

**IMPACT OF ACCOUNTING INFORMATION SYSTEMS ON ORGANIZATIONAL
EFFECTIVENESS OF AUTOMOBILE COMPANIES IN KENYA**

BY

NZOMO SAMUEL

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DECLARATION

This project is my original work and has not been presented for a degree award in the university. No part of this research should be reproduced without my consent or that of the University of Nairobi.

Student

Signed..... Date:.....

Nzomo S.M

Supervisor

This project paper has been presented for examination with my approval as University Supervisor

Signed..... Date.....

Dr. Sifunjo Kisaka

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DEDICATION

I dedicate this research project to my parents Mr. Nicholus N. King'oku and Mrs. Rachael Nzomo for their financial, spiritual and moral support. Sincere gratitude also goes to my fiancé Kambua for her endless support.

ABSTRACT

Currently, most organizations continue to increase spending on information system and their budgets continue to rise. Moreover, economic conditions and competition create pressures about costs of information. Generally, information system is developed using information technology to aid an individual in performing their job. Therefore, most organizations focus on developing information system in order to support decision system, communication, knowledge management, as well as many others. The key part of information system needed for decision making in organization is accounting information system.

Management in the automobile organizations in Kenya relies heavily on information generated from the AIS employed by the company. Quality reports are very key to arrive at an ideal investment. Traditional way of recording, summarizing and reporting company financial reports led to less optimal decisions. Investment in good and reliable accounting systems has become a major concern for all managers as it leads to better management and analysis of firm's performance. This has led the researcher to investigate on the application and use of accounting systems by automakers and thus, its impact on the organizational effectiveness.

The study is of key importance to the selected automobile companies as well as other firms in the same sector in terms of determining the benefits accruing due to the integration of accounting information systems in their operations. This enabled automotive firms in gauging the model in terms of enhancing organizational effectiveness. The study is useful to other researchers interested in the problem under investigation as the study has laid a platform on which further studies related to the subject can be undertaken.

The design of the study is descriptive research method. In addition both qualitative and quantitative methods were applied in data collection and analysis. The descriptive design is found to be suitable because it addresses major objectives and research questions proposed in the study adequately. The study gathered both primary and secondary data. Primary data was obtained through interviews and questionnaires to randomly selected employees from the selected companies. The use of interviews was ideal since it guaranteed confidentiality to the

respondents thus they acted without any fear or embarrassment. Primary data was collected using interviews conducted one on one with the researcher and questionnaires were circulated and filled by the respondents. Secondary data included censuses, organizational records and data collected through qualitative methodologies or qualitative research.

The findings of this study indicate that Accounting Information Systems are an important mechanism for organizations' effective management, decision-making and controlling activities. The results are consistent with empirical reviews which indicated that there exist a relationship between AIS and organizational performance. AIS are an effective decision-making tool for controlling and coordinating the activities of an organization. The study concluded that AIS are critical to the production of quality accounting information on a timely basis and the communication of that information to the decision makers. In other words, empirical findings indicated that accounting information systems have a greater impact on the organizational effectiveness of automobile companies in Kenya.

LIST OF ABBREVIATIONS

AIS	-	Accounting Information System
MAIS	-	Management Accounting Information Systems
CMC	-	Cooper Motors Cooperation
CRM	-	Customer Relationship Management Software
ERP	-	Enterprise Resource Planning
GM	-	General Motors
ICT	-	Information and Communications Technology
IT	-	Information Technology
XML	-	Extensible Markup Language

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The Automotive industry in Kenya is primarily involved in the retail and distribution of motor vehicles. There are a number of motor vehicle dealers operating in the country, with the most established being Toyota (East Africa), Cooper Motor Corporation, General Motors, Simba Colt and DT Dobie. There are also three vehicle assembly plants in the country, which concentrate on the assembly of pick-ups and heavy commercial vehicles.

The established dealers face intense competition from imported second-hand vehicles, mainly from Japan and United Arab Emirates. These imports now account for about 70% of the market. The last decade witnessed a significant decline in the number of new vehicles sold in the country. There has been a steady recovery in the last four years, but the numbers achieved still fall far short of the numbers recorded a decade ago. In 2004, the leading motor vehicle companies recorded sales of 9,979 units. Although 27% better than the previous year, this is still well below the levels achieved in the early 1990's. The slump in the volume of new cars sold is attributable to the increased competition from second hand vehicles and the depressed economy.

The Kenya Motor Industry Association (KMI), the representative body of the corporate participants in the motor industry, has been lobbying hard to reverse this trend. Some of these measures have helped the industry recover from its lowest point in 2000, when only 5,869 units were sold. On their part, the companies themselves have become more innovative in responding to customer needs. Some of the measures that KMI has been advocating include: Implementation of strict criteria on importation of second hand vehicles, Incentives to promote local assembling of commercial vehicles & Export incentives aimed at encouraging car manufacturers to expand operations in the region.

Pressures in the highly competitive automotive manufacturing sector increase and over-capacity, particularly in vehicle assembly, mean that most suppliers face unrelenting price pressure. The rapid development of the low-cost labor economies in Eastern Europe, South East Asia, China

and India is putting enormous pressures on labor intensive suppliers. The drive for lower costs and a technical edge are therefore vital for survival.

<http://www.pwc.com/ke/en/industries/automotive.jhtml>

1.1.1 Accounting Information Systems

Accounting Information Systems (AIS) are a tool which, when incorporated into the field of Information and Technology systems, are designed to help in the management and control of topics related to organization's economic-financial area. But the stunning advance in technology has opened up the possibility of generating and using accounting information from a strategic viewpoint (El Louadi, 1998). Accounting Information System (AIS) is vital to all organizations (Borthick and Clark, 1990; Curtis, 1995; Rahman et al., 1988; Wilkinson, 1993; Wilkinson et al., 2000) and perhaps, each organization either profit or non profit-oriented need to maintain the AISs (Wilkinson, 2000: 3-4). On the other hand, an AIS is the whole of the related components that are put together to collect information, raw data or ordinary data and transform them into financial data for the purpose of reporting them to decision makers (LI, M., YE, L.R. 1999). To better understand the term 'Accounting Information System', the three words constitute AIS would be elaborated separately. Firstly, literature documented that accounting could be identified into three components, namely information system, "language of business" and source of financial information (Wilkinson, 1993: 6-7). Secondly, information is a valuable data processing that provides a basis for making decisions, taking action and fulfilling legal obligation. Finally, system is an integrated entity, where the framework is focused on a set of objectives (Watts, 1999).

Accounting literature argues that strategic success is considered an outcome of Accounting Information Systems (AIS) design (Langfield-Smith, 1997). Several, studies have analyzed the impact of AIS in strategic management, examining the attributes of AIS under different strategic priorities (Ittner and Larcker, 1997; Bouwens and Abernethy, 2000). It has also been analyzing the effect on performance of the interaction between certain types of strategies and different design of AIS (e.g. different techniques and information). The appropriate design of AIS supports business strategies in ways that increasing the organizational performance (Chenhall, 2003). Increasing AIS investment will be the leverage for achieving a stronger, more flexible

corporate culture to face persistent changes in the environment. Innovation is the incentive with which a virtuous circle will be put in place, leading to better firm performance and a reduction in the financial and organizational obstacles, while making it possible to access capital markets. AIS are systems used to record the financial transactions of a business or organization. AIS combines the methodologies, controls and accounting techniques with the technology of the IT industry to track transactions, provide internal reporting data, external reporting data, financial statements, and trend analysis capabilities to affect on organizational performance (GUL, F.A. 1991).

In managing an organization and implementing an internal control system the impact of accounting information system (AIS) is crucial. An important question in the field of accounting and management decision-making concerns the fit of AIS with organizational requirements for information communication and control (Nicolaou, 2000). Benefits of accounting information system can be evaluated by its impacts on improvement of decision-making process, quality of accounting information, performance evaluation, internal controls and facilitating company's transactions (Bolon, 1998).

1.1.2 Organizational Effectiveness

Organizational effectiveness is the concept of how effective an organization is in achieving its goals. Every employee in a company contributes to organizational effectiveness. Taking into account skills, experience, motivation and rank, some employees play a bigger role than others. These are the people who contribute to the development of organization mainly with their knowledge (Scott, 1977).

Organizational effectiveness was succinctly defined by Daft (1983) as “the degree to which an organization realized its goals”. However, Mondy, (1990) defined it aptly as “the degree to which an organization produce the intended output” As Daft rightly argued. Organizations pursue multiple goals, and such goals must be achieved in the face of competition limited resources, and disagreement among interest groups. Oguntimehin (2001) submitted that organizational effectiveness is the ability to produce desire results.

There are many ways to measure the effectiveness of an organization, which include different criteria such as productivity, profits, growth, turnover, stability and cohesion. Rational perspectives focus on the achievement of previously set goals and on output variables such as quality, productivity and efficiency. Natural system perspectives focus on the support goals of the organization such as employee satisfaction, morale and interpersonal skills. Open system perspectives focus on the exchanges with the environment; this includes information processing, profitability, flexibility and adaptability (Campbell, 1977).

1.1.3 Relationship between Accounting Information Systems and Organizational Effectiveness

Ponemon and Nagida (1990) assert that the main reason for which accounting information is generated is to facilitate decision making. However, for financial reporting to be effective, among other requirements, it is relevant, complete and reliable. These qualitative characteristics require that the information must not be unfair nor has predisposition of favoring one party over the others. Accounting information should give a decision maker the capacity to predict future actions. It should also increase the knowledge of the users to identify similarities and differences in two type of information (Bolon, 1998). Therefore, reliable accounting information can be described as an essential pre-requisite for stock market growth. Based on the “engine of economic growth” potential of the stock market, developed nations do not toy with their Stock Markets and relevance of financial reporting.

Hunton, (2002) study, which investigated the relationship between automated accounting information system and organizational effectiveness; showed that there was strong relationship between accounting information system and organizational effectiveness, which means access to accounting information will lead to organizational effectiveness. Several recent studies on value of accounting information for equity valuation, share price and earnings prediction have queried current financial reporting model in the developed world. The same issue can be raised in Nigeria about the value relevance of accounting numbers to investors. This assists the researcher to determine whether the result agrees or digresses from the previous studies.

In managing an organization and implementing an internal control system the role of accounting information system (AIS) is crucial. An important question in the field of accounting and

management decision-making concerns the fit of AIS with organizational requirements for information communication and control. Although the information generated from an accounting information system can be effective in decision-making process, purchase, installation and usage of such a system are beneficial when the benefits exceed its costs. Huber, (1990) agrees that automated accounting information system aids decision making for management of organizations. Benefits of accounting information system can be evaluated by its impacts on improvement of decision- making process, quality of accounting information, performance evaluation, internal controls and facilitating company's transactions. Regarding the above five characteristics, the effectiveness of AIS is highly important for all the firms.

1.2 Research Problem

Currently, most organizations continue to increase spending on information system and their budgets continue to rise. Moreover, economic conditions and competition create pressures about costs of information. Generally, information system is developed using information technology to aid an individual in performing their job. Therefore, most organizations focus on developing information system in order to support decision system, communication, knowledge management, as well as many others. The key part of information system needed for decision making in organization is accounting information system.

Today, information technology and an increasingly transparent financial sector have become key driving forces in business operations, strategies, structures, ownership, and performance. These forces cut across many industries to force changes that, in turn, have had significant economic and social impacts on the organizational effectiveness (Doms, Jarmin and Klimek, 2004). Structurally, the emerging information technology industry is uncharacteristic of typical traditional processes which has gradually grown out of the need to increase efficiency and cut on operations costs in the industry. The ability of automobile firms to achieve competitive advantage is predicated, in part, on their capacity to develop efficient, internalized accounting information systems to provide market coordination and linkages between their operations and global commodity and financial markets (Curtis, 1995).

Accounting Information Systems (AIS) is an important topic for managers and researchers alike. However, there is evidence of a gap between FIS research and practice. Huber (1990) on

accounting information systems and management decision- making opines that in managing an organization and implementing an internal control system the role of accounting information system (AIS) is crucial. He questioned the fit of AIS with organizational requirements for information communication and control and concluded that although the information generated from an accounting information system can be effective in decision-making process, purchase and installation, the usage of such a system are beneficial when the benefits exceed its costs.

Hunton, (2002) investigated the relationship between automated accounting information system and organizational effectiveness. He showed that there was strong relationship between accounting information system and organizational effectiveness. To compare Accounting Information System Chang, Y. W. (2001) studied the nexus between organizational strategies and performance. They found out that organizations systematically vary the AIS design to support their chosen strategy, recognizing that AIS have the potential to facilitate strategy management and enhance organizational performance (Chang, 2001).

Management in the automobile organizations in Kenya relies heavily on information generated from the AIS employed by the company. Quality reports are very key to arrive at an ideal investment. Traditional way of recording, summarizing and reporting company financial reports led to less optimal decisions. Investment in good and reliable accounting systems has become a major concern for all managers as it leads to better management and analysis of firm's performance. This has led the researcher to investigate on the application and use of accounting systems by automakers and thus, its impact on the organizational effectiveness (Author, 2013).

This current study examines in detail two possible explanations for the gap. First, is the deficiency in transfer of academic knowledge on accounting information systems to practice and secondly, the insufficient use of the accounting information systems. It will examine the use and logic of transformation of AIS in the automotive industry. This study departs somewhat from the above practice of focusing on the ways in which specific information technologies affect the operation of organizations but specifically focus on the impact of Accounting Information Systems on the effectiveness of the Kenyan Automobile Industry. How does accounting information system contribute to the effectiveness of the automobile industry in Kenya?

1.3 Objective of the Study

The objective of this study is to determine the impact of accounting information systems on the effectiveness of automobile companies in Kenya.

1.4 Importance of the Study

The study is of key importance to the selected automobile companies as well as other firms in the same sector in terms of determining the benefits accruing due to the integration of accounting information systems in their operations. This enabled automotive firms in gauging the model in terms of enhancing organizational effectiveness. The study is useful to other researchers interested in the problem under investigation as the study has laid a platform on which further studies related to the subject can be undertaken.

The study would provide a theoretical basis about accounting information system successful adoption dimension to firms. It would provide practical guidance for accounting information systems implementation in small and medium business and it would also provide empirical and practical contributions for organization in effectively applying accounting information system in their operations.

Accounting information systems provide information about the financial resources, obligations, and activities of an enterprise that is intended for use primarily by external decision makers – investors and creditors. This study provides useful information in making investment and credit decisions.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter explains past relevant literature from other researchers who have conducted research in the same field. It contains opinions, attributes, research outcomes and conclusions thereon from previous research work done by other people and organizations. Section 2.2 discusses the theoretical literature. Section 2.3 presents the empirical literature. Section 2.4 looks at the local studies of the case study and section 2.5 summarizes the literature review.

2.1 Theoretical Literature

2.1.1 Contingency Theory

Contingency theory suggests that an accounting information system should be designed in a flexible manner so as to consider the environment and organizational structure confronting an organization. Accounting information systems also need to be adapting to the specific decisions being considered. In other words, accounting information systems need to be designed within an adaptive framework.

The first paper to specifically focus on the contingency view of accounting information systems in the accounting literature was "A Contingency Framework for the Design of Accounting Information Systems,"(Gordon & Miller, 1976). This paper laid out the basic framework for considering accounting information systems from a contingency perspective.

Gordon & Narayanan (1984) concluded that environmental uncertainty is a fundamental driver for designing management accounting systems among successful organizations. A key finding in this study was that, as decision makers perceive greater environmental uncertainty, they tend to seek more external, nonfinancial and ex ante information in addition to internal, financial and ex post information. This latter finding has been confirmed by several studies that followed the Gordon and Narayanan paper.

Although extensively studied in the last two decades, contingency theory has been given relatively little consideration in terms of the factors that influence the accounting information systems. Few organizations appear to have systematic processes in place for managing the evolution of their measurement systems and few researchers appear to have explored two of the main questions: What are the requirements of accounting information in automobile companies? And, how efficient is the accounting systems in automobile companies? The paper addresses these questions by providing empirical evidence of management accounting information contingencies based on a sample of selected automobile companies in Kenya.

2.1.2 Agency Theory

Agency theory has been one of the most important theoretical paradigms in accounting during the last 20 years. The primary feature of agency theory that has made it attractive to accounting researchers is that it allows us to explicitly incorporate conflicts of interest, incentive problems, and mechanisms for controlling incentive problems into our models. This is important because much of the motivation for accounting and auditing has to do with the control of incentive problems, (Kaplan and Norton, 1993).

It is generally assumed that the principal is risk-neutral and the agent is risk- and effort averse. The principal and agent are assumed to be motivated by self-interest, often leading to conflicting objectives. Compensation contracts bring these conflicting objectives into equilibrium (David, Julie Smith; et al 1999). The sharing rule that determines the allocation of outcome between the principal and the agent is called a contract, whether it is written or not. Thus, agency theory provides a vehicle for formal, direct analysis of the economic elements of incentive compensation contracts based on effort levels or surrogates of effort levels.

In conclusion agency theory is used in this research to address two questions; how do features of information, accounting, and compensation systems affect (reduce or make worse) incentive problems? and how does the existence of incentive problems affect the design and structure of accounting information systems? Agency theory provides a framework for addressing these issues and rigorously examining the link between accounting information systems, incentives, and behavior.

2.1.3 Behavioral Theory

Early behavioral theory accounting research explored bivariate relations between control system characteristics (for example; reliance on accounting performance measures or budget participation) and various criterion variables (e.g., performance or dysfunctional behavior). Behavioral theory accounting research evolved rather quickly, however, to more complex contingency models of the organization with a richer view of the organization and of individual behavior. The fundamental premise of contingency theory research has been that organizational structure and control system design is related to organizational context. Thus, the effects of control system characteristics are moderated by contextual factors which impact the individual and the organization, (Kren and Liao, 1988).

Specific characteristics of the control system must be matched to the contextual variables that define the organization's environment. The (often implicit) assumption is that a better match is positively related to organizational performance (Kren and Liao 1988; Merchant and Simons 1986; Otley 1980). Understanding control system design and effectiveness, in general, begins with analyses of the characteristics of specific organizations and their environments and this forms the basis of the researcher.

2.2 Determining Criteria of Effectiveness

There are many ways to measure the effectiveness of an organization. Campbell (1977) lists over 30 different criteria from productivity, profits, growth, turnover, stability and cohesion (Scott W.R 1977). Different theoretical perspectives can account for the diversity in usage of effectiveness measurements.

Rational perspectives emphasize goal attainment and focus on output variables such as quality, productivity, and efficiency. Natural system perspectives focus on the support goals of the organization such as participant satisfaction, morale, interpersonal skills, etc. Open system perspectives focus on the exchanges with the environment -- this includes information processing, profitability, flexibility, adaptability (Downs,1957).

Effectiveness criteria also vary with time, and often subgroups have different effectiveness

criteria. Also often there are different evaluation criteria applied by those who assign tasks and those who evaluate performance (Scott p. 346). Often effectiveness criteria involve self-interest, are stated as universalistic and objective, and cause conflict and disagreement among subgroups.

2.3 Empirical Literature

2.3.1 AIS and Organizational Effectiveness

The AIS design can be defined in terms of the information characteristics that it provides (Chenhall and Morris, 1986; Gul, 1991). Chenhall and Morris (1986) described AIS according to the perceived usefulness of four information attributes, namely scope, timeliness, level of aggregation, and integration. Scope refers to the measures being used and to the extension of AIS in time and space. Then information could focus on future vs. historical events or external vs. internal events. Also the information could be quantified in monetary or non-monetary terms. Timeliness refers to the frequency, speed of reporting and the orientation of the information (e.g. short or long run). Aggregation refers to the way data is aggregated in time periods, functions or in accordance with decision models. Finally, integration refers to the need of providing information to reflect the interaction and coordination effects of several functions in the organization. These four attributes have been analyzed for comparing AIS and organizational strategies and performance (Gordon & Miller, 1976). Only recently have studies begun to examine whether organizations systematically vary the AIS design to support their chosen strategy, recognizing that AIS have the potential to facilitate strategy management and enhance organizational performance (Gordon & Miller, 1976).

Hunton (2002) study, which investigated the relationship between automated accounting information system and organizational effectiveness; showed that there was strong relationship between accounting information system and organizational effectiveness, which means access to accounting information will lead to organizational effectiveness. Several recent studies on value of accounting information for equity valuation, share price and earnings prediction have queried current financial reporting model in the developed world. The same issue can be raised in Kenya about the value relevance of accounting numbers to investors. This assists the researcher to determine whether the result agrees or digresses from the previous studies.

Chenhall (2003) asserted that AIS plays a proactive role in the strategy management, acting as a mechanism that enables organizational strategy. Strategy has been examined using different typologies, such as Porter (1985) or Miles and Snow (1978). The latter has been extensively used in management literature (Ponemon & Nagoda, 1990). In the present study it is assumed that the organizational performance is a function of the financial performance, performance management and the AIS. Fitness will exist in the combination of strategy and AIS that contribute to financial performance.

Appropriate review between designing of AIS and performance of commercial units by analyzing strategies explains that high performance of commercial units depends on a wide range of accounting information systems (Boulianne, 2007). So many studies begun to examine whether organizations systematically vary the AIS design to support their chosen strategy, recognizing that AIS have the potential to facilitate strategy management and enhance organizational performance (Gordon & Miller, 1976).

Accounting information systems is an important mechanism of an organization that is vital for effective management decision-making in controlling organization (Zimmerman, 1995). Generally, AIS is classified in two categories: a: effective decision-making for information that is largely for control of organization and b: to facilitate information that is mainly used for coordination of organization in decision-making are used (Kern, 1992). Effectiveness of AIS to increase system integration is to improve internal communications throughout the organization (Huber, 1990). Top management team with various planning and management information system influences on strategic performance (Huber, 1990).

2.3.2 Internal Controls

Internal controls encompass a set of rules, policies, and procedures an organization implements to provide reasonable assurance that; its financial reports are reliable, its operations are effective and efficient, and its activities comply with applicable laws and regulations.

In managing an organization and implementing an internal control system the role of accounting information system (AIS) is crucial. An important question in the field of accounting and management decision-making concerns the fit of AIS with organizational requirements for

information communication and control. Although the information generated from an accounting information system can be effective in decision-making process, purchase, installation and usage of such a system are beneficial when the benefits exceed its costs. Huber, (1990) agrees that automated AIS aids decision making for management of organizations.

Existing literature offers scant evidence of the relationship between AIS and Management Accounting Information Systems (MAIS). AIS are considered as important organizational mechanisms that are critical for effectiveness of decision management and control in organizations (Oguntimehin, 2001). Accounting Information System (AIS) as one of the most critical systems in the organization has also changed its way of capturing, processing, storing and distributing information. Nowadays, more and more digital and on-line information is utilized in the accounting information systems (Oguntimehin, 2001).

Management is engaged with different types of activities which require good quality and reliable information. Quality information is one of the competitive advantages for an organization. In an accounting information system, the quality of the information provided is imperative to the success of the systems (Mondy, 1990). Quality of information generated from AIS is very important for management (Mondy, 1990). Business organizations often use accounting information systems to provide support for management decisions. Support usually includes financial analysis from company accountants. Analysis is often taken for the company's accounting information system. Using business technology, this system can process copious amounts of documents electronically for owners and managers (Mondy, 1990).

Management compares information about current performance to budgets, forecasts, prior periods, or other benchmarks to measure the extent to which goals and objectives are being achieved and to identify unexpected results or unusual conditions that require follow-up. In the same way that managers are primarily responsible for identifying the financial and compliance risks for their operations, they also have line responsibility for designing, implementing and monitoring their internal control system. Internal controls typically center around the company's accounting information system, which is the primary function for moving financial information through a company. Therefore, internal controls help managers to monitor and measure the effectiveness of their accounting operations on performance (Ponemon & Nagoda, 1990).

Performance management has a key role to play in improving the overall value of an organization (Armstrong and Baron, 1998). Accounting systems are often the most important formal sources of information in industrial organizations. They are designed to provide all levels of management with timely and reasonably accurate information to effect on performance management and help them make decisions which are in agreement with their organization's goals (Anthony G, 2006). Organizational performance is one of the most important constructs in management research (Ponemon & Nagoda, 1990).

Hitt, Hoskisson, Johnson, and Moesel (1996) argued that there are two types of major internal controls associated with the management of large firms, particularly diversified firms, which have an important effect on firm innovation, these are; strategic controls and financial controls. Strategic controls entail the use of long-term and strategically relevant criteria for the evaluation of business-level managers' actions and performance. Strategic controls emphasize largely subjective and sometimes intuitive \criteria for evaluation (Gupta, 1987). The use of strategic controls requires that corporate managers have a deep understanding of business-level operations and markets. Such controls also require a rich information exchange between corporate and divisional managers (Hoskisson, Hitt, & Ireland, 1994).

Thus, the relationship between AIS and organizational performance would be moderated by the strength of internal controls. According to the previous argument we analyze the contingency fit between AIS, management performance and organizational effectiveness using accounting data, decision making and internal control process.

Salih (1983) evaluated the internal controls of Ethiopian Airlines, Nairobi branch office and concluded that lack of segregation of accounting and custodian functions was the greatest weakness of the Branch office. He argued that there is need to centralize cash receipts, establish an internal audit, separate duties of purchase activities, establish perpetually inventory system for tickets.

2.3.3 Human Resources

Due to the novelty of this subject the researchers found few studies regarding the impact of human resources on the accounting information systems of firms. Also it should be noted that

almost all the studies found addressed the subject of the impact of human resources on the AIS in a general way.

Flamholtz, Kannan-Narasimhan & Bullen (2004) indicates that Skillful and specialized human resources are of vital importance for an organization just like its physical properties and investments. Managers of the organizations spend a lot of money for training and educating their workers and employees in order to increase the efficiency of the organization under their control, but human resources accounting system which should be used for human resources information processing have not been used practically by any organization in Iran. The paper explored firstly, on whether investment decisions in AIS are affected by human resources. Secondly, it explored as to what factors can interfere in this effect? Thirdly, it examined which evaluation method of human resource is the most appropriate method consistent with Iranian companies in terms of qualitative characteristics of accounting information? The results indicate that human resources are of vital importance for an organization and affect on the optimal investment decisions in AIS and AIS implementation.

Pekin Ogan, (1988), the purpose of this study was to report the results of a field experiment designed to assess the impact of human resource on investment decisions made by managers. The study was a partial replication and extension of studies by Tomassini and Oliver and Flamholtz. The findings of this study are similar to the earlier studies; human resource does make a difference in managers' investment decisions and enables managers to increase their level of confidence regarding decisions of this sort. Bo Hansson (1997), this study examines the pricing of knowledge-based firms compared with firms that are less dependent on human resources. The results show that an increasing dependence on human resources is followed by a rise in organizational performance hence high returns. The findings suggest that investors may need accounting information on human resources to help improve investment decisions.

Daft (1983) this paper comprehensively examined the linkages between AIS and human resources. Results based on a national sample of nearly one thousand firms indicate that human resources have an economically and statistically significant impact on both intermediate outcomes (turnover and productivity) and short- and long-term measures of corporate financial

performance. Support for the predictions that the impact of human resources is in part contingent on their interrelationships and links with competitive strategy was limited.

2.4 Review of Local Studies

Mawanda (2008) the study investigated and sought to establish the relationship between internal control systems and financial performance in an Institution of higher learning in Uganda. Internal controls were looked at from the perspective of Control Environment, Internal Audit and Control Activities whereas Financial performance focused on Liquidity, Accountability and Reporting as the measures of Financial performance. The Researcher set out to establish the causes of persistent poor financial performance from the perspective of internal controls.

The research was conducted using both quantitative and qualitative approaches using Survey, Correlation and Case study as Research Designs. Data was collected using Questionnaires and Interview guide as well as review of available documents and records targeting basically Deans, Associate Deans, Heads of Departments, Management Committee members and Finance and Accounts staff as respondents from a population of 270 Uganda Martyrs University staff. Data was analyzed using the Statistical Package for Social Scientists where conclusions were drawn from tables, figures from the Package (Mawanda, 2008).

The Study therefore concludes that internal control systems do function although with hiccups and that there is a significant relationship between internal control systems and financial performance in an Institution of higher learning. However, the study also found out that there is lack of information sharing and inadequate security measures to safeguard the assets of the University (Mawanda, 2008).

Ismailjee (1993) evaluated the internal controls of the Nyayo Bus Service Corporation, Nairobi. Internal controls were looked at from the perspective of control activities; the cash receipts and the cash disbursements. A descriptive study (survey) design was adopted in conducting this study. Descriptive research is a process of collecting data in order to test hypotheses or to answer questions concerning the current status of the subjects in the study. Descriptive research determines and reports the way things are. This design proved useful as respondents were given

time to respond without any interference and manipulation hence information was generally obtained much faster.

Ismailjee (1993) concluded that the analysis conducted on the cash receipts as well as the cash disbursements and the purchase cycle areas bore fairly strong controls. He attributed this largely to the fact that the government accounting system was still in operation in those areas. He however found weakness in the organization chart, payroll and the stores accounting system.

Rono (2006) studied on the effectiveness of the internal control system in the management of finances in public universities in Kenya. The study sought to determine whether there was a significant difference in the evaluation of the effectiveness of the internal control system in the financial management between the academic and non-academic departments in Egerton University. It concluded that the evaluation of the effectiveness of the internal control systems in the university depended on the category of the departments. The research revealed that the internal control systems in Egerton University were effective due to the well established departments charged with the responsibility of implementing the internal controls as they carry out the financial processes for example, finance, supplies and personnel departments with their various sections like cash office, salaries, computer, debtors and creditors.

2.5 Summary

Accounting information systems are critical to the production of quality accounting information on a timely basis and the communication of that information to the decision makers. While there are different types of AIS's they all have one common characteristic – to meet the organizations' needs of accounting information as efficiently as possible (Author, 2013).

Existing literature offers evidence of the relationship between these AIS and organizational effectiveness; though it is important to highlight that an in-depth study is required to examine other factors that may influence this relationship. The information value generated by AIS to shareholders and stakeholders in making investment decisions is invaluable. Financial managers need the financial and accounting data provided by AIS to evaluate the firm's past performance and to map future plans (Author, 2013).

Even though past researches state that a greater effort in using AIS corresponds to better financial and economic results; in line with the contingency theory, the researcher is aware that in the results obtained other complementary variables are combined as an alignment with organizational performance and company's long-term strategy. In other words, a well-defined strategy in favor of investing in AIS and favoring their use needs a management support in the controls and a well trained human resources accompany it, even if in the short- term allocating resources to AIS may lessen performance and this factor in times of crisis may act as an entry barrier for making investments in this type of technology. Consequently, it is necessary to analyze the relationship between investments in AIS and certain changes in firms' productive organization (Author, 2013).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out research approach used in achieving at the study's objectives. It sets out the method used in selecting respondents, collecting data and analyzing the same. The chapter is thus structured into sections; Section 3.2 analyses the research design, 3.3 present's the target population and the sampling design, 3.4 are the data collection instruments and data collection procedures and section 3.5 data analysis entailing the conceptual and analytical models.

3.2 Research Design

A research design encompasses the methodology and procedures employed to conduct scientific research. The design of a study defines the study type. The researcher employed a case study approach which allows for intensive observations and investigation of salient factors in the units of study (Kothari, 1990). On the whole, this research design facilitates a better understanding of the impact of accounting information systems towards organizational effectiveness.

The design of the study is descriptive research method. In addition both qualitative and quantitative methods were applied in data collection and analysis. The descriptive design is found to be suitable because it addresses major objectives and research questions proposed in the study adequately.

3.3 Population and Sample

The target population for this study was the 5 major established motor vehicle dealers in Kenya. A sample size of 75% was used. Probability sampling scheme was employed where every unit in the sampling frame has a chance (greater than zero) of being selected. This probability can be accurately determined through self weighting by the researcher. Simple random sampling was used, it gives equal chance to all subsets in the population and estimates are easy to calculate.

3.4 Data Collection

The study gathered primary data. Primary data was obtained through questionnaires to randomly selected employees from the selected companies. The use of questionnaires was ideal since it guaranteed confidentiality to the respondents thus they acted without any fear or embarrassment. Questionnaires were circulated and filled by the respondents.

Primary data enhances reliability since it's conducted by the investigator conducting the research. Respondents were selected randomly in each stratum; hence the researcher employed probability sampling technique to obtain the desired number of respondents (Mugenda, 2003).

3.4.1 Reliability and Validity of Data

The reliability was ensured by testing the instruments for the reliability of values (Alpha values) as recommended by Cronbatch, (1946). Cronbatch recommends analysis for Alpha values for each variable under study. According to Sekaran 2001 Alpha values for each variable under study should not be less than 0.6 for the statements in the Instruments to be deemed reliable. Consequently, all the statements under each variable were subjected to this test and proven to be above 0.6. A measure is reliable when it is error free and consistent across time and across various items in the instrument.

The validity of the data collection instruments was done with the help of an Expert (the Researcher's Supervisor) to edit the questionnaire and the interview guide. The researcher forwarded the structured questionnaire and the interview guide to supervisor who is an expert in the area covered by the research for editing and reviewing.

3.5 Data Analysis

After data collection, questions were coded and entered into Statistical Package for Social Sciences (SPSS version 17) then analysis run. Data was analyzed using descriptive statistics for quantitative data and content analysis for the qualitative data. Descriptive statistics involve the use of frequencies, percentage, mean and standard deviation. Quantitative data was presented in tables, bar graphs and pie chart, while explanations to the same were presented in prose (Mugenda & Mugenda, 1999).

3.5.1 Conceptual Model

The independent variable for this study is accounting information systems which are enforced by the human resources and enhanced by internal controls while organizational effectiveness is the dependent variable. The relationship between the dependent variable and the independent variables has been expressed using the function below.

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

Where;

Y = Organizational Effectiveness

X1 = Accounting Information Systems

Organizational effectiveness was measured by;

- Percentage increase in profits, revenue growth & growth in market share

Accounting Information systems was measured based on the following dimensions;

System quality, Information quality, Service quality, System use, User satisfaction and Net benefits.

Specific measures of each dimension;

System quality – the desirable characteristics of an information system. For example: ease of use, system flexibility, system reliability, and ease of learning, as well as system features of intuitiveness, sophistication, flexibility, and response times.

Information quality – the desirable characteristics of the system outputs; that is, management reports and Web pages. For example: relevance, understandability, accuracy, conciseness, completeness, understandability, currency, timeliness, and usability.

Service quality – the quality of the support that system users receive from the IS department and IT support personnel. For example: responsiveness, accuracy, reliability, technical competence, and empathy of the personnel staff. SERVQUAL, adapted from the field of marketing, is a popular instrument for measuring IS service quality (Pitt et al., 1995).

System use – the degree and manner in which staff and customers utilize the capabilities of an information system. For example: amount of use, frequency of use, nature of use, appropriateness of use, extent of use, and purpose of use.

User satisfaction – users’ level of satisfaction with reports, Web sites, and support services. For example, the most widely used multi-attribute instrument for measuring user information satisfaction can be found in Ives et al. (1983).

Net benefits – the extent to which AIS are contributing to the success of individuals, groups, organizations, industries, and nations. For example: improved decision-making, improved productivity, increased sales, cost reductions, improved profits, market efficiency, consumer welfare, creation of jobs, and economic development.

3.5.2 Analytical Model

The algebraic expression of the regression model takes the following form

$$Y = a + \beta_1 X_1 + \varepsilon_t \dots\dots\dots (2)$$

Where;

Y = the dependent variable

a = a constant

β_1 = the slope of the regression

X_1 = the independent variable

ε_t = Model error

The statistical significance of the relationships between the dependent and the independent variables was measured at a confidence interval of 95%. Analysis of variance between the independent variables and dependent variables was measured at a significant level of 0.05. If the P value of the model is less than the level of significance (0.05) then the independent variables would be taken as having an impact of the dependent variable. If the efficiency of accounting information systems increases, then organizational efficiency would increase. The study would conclude that accounting information systems have a significant impact on organizational effectiveness. If the p – value is greater than 0.05 then the model is insignificant and therefore the study cannot conclude that the independent variables have got a significant impact on the dependent variable.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter involves data analysis, results & discussions of findings. It is thus structured into several sections; Section 4.2 involves summary of the statistics, section 4.3 analysis the empirical model, section 4.4 involves chapter discussions and section 4.5 gives a conclusion on the chapter.

4.2 Summary Statistics

4.2.1 Response Rate

Questionnaires were administered to 54 respondents and 48 respondents returned the questionnaires. This translates to a response rate of 88.9%. The high response rate was attributed to the fact that most of the questions were semi-structured making it easy for the respondents to fill in the questionnaires. Furthermore, the questionnaires were delivered and collected by hand and hence there was a close contact and follow-up with the respondents. The high response rate is an indication that the results of this study are reliable.

4.2.2 Trading name of the respondent's company

Table 4.1 Information on trading name of the respondent's company

Trade Name	Frequency	Percent
Toyota Kenya Ltd	9	18.8
CMC Kenya Ltd	8	16.7
GM Kenya Ltd	9	18.8
Simba Colt Motors Ltd	10	20.8
Bavaria Auto Ltd	12	25.0
Total	48	100.0

Source: Researcher, 2013.

The researcher sought information on the respondents company in order to find out whether there were deviations from the sample. There were no significant deviations noted and hence the responses are a representation of the population. This enhances the reliability of the study findings. The information on the respondents company is summarized in Table 4.1.

4.2.3 The legal status of the respondent's firm

All the respondents from Toyota Kenya Ltd, GM Kenya Ltd, Simba Colt Motors Ltd and Bavaria Auto Ltd indicated that their companies were private limited companies while all the respondents from CMC Kenya Ltd indicated that their company was a public limited company. The information on the firm's legal status is summarized in Table 4.2.

Table 4.2 Information on the legal status of the respondent's firm

Trade Name	Firm's Legal Status	
	Public Ltd Company	Private Ltd Company
Toyota Kenya Ltd	0	9
CMC Kenya Ltd	8	0
GM Kenya Ltd	0	9
Simba Colt Motors Ltd	0	10
Bavaria Auto Ltd	0	12
Total – Count	8	40
Total – %	16.7%	83.3%

Source: Researcher, 2013.

4.2.4 The respondent's years of service

Table 4.3 below shows that majority of the respondents have worked for their company for more than five years. Only 22.9% of the respondents have worked for their company for a period not exceeding five years. This is an indication that most of the respondents have a thorough understanding of their company. Therefore, any information obtained from them would be reliable.

Table 4.3 Information on the respondent's years of service

Trade Name	Years of Service			
	Up to 5 Years	6 - 10 Years	11 - 15 Years	Over 15 Years
Toyota Kenya Ltd	0	4	3	2
CMC Kenya Ltd	3	2	1	2
GM Kenya Ltd	3	2	3	1
Simba Colt Motors Ltd	1	3	2	4
Bavaria Auto Ltd	4	5	3	0
Total – Count	11	16	12	9
Total – %	22.9%	33.3%	25.0%	18.8%

Source: Researcher, 2013.

4.2.5 The gender of the respondents

60.4% of the respondents were male while 39.6% were female. This implies that there was no gender biasness. The information on the gender of respondents is summarized in Table 4.4.

Table 4.4 Information on the gender of the respondents

Trade Name	Gender	
	Male	Female
Toyota Kenya Ltd	5	4
CMC Kenya Ltd	7	1
GM Kenya Ltd	4	5
Simba Colt Motors Ltd	6	4
Bavaria Auto Ltd	7	5
Total – Count	29	19
Total – %	60.4%	39.6%

Source: Researcher, 2013.

4.2.6 The respondent's department

Table 4.5 shows that 37.5%, 31.3% and 27.1% of the respondents were from Finance & Administration department, Sales & Marketing department and ICT department respectively. 4.2% of the respondents were from other departments such as the Imports department. This shows that data was collected from all the departments and therefore the information is reliable.

Table 4.5 Information on the respondent's department

Trade Name	Department			
	Finance & Administration	ICT	Sales & Marketing	Others
Toyota Kenya Ltd	4	2	3	0
CMC Kenya Ltd	4	2	2	0
GM Kenya Ltd	3	3	3	0
Simba Colt Motors Ltd	3	3	2	2
Bavaria Auto Ltd	4	3	5	0
Total – Count	18	13	15	2
Total – %	37.5%	27.1%	31.3%	4.2%

Source: Researcher, 2013.

4.2.7 The leadership team has a clear vision and mission

Majority of the respondents agreed that their leadership team had a clear vision and mission. However, 4.2% of the respondents disagreed that their leadership team had a clear vision and mission while 2.1% were neutral. Clear vision and mission guide companies towards achieving their goals and objectives. This is an indication that companies from the automobile industry in Kenya are guided by clear visions and missions. The information on whether the leadership team had a clear vision and mission is summarized in Table 4.6.

Table 4.6 Information on whether the leadership team has a clear vision and mission

Trade Name	The leadership team has a clear vision and mission				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	0	6	3
CMC Kenya Ltd	0	0	0	6	2
GM Kenya Ltd	0	0	1	4	4
Simba Colt Motors Ltd	0	1	0	6	3
Bavaria Auto Ltd	1	0	0	5	6
Total – Count	1	1	1	27	18
Total – %	2.1%	2.1%	2.1%	56.3%	37.5%

Source: Researcher, 2013.

4.2.8 The vision is known to all

Majority of the respondents agreed that their company's vision is known to all. This shows that most of the employees in the automobile industry know their company's vision and mission which is the driving force for any company. The information on whether the vision is known to all is summarized in Table 4.7.

Table 4.7 Information on whether the vision is known to all

Trade Name	The vision is known to all				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	1	6	2
CMC Kenya Ltd	0	0	0	6	2
GM Kenya Ltd	0	0	1	3	5
Simba Colt Motors Ltd	0	0	1	6	3
Bavaria Auto Ltd	1	1	0	5	5
Total – Count	1	1	3	26	17
Total – %	2.1%	2.1%	6.3%	54.2%	35.4%

Source: Researcher, 2013.

4.2.9 Staff are involved in achieving the vision and mission

Table 4.8 shows that majority of the respondents agreed that staff are involved in achieving the vision and mission. This implies that the employees' goals and objectives are aligned to the overall goal of their company. Therefore, all the efforts are directed towards achieving a common goal.

Table 4.8 Information on whether staff is involved in achieving the vision and mission

Trade Name	Staff are involved in achieving the vision and mission			
	Disagree	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	1	1	2	5
Simba Colt Motors Ltd	0	0	7	3
Bavaria Auto Ltd	1	1	5	5
Total – Count	2	2	26	18
Total – %	4.2%	4.2%	54.2%	37.5%

Source: Researcher, 2013.

4.2.10 Each department has measures of their quality of service

93.8% of the respondents agreed that each department has measures of their quality of service while 2.1% of the respondents disagreed that each department has measures of their quality of service. However, 4.2% of the respondents were neutral as to whether each department has measures of their quality of service. This is an indication that organizational performance is measured at the department level. The information on whether each department has measures of their quality of service is summarized in Table 4.9.

Table 4.9 Information on whether each department has measures of their quality of service

Trade Name	Each department has measures of their quality of service			
	Strongly Disagree	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	1	1	1	6
Simba Colt Motors Ltd	0	0	7	3
Bavaria Auto Ltd	0	1	5	6
Total – Count	1	2	25	20
Total – %	2.1%	4.2%	52.1%	41.7%

Source: Researcher, 2013.

4.2.11 Organizational performance is measured regularly

Table 4.10 Information on whether organizational performance is measured regularly

Trade Name	Organizational performance is measured regularly		
	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	7	2
CMC Kenya Ltd	0	6	2
GM Kenya Ltd	1	2	6
Simba Colt Motors Ltd	0	7	3
Bavaria Auto Ltd	0	5	7
Total – Count	1	27	20
Total – %	2.1%	56.3%	41.7%

Source: Researcher, 2013.

97.9% of the respondents agreed that organizational performance is measured regularly while 2.1% of the respondents were neutral. This is an indication that monitoring of the organizational performance is an ongoing exercise in the automobile industry. The information on whether the organizational performance is measured regularly is summarized in Table 4.10.

4.2.12 Performance measures are shared regularly with staff

97.9% of the respondents agreed that performance measures are shared regularly with staff while 2.1% of the respondents were neutral. This shows that staffs are updated with their performance regularly and corrective actions may be taken in case of poor performance. The information on whether the performance measures are shared regularly with staff is summarized in Table 4.11.

Table 4.11 Information on whether performance measures are shared measured regularly with staff

Trade Name	Performance measures are shared regularly with staff		
	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	6	3
CMC Kenya Ltd	0	6	2
GM Kenya Ltd	1	1	7
Simba Colt Motors Ltd	0	7	3
Bavaria Auto Ltd	0	5	7
Total – Count	1	25	22
Total – %	2.1%	52.1%	45.8%

Source: Researcher, 2013.

4.2.13 Financial reports are published regularly

Table 4.12 shows that 91.7% of the respondents agreed that financial reports are published regularly while 8.3% of the respondents were neutral. The financial reports show the cash flow requirements of the company, the financial position of the company, and the performance of the company. The financial reports are usually published in the same format and this would enable the company monitor their performance in relation to their competitors in the industry. Poor performance would be noted well in advance and this would allow the management to note the weak areas and make a turn around.

Table 4.12 Information on whether financial reports are published regularly

Trade Name	Financial reports are published regularly		
	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	1	5	3
CMC Kenya Ltd	0	6	2
GM Kenya Ltd	1	2	6
Simba Colt Motors Ltd	0	7	3
Bavaria Auto Ltd	2	3	7
Total – Count	4	23	21
Total – %	8.3%	47.9%	43.8%

Source: Researcher, 2013.

4.2.14 Managers set personal and business objectives

Table 4.13 shows that majority of the respondents agreed that managers set personal and business objectives. This would enable the managers to align their personal goals with the overall goal of the company. This would imply that the managers' efforts are directed towards achieving a common goal.

Table 4.13 Information on whether managers set personal and business objectives

Trade Name	Managers set personal and business objectives				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	0	7	2
CMC Kenya Ltd	0	0	0	6	2
GM Kenya Ltd	1	0	2	2	4
Simba Colt Motors Ltd	0	0	0	7	3
Bavaria Auto Ltd	2	1	0	4	5
Total – Count	3	1	2	26	16
Total – %	6.3%	2.1%	4.2%	54.2%	33.3%

Source: Researcher, 2013.

4.2.15 People are committed to the organization

Majority of the respondents agreed that people are committed to the organization. Commitment is an indication of dedication towards achieving the objectives of the company. The information on whether people are committed to the organization is summarized in Table 4.14.

Table 4.14 Information on whether people are committed to the organization

Trade Name	People are committed to the organization		
	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	1	5	3
CMC Kenya Ltd	0	6	2
GM Kenya Ltd	2	1	6
Simba Colt Motors Ltd	1	6	3
Bavaria Auto Ltd	1	5	6
Total – Count	5	23	20
Total – %	10.4%	47.9%	41.7%

Source: Researcher, 2013.

4.2.16 The morale of staff is positive

Table 4.15 Information on whether the morale of staff is positive

Trade Name	Morale is positive			
	Disagree	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	1	6	2
CMC Kenya Ltd	0	1	5	2
GM Kenya Ltd	0	1	2	6
Simba Colt Motors Ltd	0	1	6	3
Bavaria Auto Ltd	1	2	3	6
Total – Count	1	6	22	19
Total – %	2.1%	12.5%	45.8%	39.6%

Source: Researcher, 2013.

Majority of the respondents agreed that the morale of the people is positive. This shows that people work harder towards achieving the organizational objective. The information on whether the morale is positive is summarized in Table 4.15.

4.2.17 The market is relatively stable

41.6% of the respondents agreed that the market is relatively stable while 37.5 of the respondents were neutral. However, 20.9% of the respondents disagreed that the market is relatively stable. A stable market implies less risky environment which conducive for exemplary performance. The information on whether the market is relatively stable is summarized in Table 4.16.

Table 4.16 Information on whether the market is relatively stable

Trade Name	The market is relatively stable				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	2	0	5	2	0
CMC Kenya Ltd	1	2	2	2	1
GM Kenya Ltd	2	1	0	3	3
Simba Colt Motors Ltd	2	0	6	2	0
Bavaria Auto Ltd	0	0	5	7	0
Total – Count	7	3	18	16	4
Total – %	14.6%	6.3%	37.5%	33.3%	8.3%

Source: Researcher, 2013.

4.2.18 Employees know what is expected of them

95.8% of the respondents agreed that employees know what is expected of them while 4.2 of the respondents were neutral. However, none of the respondents disagreed that employees know what is expected of them. The information on whether employees know what is expected of them is summarized in Table 4.17.

Table 4.17 Information on whether employees know what is expected of them

Trade Name	Employees know what is expected of them		
	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	1	5	3
CMC Kenya Ltd	1	5	2
GM Kenya Ltd	0	2	7
Simba Colt Motors Ltd	0	7	3
Bavaria Auto Ltd	0	5	7
Total – Count	2	24	22
Total – %	4.2%	50.0%	45.8%

Source: Researcher, 2013.

4.2.19 Employees have the materials and equipments needed to do their job

Majority of the respondents agreed that employees have the materials and equipments needed to do their job. The information on whether employees have the materials and equipments needed to do their job is summarized in Table 4.18.

Table 4.18 Information on whether employees have the materials and equipments needed to do their job

Trade Name	Employees have the materials and equipments needed to do their job			
	Disagree	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	5	4
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	3	6
Simba Colt Motors Ltd	0	1	6	3
Bavaria Auto Ltd	1	1	4	6
Total – Count	1	2	24	21
Total – %	2.1%	4.2%	50.0%	43.8%

Source: Researcher, 2013.

4.2.20 Employees are encouraged to develop their knowledge and skills

93.8% of the respondents agreed that employees are encouraged to develop their knowledge and skills while 4.2% were neutral. However, 2.1% of the respondents disagreed that employees are encouraged to develop their knowledge and skills. The employees who develop their knowledge and skills would perform better in future. The information on whether employees are encouraged to develop their knowledge and skills is summarized in Table 4.19.

Table 4.19 Information on whether employees are encouraged to develop their knowledge and skills

Trade Name	Employees are encouraged to develop their knowledge and skills			
	Strongly Disagree	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	5	4
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	1	4	4
Simba Colt Motors Ltd	0	1	6	3
Bavaria Auto Ltd	1	0	5	6
Total – Count	1	2	26	19
Total – %	2.1%	4.2%	54.2%	39.6%

Source: Researcher, 2013.

4.2.21 Employees are committed to doing quality work

All the respondents agreed that employees are committed to doing quality work. This would imply that, if the employees are committed to doing quality work, quality products and services are guaranteed. Quality products and services are paramount for exemplary performance of the company. The information on whether employees are committed to doing quality work is summarized in Table 4.20.

Table 4.20 Information on whether employees are committed to doing quality work

Trade Name	Employees are committed to doing quality work	
	Agree	Strongly Agree
Toyota Kenya Ltd	5	4
CMC Kenya Ltd	6	2
GM Kenya Ltd	2	7
Simba Colt Motors Ltd	7	3
Bavaria Auto Ltd	5	7
Total – Count	25	23
Total – %	52.1%	47.9%

Source: Researcher, 2013.

4.2.22 The Company has been reporting increased profits

Majority of the respondents agreed that their company has been reporting increased profits. Reporting increased profits is an indication of excellent performance. The information on whether the company has been reporting increased profits is summarized in Table 4.21.

Table 4.21 Information on whether the company has been reporting increased profits

Trade Name	The company has been reporting increased profits				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	0	5	4
CMC Kenya Ltd	0	0	0	6	2
GM Kenya Ltd	0	0	0	4	5
Simba Colt Motors Ltd	0	0	3	7	0
Bavaria Auto Ltd	7	2	3	0	0
Total – Count	7	2	6	22	11
Total – %	14.6%	4.2%	12.5%	45.8%	22.9%

Source: Researcher, 2013.

4.2.23 The Company has been reporting increased revenue

Table 4.22 Information on whether the company has been reporting increased revenue

Trade Name	The company has been reporting increased revenue				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	0	5	4
CMC Kenya Ltd	0	0	0	6	2
GM Kenya Ltd	0	0	0	3	6
Simba Colt Motors Ltd	0	0	3	7	0
Bavaria Auto Ltd	7	2	3	0	0
Total – Count	7	2	6	21	12
Total – %	14.6%	4.2%	12.5%	43.8%	25.0%

Source: Researcher, 2013.

Majority of the respondents agreed that their company has been reporting increased revenue. Reporting increased revenue is an indication of excellent performance. The information on whether the company has been reporting increased revenue is summarized in Table 4.22.

4.2.24 The Company has been reporting increased market share

Table 4.23 Information on whether the company has been reporting increased market share

Trade Name	The company has been reporting increased market share				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	0	5	4
CMC Kenya Ltd	0	0	0	6	2
GM Kenya Ltd	0	0	0	2	7
Simba Colt Motors Ltd	0	0	3	7	0
Bavaria Auto Ltd	7	2	3	0	0
Total – Count	7	2	6	20	13
Total – %	14.6%	4.2%	12.5%	41.7%	27.1%

Source: Researcher, 2013.

Majority of the respondents agreed that their company has been reporting increased market share. Reporting increased market share is an indication of excellent performance. The information on whether the company has been reporting increased market share is summarized in Table 4.23.

4.2.25 Does your firm use any AIS for its financial and economic management?

Majority of the respondents confirmed that their companies use AIS for their financial and economic management. This is an indication that AIS help companies to manage their finances. The information on whether the company is using any AIS for its financial and economic management is summarized in Table 4.24.

Table 4.24 Information on whether the respondent’s firm uses any AIS for its financial and economic management

Trade Name	Does your firm use any AIS for its financial and economic management	
	Yes	No
Toyota Kenya Ltd	9	0
CMC Kenya Ltd	8	0
GM Kenya Ltd	9	0
Simba Colt Motors Ltd	10	0
Bavaria Auto Ltd	0	12
Total – Count	36	12
Total – %	75.0%	25.0%

Source: Researcher, 2013.

4.2.26 Does AIS play an important role in planning the firm’s strategies

Majority of the respondents confirmed that the use of AIS play an important role in planning the firm’s strategies. This shows that most of the firms in the automobile industry use their AIS when formulating their strategies. The information on whether AIS play an important role in planning the firm’s strategies is summarized in Table 4.25.

Table 4.25 Information on whether AIS play an important role in planning the firm's strategies

Trade Name	Does AIS play an important role in planning the firm's strategies	
	Yes	No
Toyota Kenya Ltd	9	0
CMC Kenya Ltd	8	0
GM Kenya Ltd	9	0
Simba Colt Motors Ltd	10	0
Bavaria Auto Ltd	0	12
Total – Count	36	12
Total – %	75.0%	25.0%

Source: Researcher, 2013.

4.2.27 Shortcomings of using AIS

Some of the respondents cited lack of proper training and lack of proper system documentation as some of the challenges they face. Other respondents also noted that high staff turnover is one of the challenges of using the AIS. They indicated that when the staff turnover is high, some of super trained staff leave the organization and they happen to be having more information about the AIS than the normal users of the AIS. Other shortcomings included lack of finances and risk of obsolescence, among others.

4.2.28 Do you use the same computerized accounting program for financial, cost and management accounting

Majority of the respondents confirmed that they use the same computerized accounting program for financial, cost and management accounting. The information on whether the company uses the same computerized accounting program for financial, cost and management accounting is summarized in Table 4.26.

Table 4.26 Information on whether respondents use the same computerized accounting program for financial, cost and management accounting

Trade Name	Do you use the same computerized accounting program for financial, cost and management accounting	
	Yes	No
Toyota Kenya Ltd	9	0
CMC Kenya Ltd	8	0
GM Kenya Ltd	9	0
Simba Colt Motors Ltd	10	0
Bavaria Auto Ltd	0	12
Total – Count	36	12
Total – %	75.0%	25.0%

Source: Researcher, 2013.

4.2.29 How long have you been doing your accounting with a computer program

Table 4.27 Information on how long have you been doing your accounting with a computer program

Trade Name	How long have you been doing your accounting with a computer program		
	Less than 5 Years	5 - 10 Years	Over 10 Years
Toyota Kenya Ltd	0	0	9
CMC Kenya Ltd	0	0	8
GM Kenya Ltd	0	0	9
Simba Colt Motors Ltd	0	10	0
Bavaria Auto Ltd	12	0	0
Total – Count	12	10	26
Total – %	25.0%	20.8%	54.2%

Source: Researcher, 2013.

54.2% of the respondents indicated that they have been doing accounting with a computer program for over 10 years while 20.8% of the respondents indicated that they have been doing accounting with a computer program for a period between 5 and 10 years. The information on the length of time the companies have been doing accounting with a computer program is summarized in Table 4.27.

4.2.30 Does computerized AIS allow you to manage your cash position with banks

Majority of the respondents confirmed that their computerized AIS allow them to manage their cash with banks. This would enable the automobile firms manage their cash flows effectively. This would also enable the automobile firms monitor the movement in exchange rates and make timely decisions regarding purchasing the foreign currencies. The information on whether the computerized AIS allow companies to manage their cash with banks is summarized in Table 4.28.

Table 4.28 Information on whether computerized AIS allow you to manage your cash position

Trade Name	Does computerized AIS allow you to manage your cash position with banks	
	Yes	No
Toyota Kenya Ltd	9	0
CMC Kenya Ltd	8	0
GM Kenya Ltd	9	0
Simba Colt Motors Ltd	10	0
Bavaria Auto Ltd	0	12
Total – Count	36	12
Total – %	75.0%	25.0%

Source: Researcher, 2013.

4.2.31 Does AIS allow you to manage your fiscal affairs with government bodies

Table 4.29 Information on whether AIS allow you to manage your fiscal affairs with government bodies

Trade Name	Does AIS allow you to manage your fiscal affairs with government bodies	
	Yes	No
Toyota Kenya Ltd	9	0
CMC Kenya Ltd	8	0
GM Kenya Ltd	9	0
Simba Colt Motors Ltd	10	0
Bavaria Auto Ltd	0	12
Total – Count	36	12
Total – %	75.0%	25.0%

Source: Researcher, 2013.

Majority of the respondents confirmed that their AIS allow them to manage their fiscal affairs with government bodies. The information on whether the AIS allow companies to manage their fiscal affairs with government bodies is summarized in Table 4.29.

4.2.32 Does AIS improve your firm's organization and administration

All the respondents confirmed that their firm's organization and administration have improved since using AIS. This is an indication that AIS is not only used to produce the financial reports but also help the management in organizing and administering their firms. It also implies that AIS is a very useful tool for every organization in the automobile industry. The information on whether the firm's organization and administration have improved since using AIS is summarized in Table 4.30.

Table 4.30 Information on whether AIS improve your firm’s organization and administration

Trade Name	Do you think that the organization and administration in your firm have improved since using AIS	
	Yes	No
Toyota Kenya Ltd	9	0
CMC Kenya Ltd	8	0
GM Kenya Ltd	9	0
Simba Colt Motors Ltd	10	0
Bavaria Auto Ltd	12	0
Total – Count	48	0
Total – %	100.0%	0.0%

Source: Researcher, 2013.

4.2.33 Are you familiar with new technologies such as ERP, CRM and XML

Table 4.31 Information on whether respondents were familiar with new technologies such as ERP, CRM and XML

Trade Name	Are you familiar with new technologies such as ERP, CRM and XML	
	Yes	No
Toyota Kenya Ltd	9	0
CMC Kenya Ltd	8	0
GM Kenya Ltd	9	0
Simba Colt Motors Ltd	10	0
Bavaria Auto Ltd	0	12
Total – Count	36	12
Total – %	75.0%	25.0%

Source: Researcher, 2013.

Majority of the respondents confirmed that they are familiar with new technologies such as ERP, CRM and XML. This implies that most of the employees in the automobile industry update themselves with the current technologies. The information on whether the employees are familiar with new technologies such as ERP, CRM and XML is summarized in Table 4.31.

4.2.34 Rating of your AIS towards organizational effectiveness

Table 4.32 Information on respondent’s rating of their AIS towards organizational effectiveness

Trade Name	How would you rate your AIS towards organizational effectiveness				
	Very Unimportant	Unimportant	Neutral	Important	Very Important
Toyota Kenya Ltd	0	0	0	5	4
CMC Kenya Ltd	0	0	0	6	2
GM Kenya Ltd	0	0	0	2	7
Simba Colt Motors Ltd	0	0	0	7	3
Bavaria Auto Ltd	7	2	3	0	0
Total – Count	7	2	3	20	16
Total – %	14.6%	4.2%	6.3%	41.7%	33.3%

Source: Researcher, 2013.

75.0% of the respondents rated their AIS as important towards organizational effectiveness while 6.3% were neutral. However, 18.8% of the respondents rated their AIS as unimportant towards organizational effectiveness. This is an indication that most of the AIS in the automobile industry help the management towards achieving organizational effectiveness. The information on the importance of the existing AIS towards organizational effectiveness is summarized in Table 4.32.

4.2.35 The System is reliable

77.1% of the respondents agreed that their systems are reliable while 22.9% of the respondents disagreed that their systems are reliable were neutral. This shows that most of the systems in the

automobile industry are reliable. The information on whether the system is reliable is summarized in Table 4.33.

Table 4.33 Information on whether the System is reliable

Trade Name	The system is reliable			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.36 The System is easy to learn and understand its features

Table 4.34 Information on whether the System is easy to learn and understand its features

Trade Name	The system is easy to learn and understand its features			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

Majority of the respondents agreed that their systems are easy to learn and understand their features. Complex systems de-motivate the end users to learn more about the system and are not

user friendly. When the systems are easy to learn and understand, they would be more useful to the employees since the employees would appreciate the system and they would be willing to learn more features of the system. They would use the system features to enhance their effectiveness. The information on whether the system is easy to learn and understand its features is summarized in Table 4.34.

4.2.37 The response time for the system is fast

Table 4.35 Information on whether the response time is fast

Trade Name	The response time for the system is fast			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

Majority of the respondents agreed that the response time for the system is fast. A fast response time indicates that the users would accomplish their tasks with minimal time. This would improve efficiency and effectiveness. The information on whether the response time for the system is fast is summarized in Table 4.35.

4.2.38 The System is flexible

Majority of the respondents agreed that their systems are flexible. This is an indication that the systems used in the automobile industry can be upgraded and hence, the risk of obsolescence is minimal. This also implies that the system can accommodate the users in terms of their requirements including reports. The information on whether the system is flexible is summarized in Table 4.36.

Table 4.36 Information on whether the system is flexible

Trade Name	The system is flexible			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.39 Management reports are reliable

Majority of the respondents agreed that their management reports are reliable. The management reports would be reliable if they are accurate and timely. Timely reports act as a guide to the management as to the areas that need management attention. This would enable the management to take corrective actions and to make informed decisions. The information on whether the management reports are reliable is summarized in Table 4.37.

Table 4.37 Information on whether management reports are reliable

Trade Name	Managements reports are reliable			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.40 Web pages are accurate and updated

Majority of the respondents agreed that their firm's web pages are accurate and updated. This implies that any interested stakeholder such as the customers would easily find accurate and timely information on the firm's website. The information on whether the web pages are accurate and updated is summarized in Table 4.38.

Table 4.38 Information on whether web pages are accurate and updated

Trade Name	Web pages are accurate and updated			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.41 System outputs are clear

Table 4.39 Information on whether system outputs are clear

Trade Name	System outputs are clear			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

Majority of the respondents agreed that their systems outputs are clear. The information on whether the system outputs are clear is summarized in Table 4.39.

4.2.42 IT team provide support for the system

Table 4.40 Information on whether system outputs are clear

Trade Name	IT team provides support for the system			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

Majority of the respondents agreed that their IT team provide support for the system. It support is very paramount for the success of an AIS. This implies that the end users would get support whenever they are need of it and this would enable them embrace the system. The information on whether the IT team provides support for the system is summarized in Table 4.40.

4.2.43 IT team has the technical competence

Majority of the respondents agreed that their IT team has the technical competence. Technical competence is also paramount for the success of any AIS. The information on whether the IT team has the technical competence is summarized in Table 4.41.

Table 4.41 Information on whether system outputs are clear

Trade Name	IT team has the technical competence			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.44 ICT team is responsive, timely and reliable

Majority of the respondents agreed that their ICT team is responsive, timely and reliable. Responsiveness of the ICT team would determine the quality of IT support. Reliability of the ICT team would enhance the rate of success of the AIS. The information on whether the ICT team is responsive, timely and reliable is summarized in Table 4.42.

Table 4.42 Information on whether ICT team is responsive, timely and reliable

Trade Name	ICT team is responsive, timely and reliable			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.45 Staff utilize the capabilities of an information system

Majority of the respondents agreed that staff utilize the capabilities of an information system. This is an indication that the employees in the automobile industry have embraced the information systems and they use them when performing their duties. The information on whether staffs utilize the capabilities of an information system is summarized in Table 4.43.

Table 4.43 Information on whether staff utilize the capabilities of an information system

Trade Name	Staff utilize the capabilities of an information system			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.46 Customers utilize the capabilities of an information system

Majority of the respondents agreed that customers utilize the capabilities of an information system. This is an indication that the customers in the automobile industry have embraced the technology and they are computer literate. The information on whether customers utilize the capabilities of an information system is summarized in Table 4.44.

Table 4.44 Information on whether customers utilize the capabilities of an information system

Trade Name	Customers utilize the capabilities of an information system			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.47 The system is appropriately used

Table 4.45 Information on whether the system is appropriately used

Trade Name	The system is appropriately used			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

Majority of the respondents agreed that the system is appropriately used. This implies that the employees reap benefits of the AIS. The information on whether the system is appropriately used is summarized in Table 4.45.

4.2.48 The system is extensively used

Majority of the respondents agreed that the system is extensively used. This implies that the employees reap benefits of the AIS. The information on whether the system is extensively used is summarized in Table 4.46.

Table 4.46 Information on whether the system is extensively used

Trade Name	The system is extensively used			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.49 Users are satisfied with the system reports

Table 4.47 Information on whether users are satisfied with the system reports

Trade Name	Users are satisfied with the system reports			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

Majority of the respondents agreed that the users are satisfied with the system reports. This is an indication that the system reports are accurate and reliable. This would enable the users to submit timely reports to the management for decision making. The information on whether the users are satisfied with the system reports is summarized in Table 4.47.

4.2.50 Users are satisfied with the IT team support

Majority of the respondents agreed that the users are satisfied with the IT team support. This is an indication that the ICT team is responsive, reliable and provide timely support. The information on whether the users are satisfied with the IT team support is summarized in Table 4.48.

Table 4.48 Information on whether users are satisfied with the IT team support

Trade Name	Users are satisfied with the IT team support			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.51 AIS improves decision making

Majority of the respondents agreed that AIS improves decision making. This implies that the AIS provide accurate and timely reports which aid in making informed decisions. The information on whether AIS improves decision making is summarized in Table 4.49.

Table 4.49 Information on whether AIS improves decision making

Trade Name	AIS improves decision making			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.52 AIS improves firm sales, profits and market efficiency

Table 4.50 Information on whether AIS improves firm sales, profits and market efficiency

Trade Name	AIS improves firm sales, profits and market efficiency			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

Majority of the respondents agreed that AIS improves firm sales, profits and market efficiency. The AIS would allow customer have access to important information regarding the company. This would persuade the customers to buy more of the product thereby increasing the company's market share. This would in turn increase the revenue and consequently, the profits of the firm.

The AIS would also enable the employees to be efficient and effective thereby improving the firm's market efficiency. The information on whether AIS improves firm sales, profits and market efficiency is summarized in Table 4.50.

4.2.53 AIS reduces operating costs

Majority of the respondents agreed that AIS reduces the operating costs. This is an indication that the AIS would enable the employees to be more efficient, hence, reducing the operating costs. The information on whether AIS reduces operating costs is summarized in Table 4.51.

Table 4.51 Information on whether AIS reduces operating costs

Trade Name	AIS reduces operating costs			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.54 AIS improves consumer welfare

Majority of the respondents agreed that AIS improves consumer welfare. The AIS would facilitate access of important information to the consumer with regards to the different varieties of products and services in the market. This would improve the consumer welfare since the consumer would also be making informed decisions. The information on whether AIS improves consumer welfare is summarized in Table 4.52.

Table 4.52 Information on whether AIS improves consumer welfare

Trade Name	AIS improves consumer welfare			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

4.2.55 AIS leads to creation of jobs and economic development

Table 4.53 Information on whether AIS leads to creation of jobs and economic development

Trade Name	AIS leads to creation of jobs and economic development			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Toyota Kenya Ltd	0	0	6	3
CMC Kenya Ltd	0	0	6	2
GM Kenya Ltd	0	0	5	4
Simba Colt Motors Ltd	0	0	6	4
Bavaria Auto Ltd	6	5	0	1
Total – Count	6	5	23	14
Total – %	12.5%	10.4%	47.9%	29.2%

Source: Researcher, 2013.

Majority of the respondents agreed that AIS leads to creation of jobs and economic development. The AIS would need support from the ICT team. The ICT team should comprise of employees who are technically competent. This would create job opportunities for those people with technical knowhow of the system. This would lead to economic development in the region. The information on whether AIS leads to creation of jobs and economic development is summarized in Table 4.53.

4.3 Empirical Model

Table 4.54 The company has been reporting increased revenue * How would you rate your AIS towards organizational effectiveness

The company has been reporting increased revenue		How would you rate your AIS towards organizational effectiveness					Total
		1	2	3	4	5	
Strongly Disagree	Count	7	0	0	0	0	7
	% of Total	14.6%	.0%	.0%	.0%	.0%	14.6%
Disagree	Count	0	2	0	0	0	2
	% of Total	.0%	4.2%	.0%	.0%	.0%	4.2%
Neutral	Count	0	0	3	0	3	6
	% of Total	.0%	.0%	6.3%	.0%	6.3%	12.5%
Agree	Count	0	0	0	20	1	21
	% of Total	.0%	.0%	.0%	41.7%	2.1%	43.8%
Strongly Agree	Count	0	0	0	0	12	12
	% of Total	.0%	.0%	.0%	.0%	25.0%	25.0%
Total	Count	7	2	3	20	16	48
	% of Total	14.6%	4.2%	6.3%	41.7%	33.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	158.357(a)	16	.000
Likelihood Ratio	110.118	16	.000
Linear-by-Linear Association	40.598	1	.000
N of Valid Cases	48		

Source: Researcher, 2013.

The p-value of 0.000 is less than the significance value of 0.05. Therefore, the independent variables have an impact on the dependent variable. This implies that accounting information systems increases the organizational effectiveness. The accounting information systems were measured based on dimensions such as system quality, information quality, service quality, system use, user satisfaction and net benefits. The study shows that accounting information systems have a significant impact on organizational effectiveness.

The information on the association between the AIS and the organizational effectiveness is summarized in Table 4.54. In the Table 4.54 below, the AIS was rated as: 1 if it was very unimportant towards organizational effectiveness; 2 if it was unimportant towards organizational effectiveness; 3 if the respondent was neutral; 4 if it was important towards organizational effectiveness; and 5 if it was very important towards organizational effectiveness.

4.4 Discussion

The discussions have been factored in details under the summary of the statistics. The response rate was satisfactory to draw conclusions for the research.

4.5 Summary

The chapter gathered information about the respondents, the entities they work for, and the key elements of the study, organizational effectiveness and the accounting information systems. Discussions about the finding were analyzed for each table. The findings of the study concluded that Accounting information systems impact on organizational effectiveness. The study was faced with limitations such as slow response rate and lack of Full Corporation from some respondents.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.1 Introduction

This chapter consists of a brief summary of findings that were obtained. It also presents the deduced conclusions and offers recommendations on how to improve the present situation. The research implications are discussed and suggestions of opportunities for further research presented. Section 5.2 is the summary of the study, section 5.3 gives the conclusion, 5.4 outlines the limitations of the study & section 5.5 outlines recommendations for further research.

5.2 Summary of the Study

The aim of the study was to find out the impact of Accounting Information Systems on the organizational effectiveness. The study measured the effectiveness of the Accounting Information Systems based on the various dimensions, including, system quality, information quality, service quality, system use, user satisfaction and net benefits of the AIS.

The findings of the study indicated that the AIS used in the automobile industry in Kenya are quality systems. The researcher evaluated various characteristics of an information system. These characteristics included ease of use, system flexibility, system reliability, ease of learning, as well as system features of intuitiveness, sophistication, flexibility, and response times. The findings further indicated that the quality of information was guaranteed. The results indicated that the outputs from AIS were clear, accurate, and timely.

The results of the study indicated that staff and customers utilize the capabilities of AIS. The results show that the web sites of the automobile companies are updated regularly and contain accurate information. The findings further indicated that AIS contribute to the success of individuals, groups, organizations, industries, and nations. Some of the benefits included improved decision-making, improved productivity, increased sales, cost reductions, improved profits, market efficiency, consumer welfare, creation of jobs, and economic development.

The study sought the challenges faced when using the AIS. The findings indicated that the major challenges were lack of proper training and lack of proper system documentation as some of the challenges they face. Further, the results indicated that high staff turnover is a major challenge of using the AIS. The results indicated that when the staff turnover is high, some of super trained staff leaves the organization and they happen to be having more information about the AIS than the normal users of the AIS. Other shortcomings included lack of finances and risk of obsolescence.

The findings of this study indicate that AIS is an important mechanism of an organization that is vital for effective management decision-making and controlling organization. The results are consistent with empirical reviews which indicated that there exist a relationship between AIS and organizational performance. AIS are an effective decision-making tool for controlling and coordinating the activities of an organization. The findings also indicate that an effective AIS increase system integration and improve internal communications throughout the organization. The top management team with various planning and management information system influences on strategic performance of the organization.

5.3 Conclusion

Accounting information systems are critical to the production of quality accounting information on a timely basis and the communication of that information to the decision makers. Existing literature offers evidence of the relationship between these AIS and organizational effectiveness; though it is important to highlight that an in-depth study is required to examine other factors that may influence this relationship. The information value generated by AIS to shareholders and stakeholders in making investment decisions is invaluable. Financial managers need the financial and accounting data provided by AIS to evaluate the firm's past performance and to map future plans.

This study showed that there is strong relationship between accounting information system and organizational effectiveness, which means access to accounting information, will lead to organizational effectiveness. Therefore, it can be concluded that accounting information systems have an impact on the effectiveness of automobile companies in Kenya.

5.4 Limitation of the Study

This study was not without limitations. First, it was difficult to measure the level of the organizational effectiveness of the firms in the automobile industry in Kenya with limited subjectivity. I relied on questionnaire responses to measure the organizational effectiveness of the firms under study.

Moreover, time was also limited. Perhaps other data collection methods such as secondary data analysis and interviews or face-to-face communication would have been employed and the target population would have been expanded to include more companies.

5.5 Recommendations for Further Study

Throughout working on this study, some suggestions concerning the expansion of the present study have arisen. First, in terms of data collection, I would suggest to collect data from different sources. This would include further case studies, interviews or face-to-face communication, and secondary data analysis.

Secondly, I would suggest similar studies to be done in more companies in order to compare the findings with the findings of this study. A survey would shed more light than just a case of selected companies in the industry.

Finally, a similar study could be carried out focusing on the effectiveness of accounting information systems in enhancing the organizational effectiveness. Similarly, a similar study could also be carried out focusing on factors influencing implementation of accounting information systems or even challenges faced during implementation of accounting information systems in the automobile industry in Kenya.

REFERENCES

- Armstrong, M. and Baron, A. (1998) *Performance management: the new realities*. London: Institute of Personnel and Development
- Borthick, A. F & Clark, R. L. (1990), Making accounting information systems work: An empirical investigation of the creative thinking paradigm. *Journal of Information Systems*, 4(3), 48-62.
- Bouwens, J.; Abernethy, M.A. (2000): “*The consequences of customization on management accounting systems design*”, *Accounting, Organizations and Society*, 25,3, 221-259.
- Boulianne, E. (2007). Revisiting fit between AIS design and performance with the analyzer strategic-type, *International Journal of Accounting Information Systems*, 8 (16).
- Bolon, M. (1998). *Factors influencing the alignment of accounting information systems in small and medium sized Malaysian manufacturing firms*.
- Campbell, J.P. (1977) "On the Nature of Organizational Effectiveness." In: P.S. Goodman & J.M. Pennings (Eds.), *New Perspectives on Organizational Effectiveness*, 36-41. San Francisco: Jossey-Bass.
- Chang, Y. W. (2001). Contingency factors and accounting information system design in Jordanian companies. *Journal of Accounting Information System*, 8. 1-16.
- Choe, J. M. (1996). The Relationships among performance of accounting information systems, influence factors, and evolution level of information systems, *Journal of Management Information Systems*, 12(4),215-239.
- Curtis, G. (1995). *Business information systems: Analysis, design and practice*. Wokingham: Addison-Wesley Publishing Company.

Chenhall, R.H. (2003): “*Management control systems design within its organizational context: findings from contingency-based research and directions for the future*”, *Accounting, Organizations and Society*, 28, 2-3, 127-168.

Doms, M. E., Jarmin, R. S. & Klimek, S. D. (2004). *Information technology investment and firm performance in U.S. retail trade*, *Economics of Innovation and New Technology*, 13(7), 595-613.

Daft, R. L. (1983) *Organization theory and design*, Minnesota, West Publishing Company.

David, Julie Smith; et al. “The Research Pyramid: A Framework for Accounting Information Systems Research” *Journal of Information systems* Vol.13.No.1. Spring 1999, Pp. 8-9.

Downs, Anthony (1957). *An economic theory of democracy*. New York. p. 116.

El Louadi, M. (1998). The relationship among organization structure, information technology and information processing in small Canadian firms, *Canadian Journal of Administrative Sciences*, 15(2), 180-199.

Ismailjee, A. E. K. (1993). Internal Controls: The case of Nyayo Bus Service Corporation, A *Masters project submitted to University of Nairobi*

Gordon, L. A. & Miller, D. (1976). *A contingency framework for the design of accounting information systems*, *Accounting, Organizations and Society*, 1(1), 59-69.

GUL, F.A. (1991): “*The effects of Management Accounting Systems and Environmental Uncertainty on Small Business Managers’ Performance*”, *Accounting and Business Research*, 22, 85, 57-61.

Huber, G. P. (1990). *A theory of the effects of advanced information technologies on organizational design, intelligence, and decision making*, *Academy of Management Review*, 15(1), 47-71. *IBIMA Business Review* 12.

Hunton, J. E. (2002). *Blending information and communication technology with accounting research*, *Accounting Horizons*, 16(1), 55-67.

Hindmarch ; et.al “*Accounting an Introduction*” the Macmillan Press.Ltd.1977. p.168.

Huuhtanen,Juha. “Critical Success Factors in Integration of E-commerce and Financial Information Systems Case: Elisa ShopIt - Virtual Store” *M.Sc Thesis in Accounting, the Swedish School of Economics and Business Administration 2004. p.2537*

<http://www.pwc.com/ke/en/industries/automotive.jhtml> (Accessed on 25Th July’ 2013)

Kothari C.R (1990). *Research Methodology method & Techniques* - Second. Edition.

Kaplan, R., Norton, D., 1993. “*The balance scorecard - Measures that drive performance*, *Harvard Business Review*

Kren, L. (1992): Budgetary participation and managerial performance: The impact of information and environmental volatility. *Account Review*; 67: 511–26.

Flamholtz, E. G , Kannan-Narasimhan, R., & Bullen, M.L.(2004). Human Resource Accounting today: Contributions, controversies and conclusions. *Journal of Human Resource Costing & Accounting*, 8 (2), 23-37.

Langfield-Smith, K. 1997. *Management control systems and strategy: A critical review*. *Accounting, Organizations and Society* 22(2): 207-232

LI, M., YE, L.R. (1999): “*Information technology and firm performance: Linking with environmental, strategic and managerial contexts*”, *Information and Management*, vol. 35, n. 1: 43-51. PII: S-0378-7206(98)00075-5

Michael A. Hitt, Robert E. Hoskisson, Richard A. Johnson, Douglas D. Moesel. (1996). *The Market for Corporate Control and Firm Innovation*

Mawanda S. P (2008). Effects of Internal Control Systems on Financial Performance in an Institution of Higher Learning in Uganda, *a postgraduate dissertation*; Uganda Marytrs University.

McCarthy, w. e. “An entity-relationship view of accounting models”. The Accounting Review, October, 1979, Pp.667-686.35

Mondy, R.W, (1990), *Management and organization behavior*. Boston, Allyn and Bacon Publishers.

Mugenda and Mugenda, (1999), *Research Methods: Qualitative and Quantitative Approach*, ...Research Methods in Social Sciences, 5th edition, St. Martin's. New York.

Mugenda, O. M., & Mugenda, G. A. (2003). *Research Methods: Quantitative and Qualitative Approaches*. African Center for Technology Studies (ACTS)-Press, Nairobi Kenya.

Nicolaou, A.I. 2000. “A Contingency Model of Perceived Effectiveness in Accounting. Information Systems: Organizational Coordination and Control Effects.

Oguntimehin, A. (2001). Teacher effectiveness: Some practical strategies for successful implementation of universal basic education in Nigeria, *African Journal of Educational Management*, 9(1) 151 – 161.

Pekin Ogan, (1988) "Assessing The Impact Of Human Resource Accounting Information On Managerial Decisions: A Field Experiment", *Personnel Review*, Vol. 17 Iss: 3, pp.29 – 35

Ponemon, L. A. & Nagoda, R. J. (1990). Perceptual variation and the implementation of accounting information systems: An Empirical investigation. *Journal of Information System*, 4(2),1-14.

Rahman, M. & Halladay, M. (1988). *Accounting information systems: Principles, applications and future directions*. New Jersey: Prentice Hall.

Reneau, J. H. & Grabski, S. V. (1987). A review of research in computer-human interaction and individual differences within a model for research in accounting information systems. *Journal of Information Systems*, 2(1), 33-53.

Rono, E. (2006). Effectiveness of the internal control system in management of finances in public universities in Kenya. *A masters project submitted to Egerton University.*

Ronney Marshall B, & Steinbort, Paul John (2000). " *Accounting Information Systems*" 8ed, Prentice-Hall Inc, 2000, P2.

Salih, M. A. (1982). Internal Control; the case of Ethiopian Airlines "a masters project submitted to university of Nairobi.

Scott, W.R. (1977) "*Effectiveness of Organizational Effectiveness Studies*" In: P.S.Goodman & J.M. Pennings (Eds.), *New Perspectives on Organizational Effectiveness*, 63-96. San Francisco: Jossey-Bass.

Watts, H. (1999). *A Conceptual Framework to Financial Reports and Internal Audits*. Vol. 20, Pp. 753-778.

Wilkinson, J. W. (1993). *Accounting information systems: Essential concepts and applications*. Second Edition. New York: John Wiley & Sons Inc.

Wilkinson, J. W., Cerullo, M. J., Raval, V. & Wong-On-Wing, B. (2000). *Accounting information systems: Essential concepts and applications*. New York: John Wiley and Sons.

Zimmerman J. L. (1995): *Accounting for decision-making and control*, Chicago: Irwin.

APPENDIX I: QUESTIONNAIRE

Dear Respondent: My name is Nzomo Samuel. I am a finalist Master of Business Administration (MBA) degree student at University of Nairobi. In partial fulfillment of the requirement of this course, I am conducting my academic research entitled 'Impact of Accounting Information Systems on Organizational Effectiveness of Automobile Companies in Kenya'. The University has permitted me to carry out this research and I will treat your opinions confidentially. Your honesty is both critical and paramount when you respond to the questionnaire. Please tick (✓) as appropriate.

Section A: Personal Information

1. Trade name of the company

Toyota Kenya Ltd CMC Motors Ltd GM Kenya Ltd

Simba Colt Motors Ltd Bavaria Auto Ltd

2. Firm's legal status

Public Limited Company Private Limited Company

3. How long have you been in this company (in terms of years)?

Up to 5 6 – 10 11 - 15 Over 15

4. Gender of the Respondent

Male Female

5. Department in the company

Finance & Administration ICT

Sales & Marketing Others

Section B: Assessing Organizational Effectiveness

6. Please evaluate the degree of your agreement with the following criteria 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					
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					
Change Management					
People are committed to the organization					
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 has been reporting increased market share					

Section C: Assessing the Accounting Information Systems

7. Does AIS play an important role in planning the firm’s strategies?

Yes No

8. Does your firm use any AIS for its financial and economic management?

Yes No

9. What shortcomings do you find in the AIS you use?

10. Do you use the same computerized accounting program for financial, cost and management accounting?

Yes No

11. How long have you been doing your accounting with a computer program?

Less than 5 years 5 – 10 years Over 10 years

12. Does computerized accounting AIS allow you to manage your cash position with banks?

Yes No

13. Does AIS allow you to manage your fiscal affairs with Government bodies?

Yes No

14. Do you think that the organization and administration in your firm have improved since using AIS?

Yes No

15. Are you familiar with new technologies such as ERP, CRM (Customer Relationship Management Software) and XML (Extensible Markup Language)?

Yes No

16. How do you rate your AIS towards organizational effectiveness?

Very Unimportant Unimportant Neutral

Important Very Important

17. Please evaluate the degree of your agreement with the following criteria for assessing accounting information systems:

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

Statement	1	2	3	4	5
System Quality					
The system is reliable					
The system easy to learn & understand its features					
The response time for the system is fast					
The system is flexible					
Information Quality					
Management reports are reliable					
Web pages are accurate & updated					
System outputs are clear					
Service Quality					
IT team provides support for the system					
IT team has the technical competence					
Information System department is responsive, timely & reliable					
System Use					
Staff utilize the capabilities of an information system					
Customers utilize the capabilities of an information system					
Appropriate use of the system					
Extensive use of the system					
User Satisfaction					
Users are satisfied with system reports					
Users are satisfied with the IT team support					
Net System Benefits					
AIS Improves decision making					
AIS Improves firms sales, profits & market efficiency					
AIS reduces operating costs					
AIS improves consumer welfare					
AIS leads to creation of jobs, and economic development					

THANK YOU FOR YOUR CORPORATION