how Accounting system facilitates change management the researcher inquired to know whether staff are committed to the organization, morale is positive, expectations is known by employees, management encourages knowledge and skills development. The respondents responded with a mean of 4.02, 3.78, 4.04, 3.82, 3.49 and 3.88 respectively.

Figure 4.6.Change management ability



Source: Research Findings

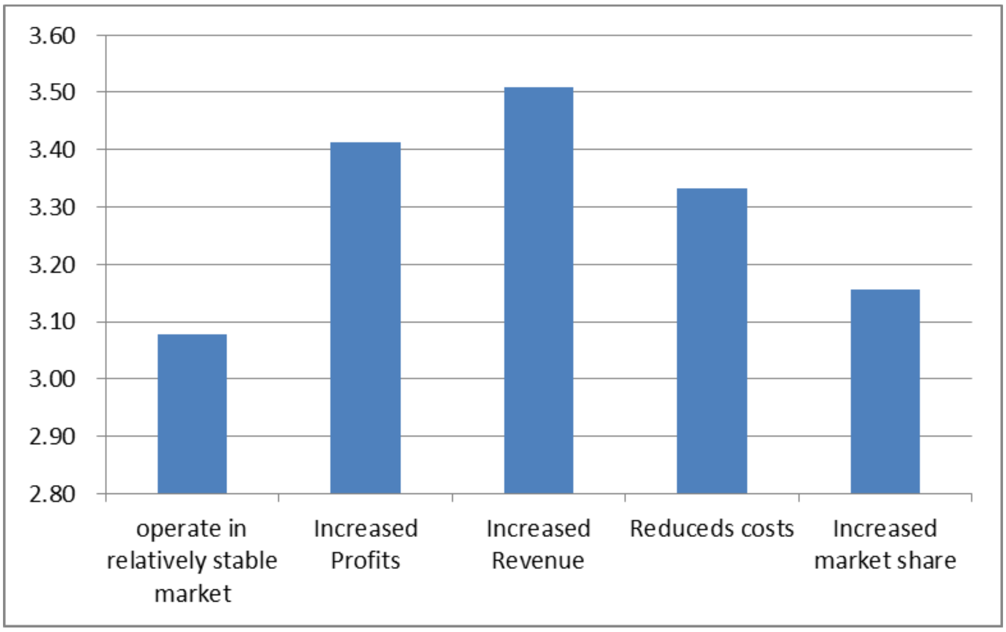
The respondent also established whether after implementation and the use of accounting information system the organization reported improved performance in terms of stabilizing their market, increased profits, increased revenue, reduced costs and increased market share. The response was in a mean of 3.08, 3.41, 3.51, 3.33 and 3.16 respectively.

Table 4.6 Organizational Performance

Organizational Performance	Mean	percentage
operate in relatively stable market	3.08	62%
Increased Profits	3.41	68%
Increased Revenue	3.51	70%
Reduced costs	3.33	67%
Increased market share	3.16	63%

Source: Research Findings

Figure 4.7 Organizational performance



Source: Research Findings

4.6 Correlation Analysis

Since $p<0.05$ then the model is significant. P=0.3524

Table 4.7 Correlation Analysis

	OE	*AIS*	*HR*	*OL*	*IC*
OE	1				
AIS	0.8575	1			
HR	0.9107	0.9024	1		
OL	0.8484	0.8258	0.8258	1	
IC	0.4410	0.5501	0.6933	0.6486	1

Table 4.8 Summary of correlation analysis and p-value

Variables	**Correlation Coefficient**	**P- Value**
Accounting Information System (X_1)	0.8575	0.3524
Human Resource Nature (X_2)	0.9107	0.3776
Managerial Leadership (X_3)	0.5484	0.0000
Internal Controls (X_4)	0.4410	0.3394

Source: Research Findings

This will allow us to predict the quality of financial reports in any given time provided we have the Accounting Information System.

It is clear AIS affects quality of financial reports positively since all coefficients are positive. So the model will be:

$$\mathbf{Y= 3.376 + 0.1124X_1 + 0.1414X_2 + 0.4730X_3 + 0.1263X_4}$$

4.7 Regression Analysis and Hypothesis Test

In order to determine the effects of Accounting Information System (AIS) of manufacturing firms in Kenya, a model was adopted. This study employed regression analysis where Accounting Information System, Human Resource and Finance Leadership are independent variables and Organizational Effectiveness is the dependent variable.

Table 4.9 Regression Analysis

Variables	**B**	**SIG. f**	**S.E**	R-squared
Accounting Information System (X_1)	0.1124	0.3524	0.7099	0.0177
Human Resource Nature (X_2)	0.1414	0.3776	0.7106	0.0159
Managerial Leadership (X_3)	0.4730	0.0000	0.5993	0.2989
Internal Controls (X_4)	0.1263	0.3394	0.7096	0.1864
Constant	3.3755			
Observations	51			
Standard errors	$p<0.1$			

Source: Research Findings

4.8 Summary and Interpretation of Findings

In summary, from the research study it was observed that the quality of the financial reports are good with the 82% agreeing that the information in the reports are accurate, 89% said the reports helps in accountability 81% said that the reports are timely and relevant whereas 83% said the reports are reliable an average of 73% agreed that the reports are reliable.

The factors that influence the selection of an accounting system are the need to facilitate financial management (4.5), the positive impact on company performance (4.2), improving quality of reports (4.3), if the accounting system is user friendly (3.6) and pressure from competitors (3.0).This findings agrees with what Onaolapo & odetayo (2012) carried out a study with the objective of finding out the consequence of AIS on firms' effectiveness towards resolution making that AIS has an effect on organizational effectiveness in Nigeria the financial reports generated conform to some of the quality attributes of good financial information. This was emphasized by a positive correlation of response on quality attributes of timeliness and accuracy but lower on the effect of competitors pressure most respondents being neutral.

The findings clearly shows that taking all other independent variables at zero, a unit increase in accounting information systems will lead to a 0.1124 increase in efficiency of manufacturing organizations; a unit increase in quality of human resource will lead to a 0.1414 increase in efficiency of manufacturing firms; a unit increase financial leadership will lead to a 0.4730increase in efficiency of manufacturing organizations. This infers that accounting information system, human resource and finance leadership affect manufacturing company efficiency with near equal measures. At 1% level of significance and 99% level of confidence, accounting information systems had a 0.01424 level of significance; human resource showed a 0. 08893 level of significance then transparency had 0.0516 thus most significant.

The researcher found out that the factors that influence affect transparency including if the organization share the program progress to its shareholders, if they have sufficient electronic control, the framework/right of confidentiality, Integrity of top management, accountability of funds and current reports value in the future which scored mean of 4.0 out of the possible 5 which is a good indicator that the manufacturing firms are transparent in their operation which contributes to the quality financial reports.

The general objective of the study was to establish the impact of accounting information system of organization effectiveness. From the study, an organization which has invested in a reliable information system in terms of speed, data accuracy, data organization, user friendly, reliability and availability. This will enable manufacturing companies become efficient in terms of timely delivery of financial reports, reduced costs, increased profitability and adaptability to changes in both micro and macro environment.

There is a strong positive relationship between AIS and Organizational Efficiency since R is positive then it has a positive gradient. The correlation coefficient measures the goodness of fit of the regression equation, which in this study $R^2=0.0177$, showing a positive relationship. The model is also significant since $p<0.05$ $P=0.3524$. Therefore, the regression model can be used during decision making process on whether to invest on accounting information system or not.

The research findings are similar to some of previous research studies carried out though in different sectors. Odero (2014) carried out a research to establish the consequence of AIS on quality of financial performance on SMEs and concluded that there exists a strong positive connection between AIS and financial performance in SMEs. Biwott (2015) carried out a research study on integrated financial management information systems (IFMIS) implementation and its impact on public procurement and found out from his findings that a moderate level of IFMIS implementation in Kenyan public sector led to efficiency. Njihia and Mwirigi (2014) studied the effect of ERP systems on firm performs in commercial banks in Kenya the findings of the study were that financial resource existence, employee perception, management support and regulatory requirements affect implementation of ERP hence firms' performance. This therefore elaborates that implementation of accounting information system will have a positive impact on the efficiency of organizations.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The objective of this research was to carry out a study on how manufacturing firms in Kenya utilize accounting information technology in their financial reporting process. The researcher analyzed how Accounting Information System (AIS) affect manufacturing firm's effectiveness. Organization effectiveness was in terms of increased profits, reduced costs, adaptability to changes in the economy and timely delivery of financial reports to the board of management. The study adopted a descriptive design and quota sampling technique. Data collected was analyzed using Microsoft excel and presented in tables and graphs, correlation and regression analysis was used to test data reliability and relationship.

The study found out that there exists a positive relationship between accounting information system (AIS) and efficiency of manufacturing firms in Kenya. The study therefore, showed that the use of Accounting Information systems affects the efficiency of manufacturing firms to a great extent. The study also found out that well trained and motivated staff will facilitate proper implementation of accounting information systems in manufacturing firms. Training staff in accounting packages and computer packages will enable them increase productivity and efficiency.

The study also indicated that accounting information system has an impact on the efficiency of manufacturing firms in Kenya in terms of effective management, decision making and controlling operations .The aspects of AIS that affect manufacturing firms include timeliness, speed, accuracy, data security, internal controls and availability of necessary information.

The study results are consistent with empirical reviews studied. The empirical literature reviews showed that there is a relationship between accounting information system and firms effectiveness. Accounting information systems is a very important tool for data analysis which in the long run helps in decision making for planning, controlling and coordinating operations in an organization. Accounting information system (AIS) utilization in manufacturing firms also increase departmental communication and point out areas that management need to put more focus in order to remain competitive. The study indicated that firms having AIS have either a stable or increasing profitability.

5.2 Conclusions

The study concludes that accounting information systems directly has an impact of the efficiency of manufacturing firms. An organization planning to invest in a computerized accounting system should also ensure that it does proper research to ensure that system will be able to increase processing speed, uphold internal controls and data security. The system should also be user friendly, facilitate financial management and have the ability of providing strategic information pertaining cash flow planning and budgeting.

Investing in a good accounting information systems (AIS) will enable a firm generate financial reports properly understood by board of management and having reliable data to allow the management make decisions to counter economic challenges and face competition strongly. Organizations will also be able to increase their efficiency also since from the research most of the firms having strong AIS have reported having maintained their profitability, market share, reduced costs and generally sticking towards their vision and mission. Organization competitiveness depends on its ability to process data into reliable information for decision making. The process of processing data can only be a reality when an organization has invested in a quality accounting information system and the staff has the ability and the motivation to ensure that the process is objective.

The study also deduced that organizations also need to invest in their human resources. Tech-savvy staff that are reliable, honest and also motivated help in a great way in making AIS to operate effectively and in the long run bring organizational efficiency system reliability and transparency contribute mostly to manufacturing firms efficiency in terms of profitability and ability to adopt on change management. Nature of human resource an organization employs however is the major lead to achieving efficiency followed by accounting information systems and last is firms' leadership.

This study concludes that manufacturing firms efficiency in meeting set goals and objectives is enhance through the use of accounting information systems. Organizations owners and managers therefore can continue investing their finances in implementation of computerized systems because from the study it is a great pillar in meeting organizations mission and vision.

5.3 Recommendations for policy and practice

From the study findings, it was clear that computerized accounting information system leads to increased processing speed, timeliness, accuracy, internal controls and quality of reports generated affecting firms' efficiency in its operations. The study therefore recommends that in order to ensure that the manufacturing firms have quality understandable reports; they should invest in computerized accounting system since it is seen to affect the financial reports to a great extent. Based on the findings of the study an adoption of computerized accounting information system is advisable for all firms in a bid to ensure correctness in reporting and general record management as enterprises that had this system showed an increase in return on investment as opposed to those that had a manual system.

The utilization of AIS need to be regulated by firms’ management. This is not only to bring sanity but to set standards and ensure provision of certain informational requirements which are of financial report format to encourage most business operators to be aware of basic reporting skills. This can even be made on line in nature and such it leads to more adoption of computerized systems.

The study further recommends that organization leadership need to enhance proper guidance and ensure that staff are motivated in the process of using AIS to ensure that manufacturing processes are accurate, timely and to create efficiency in both management and board of directors and meeting set goals and objectives. Management need to factor in both current problems and expected future challenges which the system will solve contingent to the firm. Organization leadership should not be biased to the individual needs but should consider the owners interests in choosing and implementing AIS.

5.4 Limitation of the Study

The study had some limitations. First, measuring the level of organizational effectiveness of manufacturing firms in Kenya was difficult with limited subjectivity. The researcher only relied on questionnaire response in measuring organizational efficiency. This is because of the self-report nature of data of questionnaires.

Secondly, this study was only concentrated to manufacturing companies in. This did not bring out how companies in the service sector are affected by the implementation of accounting information systems, the results therefore can only be used by firms in the manufacturing sector and not all firms who intent or those using AIS.

Thirdly, there was a time limitation. This could have allowed analysis over a longer time horizon like a span of five years in order to allow a more study of the impact of accounting information systems on organizational efficiency. A longer time period can be considered in future so to establish the trend in order to ensure consistency. A firm which has been in operation over a longer period of time tends to give a clear picture of the study variable.

5.5 Areas for Further Research

The researcher recommends further study the impact of accounting information systems on changes in international financial reporting standards (IFRS). This will allow organizations practicing full implementation of IFRS to monitor how changes in the standards will affect accounting systems given that they are not static and recommend how the challenges can be solved.

Secondly, more research needs to be done on the advantages of computerized accounting system compared to manual accounting systems on the quality of financial reports Kenya. In the recent past organizations have been implementing new information systems. The question is, is it really important to implement computerized information systems?

Thirdly, Further research need to be done on the impact of accounting information Systems on import and export trade in Kenya. Importation processes involves a lot of documentation for clearance purposes. A research study will be appropriate to establish the impact of automation of the processes could bring to an organization.

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APPENDICES

APPENDICES 1: RESEARCH QUESTIONAIRE

Dear Respondent, the researcher is a student at The University of Nairobi pursuing Masters of Business Administration. The questionnaire is designed for academic purposes only as a requirement for the Award of a Degree in Master of Business Administration. It is only through your response that the work can be completed well. Therefore any information disseminated will be handled with maximum confidentiality. Please spare a few of minutes of your time to answer the following questions, they mostly involve ticking a response in the space provided and a few filling in.

Topic: **The Impact of Accounting Information System on Effectiveness of Manufacturing Firms in Kenya**

Name of the company …………………………………………………………………………

SECTION A

Accounting Information System

Answer the following questions using a **Key: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree**

Statement	**1**	**2**	**3**	**4**	**5**
The accounting system used in the company is computerized					
The company relies on the accounting system to record data					
The company generates financial reports from the system					
Budgetary processes is done within the system					
Cash flow plan and forecast is generated from the system					

What factors are considered in choosing the accounting information software? Please tick as many as possible

Initial cost of installation [ ]

Cost Benefit Analysis [ ]

Cost of training [ ]

Acceptance by users [ ]

Knowledge of employees [ ]

Adaptability of workers [ ]

Other specify____

To what extent do you agree that your choice of accounting information system was motivated by the following factors?

Statement	**1**	**2**	**3**	**4**	**5**
The need to facilitate financial management					
The positive impact of AIS on company performance					
The need to improve quality of reports					
The accounting systems are user friendly					
The Pressure from competitors using ERP Systems					

Rate the Accounting Information System that the company is using in terms of the following variables 1= Not at all 2= Little Extent 3= Moderate extent 4= Great Extent 5= very great extent

Statement	**1**	**2**	**3**	**4**	**5**
Speed Improvement					
Level of Data Accuracy					
Financial statement					
Ease Recording Procedure					
Timelines of Report					
Data Security					
Organization of Data Processed					

Financial Leadership Management

Key: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Statement	**1**	**2**	**3**	**4**	**5**
The financial reports are clearly understood by Board of Directors					
There is sufficient and reliable information on budget implementation					
The financial accountability in this company can be rated as adequate					
The financial reports contain required cash flow reports					
Audit schedules can be extracted from the system					

Human Resources

Please evaluate the degree of your agreement with the following statements relating to your finance team.

Key: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Statement	1	2	3	4	5
Staff working at finance department are qualified are they CPA, Degree or MBA holders					
The staff are tech-savvy,do they have computer package or accounting package certification?					
The staff reliable					
The staff are honest					
Staff are motivated at work					

Internal Controls

Please evaluate the degree of your agreement with the following statements relating to your finance team. **Key: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree**

Statement	**1**	**2**	**3**	**4**	**5**
Organization has adequate accountability					
The organization data is Secure					
Data organization is as per IFRS					
The system generates accurate information					
Audit Schedules can be extracted from system					

Section B: Assessing Organizational Effectiveness

1. Please evaluate the degree of your agreement with the following criterions for assessing Organizational effectiveness:

Key: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Statement	**1**	**2**	**3**	**4**	**5**
Leadership					
The leadership team have a clear vision and mission					
The vision is known to all					
Staff are involved in achieving the vision and mission					
Performance Measures					
Each team/department has measures of their quality of service					
Management regularly measure organizational performance					
Performance measures are shared regularly with staff					
Financial reports are published regularly and available for review					
Managers set personal and business objectives					

	1	2	3	4	5
Change Management					
People are committed to the organization					
Staff morale is positive					
The market that we operate in is relatively stable					
Employee Engagement					
Employees know what is expected of them					
Employees have the materials and equipment needed to do their job					
Employees are encouraged to development their knowledge and skills					
Employees are committed to doing quality work					
Organizational Performance					
The company has been reporting increased profits					
The company has been reporting increased revenue					
The company is reporting reduced costs					
The company has been reporting increased market share					

Thank you for your valuable time

APPENDICES 2: LIST OF ENTERPRISES IN THE SAMPLE POPULATION

1	CHUI AUTO SPRINGS INDUSTRIE	27	CARTON MANUFACTURERS LTD
2	R & R PLASTIC	28	RAY PHAMACETICALS LTD
3	CHEMID KENYA	29	SAMORE ENGINEERING FABRICATORS LTD
4	SUNFLAG TEXTILE AND KNIT LT	30	HALAR INDUSTRIES LTD
5	NESTLE KENYA	31	KENPOLY INDUSTRIES
6	BLUE RING PRODUCTA LTD	32	BROOKSIDE DAIRY LTD
7	TWIGA CHEMICAL INDUSTRIES	33	CHANDARIA INDUSTRIES
8	PREMIER OIL MILLS LTD	34	GENERAL EQUIP(1978) CO. LTD
9	CITY FARMING LIMITED	35	KALUWORKS LIMITED
10	PREMIER FLOUR MILLS LTD	36	PLASTIC AND RUBBER INDUSTRIES
11	CROWN PAINTS KENYA LTD	37	SPECTRA CHEMICALS KENYA LTD
12	MORRIS AND COMPANY(2004) LT	38	SAVANNAH CEMENT
13	BETA HEALTH CARE	39	UNILIVER KENYA
14	HIGHCHEM POLY SYNTHETICS L	40	MUMIAS SUGAR
15	GALAXY PLASTICS LTD	41	MASTERMIND TOBACCO
16	ANGEL HAIR COLLECTIONS	42	BRITISH AMERICAN TOBACCO
17	SANA INDUSTRIES LTD	43	MABATI ROLLING MILLS
18	PACIFIC STATIONERIES KENYA	44	KENYA BREWERIES LTD
19	ITAL PRODUCTS LD	45	TONONOKA ROLLING MILLS LTD
20	PATCO INDUSTRIES LTD	46	APEX STEEL LTD
21	POLYFLEX INDUSTRIES LTD	47	BROLLO KENYA LTD
22	BROTHER KNITWEAR INDUSTRIE	48	TUFFSTEEL STEEL
23	TEPEE BRUSHMAN LTD	49	DOSHI & CO. (HARDWARE) LTD
24	TURN O METAL ENGINEERS	50	INSTEEL LIMITED
25	SMART COATINGS LTD	51	STARNDARD ROLLING MILLS
26	ALLIANCE GARMENT INDUSTRIES LTD		