

11  
Knowledge Management within Publicly Quoted Firms  
in Kenya 22

Presented by: Osano, K.O.

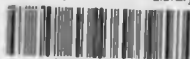
UNIVERSITY OF NAIROBI  
KIMBER KIBETE LIBRARY

Supervisor: Prof Evans Aosa

A management research project submitted in partial fulfilment of the requirements for Master of Business Administration (MBA) degree, School of Business, University of Nairobi

June 2006

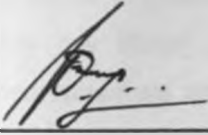
University of NAIROBI Library



0306982 0

## Declaration

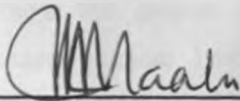
This project is my original work and has not been submitted for a degree in any other university.



Date: 25<sup>th</sup> May 2007

Name: Kenneth Oywaya Osano

This proposal has been submitted for examination with my approval as University Supervisor.



Date: 14/11/07

Prof. Evans Aosa

Lecturer

School of Business

University of Nairobi

## Dedication

I dedicate this research project to my family for all the support and encouragement they gave me during the study. Special gratitude goes to my wife Gathoni for her encouragement and continuous support to complete the research project despite my busy travel and work schedule. Much appreciation goes to my son Mike and daughter Eseri for putting up with my absence while undertaking the project.

I would also like to acknowledge the input of Mingala Obure of M & O Data Training and Consultants Limited for assisting with the data collection and analysis for the project. My sincere appreciation goes to all the firms that agreed to form my study population. Thank you for your great response.

A very special dedication goes to my supervisor, Prof. Evans Aosa, who guided me through the project and ensured I addressed exhaustively all critical areas of the research project. Last but not least I would like to thank all those who critiqued the research proposal and helped me to refine it. In this regard I would like to mention Dr. Maalu, Prof. K'Obonyo, Dr. Ogotu and Dr. Yabs, all from the School of Business Studies, University of Nairobi. Thank you all for your insight and guidance.

## Table of Contents

Declaration	ii
Dedication	iii
List of tables	vi
Acknowledgement	viii
Abstract	ix
Chapter 1: Introduction	1
1.1 Background	1
1.1.1 Overview of knowledge management	1
1.1.2 Publicly quoted firms in Kenya	2
1.2 Research problem	4
1.3 Research objective	5
1.4 Scope of the study	6
1.5 Significance of the study	6
Chapter 2: Literature Review	8
2.1 Knowledge management	8
2.2 The process of knowledge management	9
2.3 Organization learning and knowledge management	10
2.4 Issues and misconceptions in knowledge management	13
2.5 The challenges of knowledge management	14
2.6 Knowledge management and organizational structure	15
2.7 Optimizing the knowledge environment	16
2.8 The value of knowledge management	18
Chapter 3: Research Methodology	20
3.1 Research design	20
3.2 Population	20
3.3 Sampling	20
3.4 Data collection	20

3.5 Data analysis	22
Chapter 4: Findings and Discussion	23
Chapter 5: Summary, Conclusion and Recommendations	38
5.1 Summary	38
5.2 Conclusion	39
5.3 Recommendations for further research	41
References	
Appendix 1: Letter of Introduction	
Appendix 2: Research questionnaire	
Appendix 3: Company listing	

## List of tables

Table 1: Distribution of companies by sector	23
Table 2: Number of years with the firm	23
Table 3: Distribution of companies by annual turn over	24
Table 4: Does your firm use the term KM to describe any of its activities (past, current or planned)?	24
Table 5: Would you say that you are aware of the term KM?	25
Table 6: Does your organization have a knowledge management strategy?	25
Table 7: Level of application of knowledge management in the firm (optimizing KM)	25
Table 8: Potential role that effective knowledge management can play	26
Table 9: Would you say that your organization has used (is using) KM to create competitive advantage?	27
Table 10: Describe the role KM plays in creating competitive advantage in your organization	28
Table 11: Do you have a KM system in your firm?	28
Table 12: Was your firm's KM system introduced as part of a more comprehensive firm strategy?	29
Table 13: How many years have you had a KM system in your firm?	29
Table 14: Does your organization conduct KM audit to establish what knowledge it has?	30
Table 15: Does the leadership of your organization pursue strategies based on intangible resources such as intellectual property?	30
Table 16: Reasons for organizational leadership to pursue knowledge based strategies	31
Table 17: Does your organization encourage emergence of KM champions who disseminate ideas of change and establish the organization's strategic positioning?	31
Table 18: Importance of factors affecting success of KM systems	32
Table 19: Rating of factors affecting success of KM systems in the firms	33

<b>Table 20: What would you consider a major challenge in KM in your organization?</b>	<b>34</b>
<b>Table 21: Relationship between the term KM and existence of a KM system</b>	<b>35</b>
<b>Table 22: Existence of association relationship between whether KM system was introduced as part of a more comprehensive firm's strategy and existence of a KM system in the firm</b>	<b>36</b>

## Acknowledgement

I would like to acknowledge all the lecturers and fellow students who shared with me the invaluable knowledge and time while I undertook the MBA course at the School of Business Studies, University of Nairobi. Special appreciation goes to all the support staff who assisted me in one way or the other during the course.



## Abstract

Business environments put premium on continuous business innovation to deliver sustainable and competitively viable customer value propositions. Hence the design (and use) of the knowledge management program of the firm should ensure that adaptation and innovation of business performance outcomes occurs in alignment with changing dynamics of business environment to prevent the value these enterprises create and the value demanded by the changing market conditions, customer preferences, competitive offerings, changing business models, industry and structures and shareholders

The findings on how publicly listed firms in Kenya are creating, using and protecting knowledge to create competitive advantage would be beneficial to not only the relevant industry sectors but also to potential investors and stakeholders. Linking organizational success with a successful knowledge management program resident in the firm would give impetus to the need for developing sound knowledge management strategies. Thus for organizations yearning for success the focus would then change to identifying core competencies, sourcing strategy and knowledge domains, formalizing existing knowledge, representing corporate memory in knowledge repositories, sharing knowledge in the organization and working with virtual teams, creative thinking, intellectual property management and developing and marketing new knowledge – based services.

The value of knowledge results from the way in which it is used in the firm's processes in the production of products and services, and firms can build their competitive advantage by using the capabilities that arise from knowledge assets in ways which are difficult for others to imitate or replicate, as well as the intellectual property associated with the assets. The management of intangible assets, particularly individual and organizational knowledge can be extremely challenging due to the inherent difficulties in articulating, understanding, developing and transferring them. This study will attempt to establish the level of awareness of knowledge management in publicly quoted firms in Kenya. It will also endeavor to establish the existence of knowledge management systems in these firms.

# Chapter 1 Introduction

## 1.1 Background

### 1.1.1 Overview of knowledge management

Organizations around the world are just discovering that knowledge is the most important strategic asset and needs to be managed systematically (Grazenka, 1999). The shift from industry-based culture to knowledge-based culture presents significant new challenge to the way that people and organizations think, operate, and are managed. Over the last 50 years there has been a growing recognition of the role of knowledge in effective organizations and industry sectors. The concept of post-industrial society embodies the rise of service-based economies dependent on knowledge, the place of knowledge and knowledge workers (Drucker, 1993).

In many industrial sectors physical assets are becoming less important. Strategists describe the inclusion of knowledge as a primary asset as the extension of resource based view of the firm to one that is specifically knowledge based (Grant, 1996). Organizations need a clear understanding of their core competencies and together this knowledge will assist them in setting priorities and stretching goals, providing freedom for employees to achieve these goals, and creating an atmosphere to enable and encourage people to exchange and share knowledge. The value of knowledge results from the way in which it is used in the firm's processes in the production of products and services (Penrose, 1995).

A firm can gain competitive advantage from using the capabilities that arise from knowledge assets in ways which are difficult for others to imitate or replicate, as well as the intellectual property associated with assets (Teece, 2000). Technologies which support knowledge management have made virtual organizations a reality thus reducing operational and transactional costs, making it possible for these organizations to increase their competitiveness on the basis of cost leadership and operational effectiveness. The advances in technology have created virtual competitive markets internationally and locally.

### 1.1.2 Publicly Quoted Firms in Kenya

Firms which are publicly quoted in Kenya stand to benefit in many ways according to the Nairobi Stock Exchange website ([www.nse.co.ke/AboutNSE.htm](http://www.nse.co.ke/AboutNSE.htm)). These gains include free repatriation of capital and returns, sufficient brokerage services, up to date market information, good financial infrastructure, and no exchange controls. There are also fiscal incentives for publicly quoted firms which include no capital gains tax, discounted corporate tax of 20% (non quoted firms pay 30%) and employee share ownership schemes (ESOPS) enjoy tax exemption on their income. Other benefits include tax relief of 15% (subject to a maximum of Kenya shillings three thousand) per month on premiums paid for life and education policies of at least ten years maturity, withholding tax on dividends for Kenyan residents of 5% and 10% for foreigners and exemption of stamp duty for new and expanded capital. In addition registered and approved venture capital funds enjoy a ten year tax holiday and transfers of assets to a special purpose vehicle for the purposes of issuing asset backed securities is exempt from stamp duty and value added tax.

The Nairobi Stock Exchange was constituted in 1954 as a voluntary association of brokers registered under the Societies Act. It is a market that deals in exchange of shares and stocks of publicly quoted companies in Kenya. An International Finance and Central Bank of Kenya study (1984) became a blue print for structural reforms in the financial markets which culminated in the formation of a regulatory body (The Capital Market Authority) in 1989, to assist in the creation of conducive environment for growth and development in the country's capital markets. Kenya Gazette notice number 3362 of May 14<sup>th</sup> 2002 details The Capital Markets Act (Cap.485A) which provides for guidelines on corporate governance practices by publicly listed companies in Kenya in response to the growing importance of governance issues both in emerging and developing economies and for promoting growth in domestic and regional capital markets. It is also in recognition of the role of good governance in corporate performance, capital formation and maximization of shareholders value as well as protection of investor's rights. The objective of these guidelines is to strengthen corporate governance practices by publicly quoted companies in Kenya and to promote the standards of self regulation so as to bring the level of governance in line with international standards.

According to the Capital Markets Act (Cap.485A) every publicly quoted company shall disclose, on an annual basis, in its annual report, a statement of the directors as to

whether the company is complying with these guidelines on corporate governance. Also all issuers of fixed income securities or debt instruments through the capital markets such as bonds and commercial paper shall comply with the guidelines and the issuer shall disclose in the information memorandum the extent of compliance with these guidelines. The guidelines on corporate governance practices further requires that every public quoted company should be headed by an effective board to offer strategic guidance, lead and control the company and be accountable to its shareholders; the board should be supplied with relevant, accurate and timely information to enable the board discharge its duties; every board should annually disclose in its annual report its policies for remuneration including incentives for the board and senior management, share options and other forms of executive remuneration and aggregate directors' loans; the board should compose a balance of executive and non executive directors (including at least one third independent and non independent directors) of diverse skills and there should be a clear separation of the role and responsibilities of the chairman and the chief executive.

The guidelines on corporate governance also require shareholders participation in major decisions of the company with the board providing information to shareholders on matters such as major disposal of assets, restructuring, takeovers, mergers, acquisitions or reorganization. The board shall also be responsible for ensuring annual general meetings are held and providing public disclosures in respect to management agreements, the company's operating position and prospects and maintaining a sound system of internal control to safeguard the shareholders investments and assets among other responsibilities (The Capital Markets Act, Cap.485A).

Various historical landmarks have been witnessed at the Nairobi Stock Exchange (<http://www.nse.co.ke/History.htm>). These include the repealing of the entire Exchange Control Act in December 1995 and the government expanding the scope for foreign investment in 1998 by introducing incentives for capital markets growth including the setting up of tax-free Venture Capital Funds. The Capital Gains Tax on insurance companies' investments was removed and the Central Depository Systems Act (CDS) was enacted in July 2000. In February 2001 there was fundamental reorganization of Kenya's capital markets into four independent market segments, namely; the Main Investments Market Segment (MIMS), the Alternative Investments Market Segment (AIMS), the Fixed Income Securities Segment (FISMS) and the Futures and Options Market Segment (FOMS). The Main Investment market segment is comprised of Agricultural, Commercial and Services, Finance and Investment, Industrial and Allied. The

Alternative Investment segment is composed of leading companies such as the Standard Newspapers, Williamson Tea Kenya Limited and Kenya Orchards Limited among others. The Fixed Income Securities segment is composed of Kenya Power and Lighting Company Limited, Marshalls East Africa Limited, the East Africa Development Bank and the Government of Kenya Treasury Bonds to mention a few.

As at 28<sup>th</sup> January 2007, there were fifty two companies listed in the Nairobi Stock Exchange (The East African, January 22 – 28, 2007). The listed companies are leaders in their respective areas of business. They operate on diverse business segments and environments and have to continuously formulate and implement strategies that ensure they deliver superior dividends year on year to their shareholders. In addition the guidelines on corporate governance (as per The Capital Markets Act, Cap 485A) places great emphasis on enhancing prosperity and realization of shareholders long term value. These publicly quoted companies therefore need to find ways of continuously differentiating themselves to gain competitive advantage to meet their shareholder expectations.

## **1.2 Research problem**

Knowledge management is the notion that seeks to represent how organizations create, use and protect knowledge (Armistead and Meakins, 2002). According to Malhotra (1998) knowledge management is necessary for companies because what worked yesterday may not work tomorrow and this applies for assumptions about organizational structure, the control and coordination systems, the motivation and incentive schemes and so forth. To remain aligned with the dynamically changing needs of the business environment, organizations need to continuously assess their internal theories of business for ongoing effectiveness so that today's core competencies do not become core rigidities tomorrow.

The findings on how publicly listed firms in Kenya are creating, using and protecting knowledge to create competitive advantage would be beneficial to not only the relevant industry sectors but also to potential investors and stakeholders. Linking organizational success with a successful knowledge management program resident in the firm would give impetus to the need for developing sound knowledge management strategies. Thus for organizations yearning for success the focus would then change to identifying core competencies, sourcing strategy and knowledge domains, formalizing existing knowledge, representing corporate memory in knowledge repositories, sharing knowledge in the

organization and working with virtual teams, creative thinking, intellectual property management and developing and marketing new knowledge – based services.

Malhotra (2002) confers that business environments put premium on continuous business innovation to deliver sustainable and competitively viable customer value propositions. Hence the design (and use) of the knowledge management program of the firm should ensure that adaptation and innovation of business performance outcomes occurs in alignment with changing dynamics of business environment to prevent the value these enterprises create and the value demanded by the changing market conditions, customer preferences, competitive offerings, changing business models, industry and structures and shareholders ([www.brint.org/WhyKMSFail.pdf](http://www.brint.org/WhyKMSFail.pdf)).

Publicly listed firms have shares that are traded every day. Investors and potential investors are looking for shares that are showing growth or potential for growth. Stakeholders of the publicly quoted firms are demanding of their managers to ensure their shares are growing consistently and the return on investment targets realized. Thus managers are under constant pressure to grow the firms in a very competitive and challenging environment. The question is: are firms listed in the Nairobi Stock Exchange aware that knowledge management is a strategic tool and, if so, are they using it to address changing business dynamics to create competitive advantage and ensure high return on investment?

### **1.3 Research objective**

This study had two objectives, namely:

- i. To establish the level of awareness of knowledge management in publicly quoted companies in Kenya.
- ii. To establish existence of knowledge management systems in publicly quoted companies in Kenya.

## **1.4 Scope of the study**

The survey covered all publicly quoted companies in the Nairobi Stock Exchange. Firms listed in all the four independent market segments of the stock exchange were targeted. These segments include the main investment market segment, the alternative investment market segment, the fixed income securities market segment and the newly created futures and options market segment. The listed companies in the Nairobi Stock exchange are located in various parts of the Republic of Kenya. These companies include government owned enterprises (parastatals), national and multinational ventures.

The study focused on unveiling the level of awareness on knowledge management and existence of knowledge management systems in publicly quoted firms in Kenya. It focused on variables such as use of knowledge creation, acquisition, protection, use, storage and sharing to create sustainable unmatched competitive advantage in companies listed in the Nairobi Stock exchange. The survey did not address why knowledge management systems fail.

## **1.5 Significance of the study**

To firms listed in the Nairobi Stock Exchange the study will highlight the significant role that knowledge management plays in creating sustainable unmatched competitive advantage. It will enable and encourage the managers to put more emphasis on their knowledge management systems in order to be more competitive.

To other firms not listed in the Nairobi Stock Exchange the study will encourage them to develop knowledge management systems. It will help their managers identify and appreciate knowledge management as a tool and strategy for creating sustainable and unmatched competitive advantage.

To shareholders of listed companies it will encourage them to request managers of their firms to put more emphasis and resources in knowledge management systems in order for their firms to develop unmatched competitive advantage and also in order to improve their return on investment.

To shareholders of firms not listed in the Nairobi Stock Exchange it will provide a basis for them to request the managers of their firms to benchmark on management practices and strategies that embrace knowledge management.

To the academic world the study will contribute to the existing literature in the field of strategic management in general and knowledge management in particular. It will act as a stimulus for further study and research to compliment and extend present studies carried out in Kenya in this area.

It is my sincere hope that the study will encourage the public, shareholders, institutions, firms and other users of knowledge to focus more on knowledge creation, acquisition, storage, protection and sharing it in a way that helps them create unmatched competitive advantage that meets their strategic objectives and intent.



## Chapter 2 Literature Review

### 2.1 Knowledge management

Strategists describe the inclusion of knowledge as a primary asset as the extension of the resource-based view of the firm and its subsets such as core competencies, organizational capabilities and dynamic capabilities (Barney, 1991). To be competitive, a firm must hone its knowledge-creating capabilities, defined as organizational capabilities that facilitate the generation of new knowledge, and measured by the quality of organizational problem solving. The knowledge creation capabilities result in a stock of new knowledge and subsequently have a positive impact on firm performance. Knowledge management is a key strategy that organizations are embracing to manage their organizational knowledge for strategic advantage.

Liebowitz (1999) looks at knowledge management as the process of creating value from an organization's intangible assets. To him knowledge management is the amalgamation of concepts from the applied artificial intelligence, software engineering, business process re-engineering, organizational behavior and information technology fields. It deals with creating, securing, combining, retrieving and distributing knowledge in the organization, both internally and externally.

Knowledge can be divided into explicit knowledge and tacit knowledge. Explicit knowledge can be captured, for example in written form. Tacit knowledge is much more difficult to capture since it is difficult to articulate. It may be a skill or know-how. According to Polanyi (1983), much knowledge is tacit. From this perspective, the creation of organizational knowledge depends on the creation of inter-subjective agreement or 'collective knowing'. He grouped knowledge into two categories, namely; design methodology and professional knowledge. He called professional knowledge 'knowledge in action' as it was acknowledged that it affected the decisions of a designer in a way that was very difficult to describe or generalize.

Argyris and Schon (1978, 1996) as well as Nonaka and Takeuchi (1995) qualified Polanyi's approach to sub divide knowledge into tacit knowledge and explicit knowledge. Popper (1966) argued that tacit knowledge by definition is, at best, difficult or, at worst impossible to articulate. It is deeply embedded in personal beliefs, attitudes, values and

experiences that give tacit knowledge its meaning. Nonaka and Takeuchi (1985) further stated that the design methodology is explicit knowledge, while the knowledge in action is tacit knowledge.

Tacit knowledge is that which has not been articulated. It may be a skill, know-how and may include personal held beliefs, perspective and values and mental models of the world. It is knowledge that is difficult or sometimes impossible to write down. Tacit knowledge can be subdivided into tacit specifiable knowledge and truly tacit knowledge. Tacit specifiable knowledge is knowledge that can be identified and made explicit upon reflection and will usually have been accumulated through experience but never articulated, either because it includes knowledge which has become embedded in one's perspective, behavior or work community. Truly tacit knowledge, on the other hand, cannot be specified. It is knowledge that we possess but do not actually know we possess. It is subconsciously integrated from explicit and tacit knowledge and may be used in times of heightened perceptual activity in order to solve complex problems or may include high speed and simultaneous tasks that cannot be slowed down or practiced slowly.

## **2.2 The process of knowledge management**

Liebowitz (1999) proposed an eight-stage process for knowledge management including identifying, capturing, selecting, storing, sharing, applying, creating and selling knowledge. Implementing such a knowledge management process requires several important considerations. Firstly, a knowledge management model based on a clearly thought out knowledge management strategy with support from top management. The senior management must be both committed to the strategy at corporate, functional and tactical levels.

Secondly, the creation of knowledge management officers' (sometimes known as chief knowledge officers) positions should be given priority. Such roles must have functional authority and the clout to constantly take a knowledge audit within the firm. The emergence and evolution of knowledge management as a needed organizational conceptual and operating practical framework in the business environment has led to the recognition that organizations' objectives could be more effectively achieved if they had a chief knowledge officer. These manage the processes of capturing, distributing and

effectively using knowledge. Having such a position could help send the message that knowledge is an asset to be managed and shared.

Thirdly, knowledge ontologies and knowledge repositories which serve as organizational or corporate memories in core competencies should be put in place. Fourthly, knowledge management systems and knowledge management tools should be designed in order to create a corporate infrastructure that supports the operationalization of knowledge management. Fifthly, incentive systems should also be put in place. Such systems will motivate employees to share knowledge and avoid information hoarding. This view is consistent with the argument advanced by Thomson and McNamara (2001). Lastly, there should be a supportive culture for knowledge management in the firm.

According to Soo and Devinney (2002) organizational learning and performance is a product of knowledge and capabilities of alliance partners. The greater the amount of knowledge flowing into the organization's problem-solving processes, the greater is its capability to solve problems effectively. Employees are constantly engaged in sourcing and generating knowledge hence the terminologies such as 'communities of practice', and 'communities of knowing'. To make an impact on performance, there is need to make an impact on organizational capabilities such as problem solving and decision making, hence the need to understand the organizational processes through which firms access and utilize the knowledge possessed by their members. Acquired knowledge therefore needs to be shared widely within the organization, stored as part of the company's knowledge base and utilized by those engaged in developing new technologies and products. Knowledge must be implemented in action-producing forms in order to create capability.

### **2.3 Organization learning and knowledge management**

In one of the earliest definitions, Argyris (1977) defined organizational learning as the process of detecting and correcting error. It focuses on process. Argyris and Schon (1978) expanded the definition to include individual learning and organizational learning where organizational learning occurs when members of the organization act as learning agents for the organization by detecting and correcting errors in theory in use and embedding the results of their inquiry in private images and shared maps of the organization. External organizational learning can be acquired through searching (by economic, technological or social reports), grafting (by new members, acquisitions or mergers) or collaborating (by joint ventures or consortiums).

According to Senge (1990) learning organizations are organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. He believes that organizations that will truly excel in the future will be the organizations that discover how to tap people's commitment and capacity to learn at all levels in an organization. For learning organizations it is not enough to survive. "Survival learning" or what is more often termed "adaptive learning" is important but for a learning organization this must be combined by "generative learning", that is, learning that enhances the organization's capacity to be creative. This generative learning cannot be sustained in an organization if people's thinking is dominated by short-term events.

Senge (1990) identifies five basic disciplines that converge to innovate learning organizations. First, the systems thinking as the corner stone of the learning organization. This is a conceptual frame work, a body of knowledge and tools developed to over the last 50 years to help organizations identify patterns and change them effectively. He postulated that businesses are systems bound by interrelated actions which often take years to fully play out their effects on each other. According to Senge, management often fails to see organizations as dynamic processes and tend to apply simplistic frameworks to what are complex systems in organizations. He argues that people learn best from their experience, but they never directly experience the consequences of many of their most important decisions as they tend to think that cause and effect will be relatively near to each other. Thus when organizations are faced with problems they focus on solutions that are close by or actions that produce improvements in a relatively short time span. However, when viewed in systems terms short term improvements often involve very significant long term costs. For example, cutting back on research and development can bring very quick cost savings, but can severely damage the long term viability of an organization. In systems thinking we must focus on quality feedback so that our responses are reinforced and balanced.

Secondly, the personal mastery which is the discipline of continually clarifying and deepening our personal vision, focusing our energies, developing patience and seeing reality objectively. Organizations learn only through individuals who learn and individual learning does not guarantee organizational learning but without it no organizational learning occurs (Senge, 1990). Mastery is therefore a special kind of proficiency that goes beyond competence and skills, although it involves them. The discipline entails developing

personal vision; holding creative tension (managing the gap between our vision and reality); recognizing structural tensions and constraints, and our own power (or lack of it) with regard to them; a commitment to truth; and using the sub-conscious.

Mental models are the third discipline. These are deeply ingrained assumptions, generalizations, or even pictures and images that influence how we understand the world and how we take action. Mental models of what can or cannot be done in different management settings are no less deeply entrenched. Many insights into new markets or outmoded organizational practices fail to get put into practice because they conflict with powerful, tacit models. According to Senge, if organizations are to develop a capacity to work with mental models then it will be necessary for people to learn new skills and develop new orientations, and for there to be institutional changes that foster such change. Entrenched mental models thwart changes that could come with systems thinking. Moving the organization in the right direction entails working to transcend the sorts of internal politics and game playing that dominate traditional organizations. It means fostering openness and it involves seeking to distribute business responsibly far more widely while retaining coordination and control.

Building shared vision is the fourth discipline. Senge believes that one idea about leadership which has inspired organizations for years is their capacity to hold a shared picture of the future they seek to create. Organizations only sustain greatness in the presence of goals, values and mission that become deeply shared throughout the organization. For example: IBM and "service", Ford and "public transportation for masses", Apple and "computing power for masses". These organizations managed to bind people together around a common identity and sense of destination. Such a vision has the power to be uplifting and to encourage experimentation and innovation. Vision also fosters long term thinking within the organization. Genuine vision encourages workers to learn, not because they are told, but because they want to. Many leaders have personal visions that never get translated into shared visions that galvanize an organization.

The last discipline is team learning. This is the process of aligning and developing the capabilities of a team to create the results its members truly desire. It builds on personal mastery and shared vision and starts with dialogue: the capacity of members of a team to suspend assumptions and enter into genuine thinking together. Senge (1990) argues that "when dialogue is joined with systems thinking, there is a possibility of creating a language more suited for dealing with complexity, and of focusing on deep-seated structural issues and forces rather than being diverted by questions of personality and leadership style.

The role of a firm in the process of knowledge creation is to bring together the diversity of ideas and perspectives of individuals and harness the creative energy in team activities. Teams of individuals experiment with combinations of ideas to create innovative processes and products that no one individual could have conceptualized or practically produced alone. Knowledge management, organizational learning and corporate entrepreneurship are the triplets that corporate strategy has delivered in an increasingly competitive environment. Each of these is derived as a team activity and requires a shared language to communicate ideas and sufficient trust amongst the players so that breakthrough insights are well articulated and shared.

The creation of new organizational knowledge is strongly influenced by the interaction between the individual knowledge and the firm's knowledge base (Thomson & McNamara, 2001). The firm's knowledge is embedded in its routines, culture, group behaviors and hierarchy and, on average, the knowledge stored in these systems will be a more accurate reflection of reality than the individual's view. However, it is only through the diversity of the individuals' knowledge that the firm can change its view of the world and hence its capabilities.

#### **2.4 Issues and misconceptions in knowledge management**

The first misconception is that knowledge management is not about technology. Knowledge that supports an organization's processes and decision making capabilities is an absolutely vital resource, but it is often mismanaged or under managed. One important aspect of knowledge management is having a culture that fosters collaboration and sharing. Organizations often fail to acknowledge that it is the people, not technologies, that are the source of knowledge. Technologies do (can) enable access and add value when designed to enable people to apply knowledge (Brath, 1999).

The second misconception is that technology facilitates the practice of knowledge management. The emergence of affordable, manageable data warehouses and data marts, combined with browser access to those back end systems and easy to use desk top analyst tools, have made it feasible for businesses to open up these strategic data bases to more users. Also the value of data warehouses increase in proportion to the number of people who can access it (Foley, 1999). Knowledge management is successful when technology is harnessed so that people have access to the information they need, when they need it, and then use it to evaluate problems and opportunities

instead of focusing on processes and procedures. Technology as an enabler should be used to ensure that employees collect the knowledge that resides within the organization to respond with creativity and speed to the challenges in the market place. The success of knowledge management depends on broad participation among employees, which in turn rests on tangible and intangible incentives that encourage sharing behavior.

Another misconception is that organizational knowledge resides in culture, structures, technologies, and the unique configuration of individuals that make up the organization. More specifically it resides in the following processes and systems: as key organizational knowledge as reflected in the corporate mission, objectives and strategies; as task knowledge as reflected in the corporate functions and processes; as individual knowledge as reflected in organizational structure and individual roles (Foley, 1999).

## **2.5 The challenges of knowledge management**

In organizations where evaluation, promotion, or compensation is based on relative numbers, the perception is that knowledge sharing will reduce the chances of success of promotion. It will therefore be difficult to establish an effective knowledge management program in such organizations. Because of downsizing by many firms, many knowledge workers have lost a sense of loyalty to the organization they work for (Agnus et al., 1998). Managers must embrace diversity and acknowledge that culture and structure influence each other and for this reason, internal policies and practices should be coherent and support central message conveyed by the culture. Externally, the competitive environment will affect the way that 'cultural messages' are interpreted and enacted.

Tacit knowledge will continue to be a challenge to the knowledge management and it will be important to make a clear distinction between that part of expertise that is unexpressed but expressible and that part of expertise that is simply inexpressible. Whereas the importance of explicit knowledge should not be undermined, it is the tacit knowledge that often drives innovation within organizations, but people will not willingly share it with coworkers if their workplace culture does not support learning, cooperation and openness.

Another challenge is intellectual property. Experts will be willing to share their expertise only in so far as what they own can be protected or compensated for. What counts as intellectual property is far more complex and ambiguous than what can be copyrighted. There is need for corporate willingness to accept changes. According to Botkin (1999), nearly two thirds of Information Technology (IT) managers say their biggest barrier to implementing knowledge management practices or procedures are behavior modification

required of employees and the difficulty of obtaining a buy-in from management. Knowledge creation, sharing and management must permeate the entire fabric of an organization.

The lack of a systems approach to capture knowledge also poses a major challenge. Experienced executives and middle managers are walking out with everything they know about those businesses and leaving them to a high turnover population, which has only a fraction of the knowledge about the industry and how the company works (Cuthbertson, 1999). The management must create a system that would help it leverage both tacit and explicit knowledge otherwise the organization will experience corporate amnesia (the organization fails to retain knowledge acquired and lessons learnt in the past as people who had the lesson leave or do not share the knowledge they have acquired over the years) or sub-optimal decision-making (the best knowledge available, if not applied correctly, leads to sub optimal decision making) or wasted resources (since the organization does not really know what it knows it fails to capitalize on potential new initiatives).

Lastly, the implementation of knowledge management infrastructure and processes is costly in terms of both human and financial resources. Substantial time and effort go into the examination, evaluation and change when needed. Products supporting various knowledge management processes are fairly expensive and might be prohibitive for smaller institutions with low budgets and very limited discretionary resources.

## **2.6 Knowledge management and organizational structure**

Senge (1990) acknowledges that developing and expanding an organization's knowledge base is dependent on the social architecture or organizational context that exists within a company. This embraces leadership, culture, structure, infrastructure and communications. Organizational leadership provides a vision and strategic intent for the organization that recognizes the importance of knowledge, and provides a leadership style that supports learning and innovation. The structure of the organization should permit experts to share ideas and should be holistic, allowing ideas to be shared across the whole organization. The infrastructure and communications system of an organization refer to the use of effective information and communication technology, particularly networks (intranets, extranets and the internet), and plays an important role in the storage and diffusion of knowledge within the organization.



Grant (1996) argued that the primary role of the firm is the coordination of knowledge through mechanisms such as routines and group problem solving. Thus, employees are constantly engaged in sourcing and generating knowledge. However, to make an impact on performance, this needs to make an impact on organizational capabilities such as problem solving and decision-making. It follows that knowledge accumulation does not automatically enhance organizational performance – hence the need to understand the organizational structure and processes through which firms access and utilize the knowledge possessed by their members.

Acquired knowledge needs to be shared widely within the organization, stored as part of the company's knowledge base and utilized by those engaged in developing new technologies and products. There is substantial empirical evidence pointing to a positive relationship between knowledge, innovation, structure and financial performance at both the firm and industry level. Banbury and Mitchell (1995) found that the introduction of incremental product innovations strongly influenced market share and business survival. Innovation has been attributed to improved stock price performance (Chaney and Devinney, 1992), persistent profitability, sales growth and productivity growth (Chakrabarti, 1990).

## **2.7 Optimizing the knowledge environment**

According to Brand (1998) a sophisticated knowledge management system in the wrong environment will achieve little in the way of knowledge creation and sharing. Having a culture that fosters collaboration and sharing is a very important aspect of knowledge management. In most organizations data warehouses will contain the information of all the products and services that a company sells – component part numbers, quantities sold, back orders, inventory supplies, customer listing, prices etc. Detailed data on everything you do and everything you do with it is all available internally. The question remains “who gets access to all these information?” The answer to this question reveals something about the culture of the organization, the nature of competition in its business, and the relationship it has with its customers and suppliers (Foley, 1999).

In the current dynamic environment, only those organizations capable of sharing knowledge efficiently and effectively can create sustainable competitive advantage. These learning organizations evaluate their core processes, capture insights in their findings,

combine their skills and experiences, innovate and apply the newly refined ideas quickly. In a knowledge economy even a manufacturing company can obtain a competitive advantage through knowledge-based competencies like technological know-how, process and product creation skills, problem solving expertise, personal creativity, and the ability to innovate. Organizations must align knowledge management projects with business objectives to optimize the knowledge environment.

Knowledge in many large decentralized organizations is going to waste because hardly anyone knows it exists. In most cases the organizations do not really know what they know, hence they fail to capitalize on potential new initiatives and opportunities. The top issue in knowledge management is getting the right information to the right people at the right time. The top goal is to use knowledge as fuel for innovation – the only competitive advantage organizations can sustain indefinitely (Hibbard, 1997). More and more organizations are becoming dependent on knowledge in the form of procedures, patents, process expertise, management skills, technologies, customer and market information, and company history. Organizations often fail to retain knowledge acquired and lessons learnt in the past. Organizational knowledge must be shared with people and departments within the enterprise as well as with partners, suppliers, distributors and other facilitators. According to Eckhouse (1999), organizations waste knowledge all too often. Organizations that formalize the process of identifying, capturing, cataloging, and providing a means for retrieval of information are more likely to get value out of knowledge and expertise. Creating new knowledge is not simply a matter of learning from others or acquiring knowledge from the outside. Knowledge creation requires intensive and laborious interaction among members of the organization including learning centers via an online virtual learning system that is available all the time. This kind of systems should not only contain data from within the organization but also develop links to facilitate collaborative learning (Meek, 1999). Also knowledge stories told by knowledge workers to new employees to reinforce the organization's values and atmosphere that encourage innovation improves the knowledge environment.

Globally intellectual capital is becoming the most valuable organization resource and chief weapon to fight competition. Companies are challenged to rediscover their own intellectual capital. In knowledge economy, brainpower (knowledge) is the number one asset. Employee knowledge, ideas, and business methodologies that help propel innovation must be considered highly valuable assets. It is for this reason that companies such as Anderson Consulting, Ford, and Monsanto encourage employees to put "tacit" knowledge – the know-how in their heads into "explicit" form, such as written reports or

video taped presentations. This captured knowledge is stored in repositories such as group-ware, data bases, intranet web servers, and streaming media servers, all of which users can search, retrieve, and use (Hibbard, 1999).

Lastly, managers need to pay attention to the less formal and systematic side of knowledge and start focusing on highly subjective insights, intuitions, or experiences (Nonaka and Takeuchi, 1995). The insights should then be converted into explicit knowledge that can be shared within the organization.

## **2.8 The value of knowledge management**

The value of knowledge results from the way in which it is used in the firm's processes in the production of products and services, and firms can build their competitive advantage by using the capabilities that arise from knowledge assets in ways which are difficult for others to imitate or replicate, as well as the intellectual property associated with the assets. The management of intangible assets, particularly individual and organizational knowledge can be extremely challenging due to the inherent difficulties in articulating, understanding, developing and transferring them.

In their seminal work, Nonaka and Takeuchi (1995) highlighted the critical importance of knowledge creation to the long-term success of the organization. Many authors such as Bell (1973) and Stehr (1994) have advanced the view that tacit knowledge is generally not systematically identified and managed. This makes it important to have knowledge management systems that aim at capturing and maximizing on the knowledge of the employees. Such a system becomes the bedrock for long-term prosperity and sustainable competitive advantage. Through such systems, the rate of innovation and the need to think not only 'inside-out' but much more importantly 'outside-in' at the corporate level is accelerated.

The advances in technology allow the creation of knowledge management infrastructures, which facilitate rapid access to and sharing of knowledge throughout the organization. The advent of portal technology, for example, has dramatically changed the way information and knowledge are created, captured, accessed and shared. Technologies that support knowledge management have made virtual organizations a reality. This has in turn reduced operational and transaction costs, making it possible to increase their competitiveness on the basis of cost leadership. Technological advancements have also

quickened the pace of innovation, but it has also led to shortened corporate lifespan for those firms that do not awaken to the competitive calls.

A well thought out and implemented knowledge management framework can improve dramatically the ability of firms to respond to and interact with its many different customers. In functional and operational terms, this can excite the marketing experts, strategists as well as those who are in the operational circles as it entails customer relationship management and touches the core of value creation – the customer – from which wellsprings of strategy emerge.

Techniques such as data mining provide organizations with a powerful way of understanding data residing in various organizational databases and data warehouses by discovering patterns and making predictions that can help craft better strategies for improving access and success, as well as organizational effectiveness in general. In addition, document and content management can enhance the overall ability of any employee to better understand the functions, operations and processes within an organization through direct access to the knowledge embedded in many policies, procedures and other document (Gao, Li and Nakamori, 2000).

A comprehensive knowledge management infrastructure can improve operational efficiency by enhancing collaboration between individuals and organizational units and by enabling employees to conduct operations that in the past required the expertise of a centralized department. A catalyst in the knowledge management process has been the improvement and the expansion of information and communication systems, including the internet, corporate intranets and extranets that permit the capture and sharing of intra- and inter-organizational knowledge. These have helped organizations breed new ideas that assist organizations in implementing major initiatives in the pursuit of continuous improvement. Technological focus, while acknowledged as a knowledge facilitator, is not the only critical success factor in knowledge management (Foley, 1999).

The true value of knowledge hinges on converting tacit knowledge into usable, explicit knowledge, and technology has been less successful in this. Knowledge must be protected, cultivated and shared among organizational members and stakeholders to create lasting competitive advantage.

## **Chapter 3 Research Methodology**

### **3.1 Research design**

The researcher was interested in establishing the level of awareness of knowledge management and existence of knowledge management systems in firms listed in the Nairobi Stock Exchange. In order to establish these phenomena a cross - sectional survey study was used. Surveys are conducted in case of descriptive research and are concerned with describing, recording, analyzing and interpreting conditions that either exist or existed. Surveys are also concerned with relationships that exist, opinions that are held, processes that are going on, effects that are evident or trends that are developing (Kothari, 2004). Cross sectional studies focus on the relationship between different variables at a point in time in a given population.

Survey studies are primarily concerned with the present but at times do consider past events and influences as they relate to current conditions. Thus variables that exist or have occurred are selected and observed. Surveys allow for hypothesis formulation and testing the analysis of the relationship between non-manipulated variables.

### **3.2 Population**

The population of the study was all the publicly quoted companies in Kenya. As at 31<sup>st</sup> December 2006, there were fifty two such firms.

### **3.3 Sampling**

Mail questionnaires were sent to all the publicly quoted companies in Kenya. As at 31<sup>st</sup> December 2006 there were fifty two such firms and thirty nine of these firms responded. These thirty nine respondents effectively formed the sample for the study.

### **3.4 Data collection**

Primary data was collected through mailing questionnaires to respondents who were expected to read and understand the questions and write down the reply in the space meant for the purpose in the questionnaire itself. This method of data collection was chosen because it is low cost as the population of study was fairly spread geographically across the country. The method allowed for respondents who were not easily

approachable to be reached conveniently. The general form of the questionnaire was structured in nature and the questions were presented with exactly the same wording and in the same order to all respondents. The questionnaire contained fixed alternative questions in which the responses on the informants were limited on the stated alternatives. Comments in the respondent's own words were held to a minimum. This sort of standardization was adopted to ensure that all respondents reply to the same set of questions. In addition structured questionnaires are simple to administer and relatively inexpensive to analyze (Kothari, 2004).

In order to make the questionnaire effective and to ensure quality to the responses received, the researcher paid attention to the sequence in preparing the questionnaire. Close-ended questions were used to obtain ranking of qualitative data and open-ended questions were used where participants were asked to comment or tell about their view on knowledge management. The questionnaire was divided into three sections. Section A generated general information of the firm. Section B focused on the level of awareness of knowledge management in the firm. Section C highlighted the existence of knowledge management system in the firm. Sections B and C addressed the research objective. One questionnaire per company was sent to the head of strategy department, business development or marketing department. They were the target respondents because of their involvement in defining and implementing the firm's strategy. To establish the level of awareness of knowledge management in publicly quoted firms in Kenya the researcher was interested in variables such as the use of the term 'knowledge management'; existence of a knowledge management strategy; the significance of knowledge management in the firm's marketing plan, in improving customer focus, in employee development, in revenue growth, in making investment decisions, in reducing costs of operation and in defining corporate or product strategy.

To establish the existence of knowledge management systems the researcher focused on variables such as presence of knowledge management model; presence of knowledge management officers for capturing, distributing and using knowledge; presence of knowledge repositories for corporate memories and competencies; presence of corporate infrastructure to support operationalization of knowledge management and presence of a supportive culture of sharing knowledge to create sustainable competitive advantage within the firm

In order to minimize non responses a follow up was done via personal interviews, telephone calls or e-mail correspondence to facilitate responses and to enhance the response rate. Out of the 52 listed companies targeted with the mail questionnaires 39 responded, giving a response rate of 75%.

### **3.5 Data analysis**

Feedback from the completed questionnaires was the basis of quantitative analysis. Data collected from the respondents was edited for completeness and accuracy to ensure that minimum data quality standards had been achieved. Descriptive methods of data analysis based on variables included frequency table, measures of central tendencies (mean and mode) and percentages were used. The mean is a simple measurement of central tendency and is better than other averages, especially in social studies where direct quantitative measurements are possible (Kothari, 2004). The mode is a positional average and enables the researcher to identify which item or element of awareness of knowledge management and existence of knowledge management system has a maximum concentration (frequency).

The Chi –square test method was used to enable the researcher establish relationships between two or more variables and was based on frequencies generated during the study. The Chi – square test method is a statistical measure used in the context of sampling analysis for comparing a variance to a theoretical variance. As a parametric test it can be used to determine if categorical data shows dependency or the two classifications are independent. It enables researchers to test the significance between two attributes and also test the homogeneity or significance of population variance (Kothari, 2004). This method was effectively used in other related studies in the past (Ogachi, 2002)

## Chapter 4 Findings and Discussion

All 52 listed companies were targeted and sent the mail questionnaires and a total of 39 firms responded as indicated in appendix 3. This represented 75% of publicly listed companies in Kenya. Respondents were asked to indicate the name of the firm, which category of the stock exchange the firm belonged to, the number of years the respondents had been with the firm and the firm's annual turnover.

**Table 1: Distribution of companies by sector**

Sector	Frequency	Percent
Industrial and Allied	13	33.3
Commercial and Services	12	30.8
Finance and Investment	8	20.5
Agriculture	4	10.3
Alternative Investment segment	2	5.1
Total	39	100.0

Source: Research finding

Table 1 above shows the distribution of the companies by the sectors they belong to, it shows that 33.3% of the companies interviewed were from the Industrial and Allied sector, 30.8% were from the Commercial and Services sector, Financial and Investment had 20.5%, 10.3% from the Agricultural sector and the remaining 5.1% were from the Alternative Investment sector.

To find out how long the specific respondent had worked with the organization, they were asked to indicate the number of years they have worked with the firm. According to the findings in table 2 below, most of the respondents, 69.2%, had been in the organization for not more than five years, 28.2% had worked for between six to ten years and only 2.6% of the respondents had served for over 20 years.

**Table 2: Number of years with the firm**

Years	Frequency	Percent
0-5 years	27	69.2
6-10 years	11	28.2
Over 20 years	1	2.6
Total	39	100.0

Source: Research finding



Annual turnover, in Kenya shillings, was used to determine the sizes of the firms involved in the study. According to the findings as shown in table 3 below, majority, 38.5%, of the firms under the study had annual turnover above 10,000 million shillings, this was followed by 25.6% of them which had annual turnover between 5000 million and 10000 million shillings, 23.1% of them had annual turnover of between 1000 million and 5000 million shillings and about 10% had turnover between 500 million and 1000 million shillings. The remaining 2.6% of the firms under study had turnover below 500 million shillings.

**Table 3: Distribution of the firms by annual turnover**

Turnover	Frequency	Percent
Up to 500 million	1	2.6
501 million to 1000 million	4	10.3
1001 million to 5000 million	9	23.1
5001 million to 10000 million	10	25.6
Over 10000 million	15	38.5
Total	39	100.0

Source: Research finding

Section B of the questionnaire dealt with the level of awareness of knowledge management in the firm. When asked whether the company uses the term knowledge management to describe their activities, 51.3% of the firms reported that they do not use the term knowledge management to describe activities while 48.7% of the firms indicated that they use the term to describe their activities as shown in table 4 below.

**Table 4: Does your firm use the term KM to describe any of its activities (past, current, or planned)?**

	Frequency	Percent
Yes	19	48.7
No	20	51.3
Total	39	100.0

Source: Research finding

When respondents were asked if they were aware of the term 'knowledge management', 51.3% of the firms were not aware of the term knowledge management while 48.7% of them were aware of the term as indicated in Table 5 below.

**Table 5: Would you say that you are aware of the term KM?**

	Frequency	Percent
Yes	19	48.7
No	20	51.3
Total	39	100.0

Source: Research finding

**Table 6: Does your organization have a knowledge management strategy?**

	Frequency	Percent
Yes	24	61.5
No	15	38.5
Total	39	100.0

Source: Research finding

Table 6 above shows that 61.5% of the organizations interviewed have knowledge management strategy in their firm and 38.5% do not have knowledge management strategy.

**Table 7: Level of application of knowledge management in the firm**

	Yes		No		Total	
	Count	%	Count	%	Count	%
Does your firm have a shared KM vision?	23	59.0 %	16	41.0 %	39	100.0 %
Does your firm have a system that promotes acquisition and strategic use of knowledge in place?	25	64.1 %	14	35.9 %	39	100.0 %
Does your firm have a realistic time plan for implementing the KM strategy?	24	61.5 %	15	38.5 %	39	100.0 %
Is there an incentive system for knowledge based performance in your organization?	26	66.7 %	13	33.3 %	39	100.0 %
Is the KM strategy enterprise-wide (shared by all) in your organization?	21	53.8 %	18	46.2 %	39	100.0 %

Source: Research finding

Table 7 above shows the level of knowledge management within the firms studied. According to the study 59% of the firms interviewed have a shared knowledge

management vision while 41% do not have a shared knowledge management vision. Out of the firms studied 64.1% have a system that promotes acquisition and strategic use of knowledge while the other 35% do not have. It also shows that 61.5% of the organizations have put in place a realistic time plan for implementing the knowledge management strategy while 38.5% have no implementation plan. The findings also show that 66.7% of the organizations have incentive systems for knowledge based performance and the remaining 33.3% have not put such in place. As to whether the existing knowledge management strategy is enterprise wide (shared by all), it shows that 53.8% have enterprise-wide strategy while 46.2% do not have enterprise wide strategy.

**Table 8: Potential role that effective knowledge management can play**

Role in	Critically Important		Very Important		Some what Important		Not Very Important		Unimportant		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Improving competitive advantage	19	48.7%	6	15.4%	8	20.5%	3	7.7%	3	7.7%	39	100.0%
Marketing	21	53.8%	8	20.5%	6	15.4%	1	2.6%	3	7.7%	39	100.0%
Improving customer focus	15	38.5%	6	15.4%	11	28.2%	4	10.3%	3	7.7%	39	100.0%
Employee development	15	38.5%	4	10.3%	13	33.3%	4	10.3%	3	7.7%	39	100.0%
Product innovation	10	25.6%	4	10.3%	12	30.8%	7	17.9%	6	15.4%	39	100.0%
Revenue growth	16	41.0%	5	12.8%	11	28.2%	4	10.3%	3	7.7%	39	100.0%
Reducing costs	20	51.3%	6	15.4%	8	20.5%	2	5.1%	3	7.7%	39	100.0%
Investment decisions	14	35.9%	3	7.7%	12	30.8%	7	17.9%	3	7.7%	39	100.0%
Defining corporate or product strategy	13	33.3%	4	10.3%	14	35.9%	5	12.8%	3	7.7%	39	100.0%

Source: Research finding

From table 8 above the respondents indicated that knowledge management was important in the following proportions; in improving competitive advantage of the firm (up to 84.6%), in marketing (up to 89.7%), in improving customer focus (up to 82.1%), in employee development (up to 82.1) in product innovation (up to 66.7), in revenue growth (up to 82%), in cost reduction (up to 87.2%), in investment decisions (up to 74.4%) and in defining corporate or product strategy (up to 79.5%).

**Table 9: Would you say that your organization has used (is using) KM to create competitive advantage?**

	Frequency	Percent
Yes	23	59.0
No	16	41.0
Total	39	100.0

Source: Research finding

Table 9 above indicates that 59% of the organizations interviewed use knowledge management to create competitive advantage over their competitors while 41% do not use knowledge management to create competitive advantage.

Only 30.8% of firms described the role knowledge management played in creating competitive advantage in their firms as indicated in table 10 below. Those who responded mentioned that knowledge management played the following roles in creating competitive advantage, namely; it enhanced knowledge within the staff (8.3%), it helped to understand strong and weak points of the firm (16.7%), it enabled firm to create programs that led to greater innovation (16.7%), it helped company pioneer development (16.7%), it ensured high quality of products and services (16.7%) and it ensured employees are highly skilled and knowledgeable in working places (8.3%).

**Table 10: Describe the role KM plays in creating competitive advantage in your organization?**

Description of role	Frequency	Percent	Valid Percent
Enhancing Knowledge within staff	1	2.6	8.3
Get to understand strong and weak points	2	5.1	16.7
Enables firm create programs that lead to greater innovation	2	5.1	16.7
Company pioneer development	2	5.1	16.7
Use of industry knowledge and lead in development	2	5.1	16.7
To ensure high quality of products and services	2	5.1	16.7
Employees are highly skilled & knowledgeable in working areas	1	2.6	8.3
Non response	27	69.2	

Source: Research finding

Section C of the questionnaire focused on the existence of a knowledge management system in the firm. Various questions were asked and the responses are summarized below.

**Table 11: Do you have a KM system in your firm?**

	Frequency	Percent
Yes	25	64.1
No	14	35.9
Total	39	100.0

Source: Research finding

Despite the fact that only 48.7% of the organization reported to be aware of the term knowledge management (see table 5), 64.1% of the organizations interviewed indicated that they have some kind of knowledge management system while 35.9% do not have any knowledge management system in their organization as shown in table 11 above.

**Table 12: Was your firm's KM system introduced as a part of more comprehensive firm strategy?**

	Frequency	Percent
Yes	23	59.0
No	6	15.4
Not applicable	10	25.6
Total	39	100.0

Source: Research finding

Table 12 above shows that 59% of the firms interviewed introduced knowledge management as part of a comprehensive firm strategy, 25.6% which reported as not applicable are among the firms which do not have any knowledge management system, however there are 15.4% which have knowledge management system but did not introduced it as part of a comprehensive firm strategy.

**Table 13: How many years have you had a KM system in your firm?**

Mean	6.70
Median	5.50
Mode	3
Std. Deviation	4.357
Range	18
Minimum	2
Maximum	20

Source: Research finding

According to the statistics in the table 13 above knowledge management system have been in place for an average of six years and eight months among the firms studied while most of the firms have had it for three years. Of those which have had knowledge management in place two years is the shortest period and the longest period is 20 years.

**Table 14: Does your organization conduct KM audit to establish what knowledge it has?**

	Frequency	Percent
Yes	12	30.8
No	27	69.2
Total	39	100.0

Source: Research finding

The findings in table 14 above shows that about 69.2% of the firms do not conduct knowledge management audit to establish what knowledge they have, while only 30.8% of the them reported that they have had knowledge management audit in their firms.

**Table 15: Does the leadership of the organization pursue strategies based on intangible resources such as intellectual property?**

	Frequency	Percent
Yes	7	17.9
No	32	82.1
Total	39	100.0

Source: Research finding

The findings in table 15 above indicates that only 17.9% of the organizations pursue strategies based on intangible resources such as intellectual property while all the remaining 82.1% do not pursue strategies based on intangible resources such as intellectual property. Only 2.6% of the few who pursue strategies based on intangible resources such as intellectual property also say that company pursues strategies if somebody brings a good idea that can improve company when it is implemented. Another 2.6% of this group indicated the firms pursue strategies based on the changing trends in the industry.

As indicated in table 16 below, about 50% of those who responded felt that one of the reasons for their organizational leadership to pursue knowledge based strategies was if an employee brought a good idea that could improve company if implemented. Another 50% of respondents felt changing trends in the industry was a reason for the leadership to pursue knowledge based strategies.

**Table 16: Reasons for organizational leadership to pursue knowledge based strategies.**

Reasons	Frequency	Percent	Valid Percent
If somebody brings a good idea that can improve company when it is implemented	1	2.6	50.0
Company pursues strategies based on changing trend in industry	1	2.6	50.0
Total	2	5.1	100.0
Non response	37	94.9	
Total	39	100.0	

Source: Research finding

**Table 17: Does the organization encourage emergence of KM champions who disseminate ideas of change and establish the organization's strategic positioning?**

	Frequency	Percent
Yes	21	53.8
No	18	46.2
Total	39	100.0

Source: Research finding

Table 17 above shows that 53.8% of the companies encourage emergence of KM champions who disseminate ideas of change and establish the organization's strategic positioning and 46.2% of the companies do not encourage that.



**Table 18: Importance of factors affecting success of KM system**

Factor affecting success of KM system	Unimportant		Not very important		Somewhat important		Very important		Critically important		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Knowledge-sharing culture	0	0.0%	6	15.4%	2	5.1%	27	69.2%	4	10.3%	39	100.0%
Senior management support	4	10.3%	1	2.6%	8	20.5%	13	33.3%	13	33.3%	39	100.0%
Team learning and willingness to develop corporate strategy together	0	0.0%	6	15.4%	3	7.7%	17	43.6%	13	33.3%	39	100.0%
KM participation incentives (other than work-related benefits)	3	7.7%	5	12.8%	19	48.7%	12	30.8%	0	0.0%	39	100.0%
An effective KM audit	4	10.3%	10	25.6%	18	46.2%	4	10.3%	3	7.7%	39	100.0%
A formal KM task force	3	7.7%	11	28.2%	5	12.8%	16	41.0%	4	10.3%	39	100.0%
Effective communications regarding the KM program	3	7.7%	2	5.1%	4	10.3%	21	53.8%	9	23.1%	39	100.0%

Source: Research finding

The findings contained in table 18 above shows that over 79.5% of the firms regard knowledge sharing culture as either very important or critically important in achieving an effective knowledge management system while 20.5% of them think it is somewhat important or not important. Senior management support is at least very important to 66.6 % of the firms, 23.5 % regard it as just somewhat important or not very important while about 10.3 % feel it is unimportant.

Team learning and willingness to develop corporate strategy together is also rated as at least very important to critically important by over 76.9 % of the firms with only about 7.7 % rating it as somewhat important or not very important and on the other hand only 30.8%

of the firms rated knowledge management participation incentives as very important, about 60% of the rated it as either not very important or somewhat important.

Over 71.8 % of the firms consider an effective knowledge management system audit as not important or just somewhat important while 18 % of them considered it as at least very important to critically important. To 51.3% of the firms a formal task force is at least very important to critically important, however about 41% believe effective task force is either not very important or somewhat important while 7.7% said it is not important to have an effective task force to achieve a successful knowledge management system. Effective communications regarding the knowledge management program is however rated as very important or critically important by more than 76 % of the organizations in achieving an effective knowledge management system, 10.3% regard it as somewhat important, 5.1% think it is not very important while 7.7% said it is simply not important to them.

Table 19 below shows the average ratings of the factors affecting the success of the knowledge management system. The factors are ranked starting with the most important factor to the least important. It therefore indicates that for the success of knowledge management system, team learning and willingness to develop corporate strategy together had the highest mean and is the most important factor to consider, it is then followed by effective communications regarding the KM program and lastly Support from the senior management, then cultivation of knowledge sharing culture and the least important is having a formal task force.

**Table 19: Rating of factors affecting success of KM systems in the firms**

Factors important in the success of KM system	N	Min	Max	Mean	Std. Dev
Team learning and willingness to develop corporate strategy together	39	2	5	3.95	1.025
Effective communications regarding the KM program	39	1	5	3.79	1.105
Senior management support	39	1	5	3.77	1.245
Knowledge-sharing culture	39	2	5	3.74	.850
A formal KM task force	39	1	5	3.18	1.189
KM participation incentives (other than work-related benefits)	39	1	4	3.03	.873
An effective KM audit	39	1	5	2.79	1.031

Source: Research finding

Finally an open ended question was asked to ascertain descriptive statistics pertaining to what the respondents would consider major challenges in knowledge management in their organizations. The results were as documented in table 20 below.

**Table 20: What would you consider a major challenge in KM in your organization?**

Challenges	Count	Pct of Responses	Pct of Respondents
Implementation of new ideas is difficult	3	21.4	27.3
Organization culture and KM plan develop	1	7.1	9.1
Reluctant by employees especially management	2	14.3	18.2
Effective communication and knowledge sharing	3	21.4	27.3
It has a limited understanding up and awareness	2	14.3	18.2
Limited knowledge in IT	1	7.1	9.1
Political interference in the management	1	7.1	9.1
Difficulty in changing historical cultural	1	7.1	9.1
Total	14	100.0	

Source: Research finding

When asked to list some of the major challenges the respondents faced in knowledge management in their firms, only 14 out of 39 firms responded. Those who responded said the most common challenges included effective communication and knowledge sharing (27.3% of respondents) , the difficulties faced in implementing new ideas (27.3% of respondents), reluctance by employees especially management to follow through with knowledge management process (18.2% of respondents), that firms had limited knowledge management understanding and awareness (18.2% of respondents), insufficient knowledge in IT (information technology) to optimize knowledge management (9.1%), some have political interference in management (9.1% of respondents) while others have difficulties developing organization culture and knowledge management plan (9.1% of respondents). Another challenge in knowledge management in the organizations identified by 9.1% of the respondents was difficulty in changing historical organizational culture.

**Table 21: Relationship between awareness of the term KM and the existence of a KM system**

		Do you have a KM system in your firm?			
			Yes	No	Total
Would you say that you are aware of the term KM	Yes	Count	17	2	19
		%	89.5%	10.5%	100.0%
	No	% of Total	43.6%	5.1%	48.7%
		Count	8	12	20
		%	40.0%	60.0%	100.0%
		% of Total	20.5%	30.8%	51.3%
Total		Count	25	14	39
		%	64.1%	35.9%	100.0%
		% of Total	64.1%	35.9%	100.0%

Source: Research finding

To determine if there is any relationship between awareness of the term knowledge management and the existence of a knowledge management system, the relevant variables were subjected to crosstab analysis as indicated in table 21 above. The contingency table above shows that most, about 90%, of the organizations which reported to be aware of the term knowledge management have implemented a knowledge management system in their firm. It also indicates that 40% of the firms which are not aware of the term have reported to have the knowledge management system, this phenomena could be a recognition that the firms has and use knowledge management system but do not recognize it as a line of management. On the other hand majority, 60%, of the organization which reported not to be aware of the term have not implemented the KM system.

Chi-square test was carried out and indicated that there is a very significant association between awareness of the term and implementation of the system, with a chi-square value of 10.364 and a degree of freedom of one and a significance level of 99%. The findings above are indications of the wide spread awareness and existence of the knowledge management system among the publicly quoted companies. It is however important to note that some existence of the knowledge management system are by default not plan.

**Table 22: Existence of association relationship between whether KM system was introduced as a part of more comprehensive firm's strategy and existence of a KM system in the firm**

		Do you have a KM system in your firm?			
			Yes	No	Total
Was your firm's KM system introduced as a part of more comprehensive firm strategy	Yes	Count	21	2	23
		%	91.3%	8.7%	100.0%
		% of Total	53.8%	5.1%	59.0%
	No	Count	2	4	6
		%	33.3%	66.7%	100.0%
		% of Total	5.1%	10.3%	15.4%
	Not applicable	Count	2	8	10
		%	20.0%	80.0%	100.0%
		% of Total	5.1%	20.5%	25.6%
<b>Total</b>		Count	25	14	39
		%	64.1%	35.9%	100.0%
		% of Total	64.1%	35.9%	100.0%

Source: Research finding

To determine the existence of any association between whether the KM system was introduced as part of a comprehensive firm's strategy and the existence of a knowledge management system, the relevant variables were subjected to crosstab analysis and chi-square test as shown. Table 22 above shows that most, 91.3%, of the organizations which reported to have a knowledge management implemented in their firm introduced it as part of a more comprehensive firm strategy.

Table 22 also shows that there are firms which have knowledge management system but not as part of a more comprehensive strategic plan in the firm, this also could be an indication of the existence of the KM system by default not by plan. On the other hand

majority, 66.7%, of the organizations reported not to have implemented the KM system but not as part of their more comprehensive firm strategy.

# **Chapter 5 Summary, Conclusion and Recommendations**

## **5.1 Summary**

### **5.1.1 Level of awareness of knowledge management in publicly quoted companies in Kenya**

The study revealed that 48.7% of the publicly listed firms were aware of the term knowledge management and used it to describe their activities. About 62% of the firms interviewed have a knowledge management strategy with 59% having a shared knowledge management vision, 64.1% of them having a system that promotes acquisition and strategic use knowledge, 61.5% of them having put in place a realistic time plan for implementing the knowledge management strategy.

The study also showed that 66.7% of the firms have incentive systems for knowledge based performance. Only 53.8% of the firms have enterprise wide knowledge management strategy. It was also found out that knowledge management was considered important by interviewed firms in improving competitive advantage of the firm (up to 84.6% of the firms), in marketing (up to 99.7% of the firms), in improving customer focus (in up to 82.1% of the firms), in employee development (in up to 82.1% of the firms), in product innovation (in up to 66.7% of the firms), in revenue growth (in up to 82% of the firms), in cost reduction (up to 87.2% of the firms), in investment decisions (up to 74.4% of the firms) and in defining corporate strategy (up to 79.5% of the firms).

### **5.1.2 Existence of knowledge management systems in publicly quoted companies in Kenya**

About 64% of the firms interviewed said they had a knowledge management system in place with 59% indicating that they introduced knowledge management as part of a comprehensive firm strategy. Most of the firms interviewed have had knowledge management system for three years. The study further revealed that for the success of knowledge management system to occur in a firm, team learning and willingness to develop corporate strategy together had the highest mean of 3.95 and therefore the most important factor under consideration. This was followed by effective communications regarding knowledge management (mean of 3.79), support from senior management

(mean of 3.77), cultivation of knowledge sharing culture (mean of 3.74), need to have a formal knowledge management task force (mean of 3.18), knowledge management participation incentives (mean of 3.03) and least important was conducting an effective knowledge management audit (mean of 2.79). Only 30.8% of the firms reported that they conduct knowledge management audits to establish what knowledge they had

The study showed that some of the major challenges the respondents who had knowledge management systems in their firms faced included lack of effective communication and knowledge sharing (27.3% of respondents), difficulties in implementing new ideas (27.3% of respondents), reluctance by employees, and especially management, to follow through with knowledge management process (18.2% of respondents), that firms had limited knowledge management understanding and awareness (18.2% of respondents), insufficient knowledge in information technology to optimize knowledge management (9.1% of respondents), some have political interference in management (9.1% of respondents), difficulty in changing historical organizational culture (9.1% of respondents) while others have difficulties developing knowledge management organizational culture and plan (9.1% of respondents).

The study also revealed that about 18% of the firms interviewed had leadership that pursue strategies based on intangible resources such as intellectual property. According to the findings only 53.8% of the firms interviewed encourage emergence of knowledge management champions who disseminate ideas of change and establish the organization's strategic positioning.

## **5.2 Conclusion**

According to the study 48.7% of the publicly listed firms were aware of the term knowledge management and used it to describe their activities with about 62% of the firms having a knowledge management strategy and 59% having a shared knowledge management vision, 64.1% of them having a system that promotes acquisition and strategic use knowledge, 61.5% of them having put in place a realistic time plan for implementing the knowledge management strategy. About 64% of the listed firms had a knowledge management system in place with 59% indicating that they introduced knowledge management as part of a comprehensive firm strategy.

Chi-square test indicated that there was a very significant association between awareness of the term knowledge management and implementation of knowledge



management system with a Chi-square value of 10.364 and a degree of freedom of 1 at significance level of 99%. These findings are indications of awareness of knowledge management and existence of knowledge management systems among publicly quoted firms however some existence of the knowledge management system are by default and not by plan as in the case where 40% of the firms which were not aware of the term knowledge management had reported to have knowledge management system in place.

About 90% of the organizations which reported to be aware of the term knowledge management had implemented a knowledge management system. Also 40% of the firms which were not aware of the term knowledge management had reported to have knowledge management system. This phenomenon could be a recognition that 40% of the firms have and use knowledge management but do not recognize it as a line of management. On the other hand 60% of the organizations which reported not to be aware of the term have not implemented knowledge management system.

The relevant variables were subjected to a cross tab analysis and Chi-square test to determine the existence of any association between whether knowledge management system was introduced as part of a comprehensive firm's strategy and the existence of a knowledge management system in the firm. Most of the organizations (91.3%) which reported to have a knowledge management system implemented in their firm introduced it as part of a more comprehensive firm strategy. The Chi-square test indicated that there was a very significant relationship between the implementation of knowledge management system and introducing knowledge management as part of a more comprehensive firm strategy, with a Chi-square value of 18.317 and a degree of freedom of 2 at a significance level of 99%.

### **5.2.1 Limitations of the study**

The study did not address why knowledge management systems in publicly quoted firms in Kenya fail. It was limited to establishing the level of awareness of knowledge management and also establishing the existence of knowledge management systems in publicly quoted firms in Kenya.

Mail questionnaire was used to collect primary data in this study and this system had the inherent demerits of: limiting its use to only educated and cooperating respondents; low rate return of duly filled questionnaires; losing control over the questionnaire once it is

sent; inflexibility arising from the difficulty of amending the approach once the questionnaires were sent out; possibility of ambiguous responses, non responses or omissions which were difficult to interpret; difficulty in knowing whether the respondents were truly representative and also the fact that this method was the slowest in data collection. Because a cross sectional survey study was used it required a large sample to ensure the best response rate so the researcher had to target all listed firms in the Nairobi Stock Exchange as the population of study. It was challenging to make a rigid research design to ensure enough provision for protection against bias. In case of surveys the research design must maximize reliability as the aim is to obtain complete and accurate information. This was not the case in all responses however in most cases the information was complete and accurate.

The researcher used the Chi-square test to establish association between variables however the test is limited to being applied only when the individual observations of sample are independent. When individual observations of the sample are dependent the test should not be applied. In this respect the researcher was not able to report on dependent variables in the study. In addition neglect of frequencies of non occurrence, failure to equalize the sum of the observed and the sum of the expected frequencies, wrong determination of degrees of freedom and wrong computations could result in improper application of the test and hence drawing wrong inferences with respect to associations of selected variables.

### **5.3 Recommendations for further study**

Further research should be carried out to determine the extent to which firms listed in the Nairobi Stock Exchange were optimizing the knowledge environment to create competitive advantage. The research should establish whether the firms are optimizing knowledge based organizational structure, intellectual property, information technology that supports knowledge culture, control and coordination systems to remain aligned with the dynamically changing needs of the business environment?

More research is required to establish if publicly listed firms have motivation and incentive schemes that encourage implementation of knowledge management systems and culture. For the firms that have attempted and failed to establish knowledge management systems, why did they fail? To what extent are the publicly listed firms using knowledge management to continuously renew ongoing organizational schemas to anticipate the

future opportunities and threats? It will also be beneficial to further research on how publicly listed firms in the Nairobi Stock Exchange are investing in knowledge workers to empower them with creative and innovative capability so that they are able to judge if the organization's practices are aligned with dynamics of the business environment.

## References

- Agnus, J., Patel, J., & Harty, J. (1998). *Knowledge Management: Great Concept But What Is It?* Information Week, 58 – 59, March 16.
- Argyris, C., & Schon, D. (1978). *Organizational Learning: A Theory of Action Perspective*. Reading, Mass: Addison Wesley
- Argyris, C., & Schon, D. (1996). *Organizational Learning II: Theory, Method and Practice*. Reading, Mass: Addison Wesley
- Armistead, C. and Meakins, M., (2002). *A Framework for Practicing Knowledge Management*, Long Range Planning 35, 49-71.
- Banbury, C.M. and W. Mitchell, (1995). *The Effect of Introducing Important Incremental Innovations on Market Share and Business Survival*, Strategic Management Journal, 16:161-182.
- Bamey, J. (1991). *Firm Resources and Sustained Competitive Advantage*, Journal of Management vol. 17.
- Bell, D. (1973). *The Coming of Post-Industrial Society: A Venture in Social Forecasting*, Basic Book, New York.
- Botkin, J. (1999). *Who's In Charge of Knowledge Management*. Computer World, 33, August 9.
- Brand, A (1998). *Knowledge Management and Innovation*. Journal of Knowledge Management, 12, 17 – 22
- Brath, S (1999). *Master Exhorts to Make Knowledge Work*. Journal of Knowledge Management, June 14 - 15
- Chakrabarti, A.K., (1990). *Innovation and Productivity: An Analysis of The Chemical, Textiles and Machine Tool Industries in the U.S.*, Research Policy 19: 257-269.

Chaney, P.K. and T.M., Devinney, (1992). *New Product Innovations and Stock Price Performance*, Journal of Business Finance & Accounting, 19(5): 677-694.

Cuthbertson, B (1999). *Technology Takes a Back Seat to Firsthand Sharing*. Knowledge Management, May 23.

Drucker, P. (1993). *Post Capitalist Society*, Harper Business, New York

Eckhouse, J. (1999). *Sharing Knowledge Isn't Easy Yet*. Information Week 99, August 16.

Foley, J (1999). *The More You Share, The More You Gain*. Information Week, 99, 115, June 28.

Gao, F., Li, M., Nakamori, Y. (2000). *Critical Systems Thinking As a Way To Manage Knowledge*. Journal of Systems Research and Behavioral Science, Vol. 20: 3 -19

Grant, R.M., (1996). *Toward a Knowledge-Based Theory of the Firm*, Strategic Management Journal, 17: 109-122.

Grazenka, L. (1999). *Competitive intelligence*. Knowledge Management, 43, April.

Hibbard, J. (1997). *Knowing What We Know*, Information Week, 46 – 64, October 20<sup>th</sup>.

International Finance and Central Bank of Kenya (1984). *Development of Money and Capital Markets in Kenya* [ On-line] Available <http://www.nse.co.ke/AboutNSE.htm> , 25<sup>th</sup> January 2007

Kothari, C. R., (2004). *Research Methodology: Methods & Techniques*, Second Edition, Delhi.

Liebowitz, J., (1999). *Key Ingredients to the Success of an Organization's Knowledge Management Strategy*, Knowledge and Process Management Journal, Vol. 6, No. 1.

Malhotra, Y. (1998). *Knowledge Management, Knowledge Organizations & Knowledge Workers: A View from the Front Lines* interview published in Maeil Business Newspaper of February 19, 1998.

Malhotra, Y. (2002). *Why Knowledge Management Systems Fail? Enablers and Constraints of Knowledge Management in Human Enterprises*, Syracuse University  
[On-line ] Available [www.brint.org/WhyKMSFail.pdf](http://www.brint.org/WhyKMSFail.pdf), 13<sup>th</sup> March 2003

Meek, T. (1999). *Creating a Knowledge Based Organization*. Memphis, TN: Buchman Laboratories, Inc.

Neil, T. and McNamara, P., (2002). *Achieving Post-Acquisition Success: The Role of Corporate Entrepreneurship*, Long Range Planning 34, 669-697.

Nonaka, I., & Takeuchi, H. (1995). *The Knowledge Creating Company*. New York: Oxford University Press

Ogachi, J. F. (2002). *Strategic Outsourcing: The Experiences of Companies Listed in the Nairobi Stock Exchange*, unpublished MBA Project, University of Nairobi

Penrose, E. (1995). *The Theory and Growth of the Firm*, 3<sup>rd</sup> Ed., Oxford University Press

Polanyi, M. (1983). *The Tacit Dimension*, Gloucester, Mass. Peter Smith

Popper, K. (1966). *Objective Knowledge: An Evolutionary Approach*, Clarendon Press, Oxford

Senge, P. M., (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization*. London, Random House

Silverman, S. (1999). *Distill Human Capital*. Journal of Knowledge Management, 40 – 42, June.

Soo, C.W., Midgley, D.F. and Devinney, T.M., (2002). *The Process of Knowledge Creation in Organizations*, INSEAD

Stehr, N. (1994). *Knowledge Societies*, Sage Publications, London.

Teece, D. J., 2000, *Strategies for Managing Knowledge Assets: The Role of Firm Structure and Industrial Context*, Long Range Planning 33, 35-54.

## Internet sites

<http://www.nse.co.ke/AboutNSE.htm> , 25<sup>th</sup> January 2007

<http://www.nse.co.ke/History.htm>, 29<sup>th</sup> July 2006

## Appendix 1: LETTER OF INTRODUCTION

### LETTER OF INTRODUCTION

February 2007

Dear Respondent,

#### RE: REQUEST FOR RESEARCH DATA

I am a post graduate student at the University of Nairobi, pursuing a course leading to a Masters degree in Business Administration (MBA). In a partial fulfillment of the requirements of the stated course, I am conducting a Management Research Project entitled "Knowledge Management within Publicly Quoted Firms in Kenya". Knowledge management is hereby defined as the notion that seeks to represent how organizations create, use and protect knowledge.

To achieve this research project, your organization has been selected for the study. I kindly request you to fill the attached questionnaire to generate data required for this study. This information will be used purely for academic purpose and your identity will not be revealed in the report. Findings of the study shall, upon request, be availed to you.

Your assistance will be highly appreciated.

Yours sincerely,

Kenneth Osano  
Student

Prof Evans Aosa  
Supervisor



## Appendix 2: QUESTIONNAIRE

Knowledge management will be denoted by "KM".

---

### **Section A: General Information**

1. Name of your organization: \_\_\_\_\_

2. Under which of the following categories does your organization belong?  
(Please tick appropriately)

- a). Agriculture [    ]
- b). Commercial and Services [    ]
- c). Finance and Investment [    ]
- d). Industrial and Allied [    ]
- e). Alternative Investment segment [    ]
- f). Fixed Income Securities segment [    ]
- g). Futures and Options segment [    ]

3. Respondent's number of years with the firm (please tick appropriately)

- a). 0 – 5 years [    ]
- b). 6 – 10 years [    ]
- c). 11 – 15 years [    ]
- d). 16 – 20 years [    ]
- e). Over 20 years [    ]

4. Please tick one of the following that best describes your firm's annual turnover in Ksh.

- a). Up to 500 million [    ]
- b). 501 million to 1,000 million [    ]

c). 1,001 million to 5,000 million [      ]

d). 5,001 million to 10,000 million [      ]

e). Over 10,000 million [      ]

**Section B: The level of awareness of knowledge management in your firm**

1. Does your firm use the term KM to describe any of its activities (past, current, or planned)? *(Please circle appropriate answer)*

1 Yes

2 No

2. Would you say that you are aware of the term KM? *(Please circle appropriate answer)*

1 Yes

2 No

3. Does your organization have a knowledge management strategy?

1 Yes

2 No

4. Please tick appropriate box:

Issue	Yes	No
1. Does your firm have a <b>shared KM vision</b> ?		
2. Does your firm have a system that promotes <b>acquisition and strategic use</b> of knowledge in place?		
3. Does your firm have a realistic <b>time plan for implementing</b> the KM strategy?		
4. Is there an <b>incentive system for knowledge based performance</b> in your organization?		
5. Is the KM strategy <b>enterprise-wide</b> (shared by all) in your organization?		

5. How important to your organization is the role that effective knowledge management can play in achieving best results with respect to? *(please tick appropriate box)*

Issue	Critically important	Very important	Some what important	Not very important	Un - important
1. Role in improving competitive advantage					
2. Marketing					
3. Improving customer focus					
4. Employee development					
5. Product innovation					
6. Revenue growth					
7. Reducing costs					
8. Investment decisions					
9. Defining corporate or product strategy					

6. a). Would you say that your organization has used (is using) KM to create competitive advantage? *(Please tick appropriately)*

1 Yes

2 No

b). Briefly describe the role KM plays in creating competitive advantage in your organization:

---



---



---

**Section C: Existence of knowledge management system in the firm**

1. Do you have a KM system in your firm? *(please circle appropriately)*

1 Yes

2 No

2. Was your firm's KM system introduced as a part of a more comprehensive firm strategy? *(Please circle appropriate answer)*

1 Yes

2 No

3 Not applicable

3. How many years have you had a KM system in your firm?

\_\_\_\_\_ years

4. Does your organization conduct KM audit to establish what knowledge it has?

*(please circle appropriately)*

1 Yes

2 No

5a). Does the leadership of the organization pursue strategies based on

intangible resources such as intellectual property etc? *(please circle appropriately)*

1 Yes

2 No

b). If yes please explain how:

---

---

---

---

6. Does the organization encourage emergence of KM champions who disseminate ideas of change and establish the organization's strategic positioning?

*(please circle appropriately)*

1 Yes

2 No

7. How important has each of the following factors been in the success of your KM system?

*(please rate from 1 to 5 where 5 = Critically important, 4 = Very important, 3 = Some what important, 2 = Not very important, 1 = Unimportant)*

<i>Issue</i>	<i>Rate</i>
1. Knowledge-sharing culture	
1. Senior management support	
2. Team learning and willingness to develop corporate strategy together	
3. KM participation incentives (other than work-related benefits)	
4. An effective KM audit	
6. A formal KM task force	
7. Effective communications regarding the KM program	

8. What would you consider a major challenge in knowledge management in your organization?

---



---



---



---

*~~~~~Thank you for participating~~~~~*

### Appendix 3: Company listing

		20	British American Tobacco Co. Ltd
1	The Unga Group	21	Kenya Oil Co Ltd.
2	Carbacids Investments Ltd	22	Sameer Africa Ltd
3	National Bank of Kenya	23	Housing Finance Co Ltd
4	Scan Group	24	Pan Africa Insurance Holdings Ltd
5	EA Portland Cement Co Ltd	25	Diamond Trust Ltd
6	ICDC Investment Company	26	Kenya Airways
7	Marshall EA Ltd	27	Uniliver Tea Ltd
8	CMC Holdings Ltd	28	Sasini Tea Ltd
9	Car & General (K) Ltd	29	Kakuzi Ltd
10	Standard Chartered Bank	30	Hutchings Biemer Ltd
11	Kenya Electricity Generating Co. Ltd	31	City Trust
12	Express (K) Ltd	32	Total Kenya Ltd
13	Athi River Mining Ltd	33	Equity Bank Ltd
14	Barclays Bank of Kenya	34	Rea Vipingo Ltd
15	Uchumi Supermarkets	35	BOC Kenya Ltd
16	Kenya Breweries Ltd	36	KP&L Co Ltd
17	Nation Media Group Ltd	37	Bamburi Cement Ltd
18	Williamson Tea Ltd	38	Jubilee Holdings Ltd
19	Mumias Sugar Co. Ltd	39	Olympia Capital Holdings Ltd

Source: Research finding