EFFECT OF KNOWLEDGE MANAGEMENT ON COMPETITIVE ADVANTAGE OF AUDIT FIRMS IN KENYA: CASE OF GRANT THORNTON KENYA

BY

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UNITED STATES INTERNATIONAL UNIVERSITY - AFRICA

SUMMER 2017
EFFECT OF KNOWLEDGE MANAGEMENT ON COMPETITIVE ADVANTAGE OF AUDIT FIRMS IN KENYA: CASE OF GRANT THORNTON KENYA.

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EPHRAIM ALCOTT ODERO

A Research Project Submitted to the Chandaria School of Business in Partial Fulfillment of the Requirement for the Degree of Masters in Business Administration (MBA).

UNITED STATES INTERNATIONAL UNIVERSITY - AFRICA

SUMMER 2017
STUDENT’S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution, or university other than the United States International University - Africa for academic credit.

Signed: ___________________________    Date: ___________________________

Ephraim Alcott Odero (ID: 648766)

This project has been presented for examination with my approval as the appointed supervisor.

Signed: ___________________________    Date: ___________________________

Dr. Caren Ouma

Signed: ___________________________    Date: ___________________________

Dean, Chandaria School of Business,
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ACKNOWLEDGEMENT

I would like to acknowledge and appreciate the Almighty God for the gift and favor of good health and strength throughout the period of this study. Secondly, I would also like to sincerely thank my supervisor Dr. Caren Ouma for her intellectual contribution, guidance, and support in developing this research. My friend Richard Okello for the moral support and guidance. My gratitude also goes to the respondents at Grant Thornton Kenya for giving me the valuable information needed to develop this study. Finally, a big thank you to my wife Daisy for her patience, support and understanding during the process.

May God bless and reward you all abundantly.
DEDICATION

I dedicate this research project to my beloved family and friends for the support, understanding and patience during the process.
ABSTRACT

The motive behind carrying this study was to investigate the effect of the knowledge management on the competitive advantage of audit firms in Kenya. This was to be achieved under the guidance of the three (3) specific research questions that sought to find: 1) what are the dimensions of knowledge management employed by audit firms in Kenya? 2) How does leadership style affect competitive advantage? 3) How does information technology and infrastructure affect competitive advantage? All the itemized information has revolved on these three pillars of the study that would help the overall purpose to be achieved.

The study adopted a survey research design. The target population for the study were all the one hundred and sixty employees of Grant Thornton Kenya. Eighty questionnaires were distributed and 78 responded, this was considered sufficient. The study employed Pearson’s bivariate correlation and multiple linear regressions for analysis. Data collected were entered in SPSS (version 20) which was also used to summarize the responses to give both the descriptive and inferential statistics. After analysis output were summarized using percentages and frequencies then presented using tables and charts. Out of the 80 questionnaires distributed, only 78 were filed and returned representing a response rate of 97.5% which was sufficient for the study.

The first objective of the study was to examine the dimension of knowledge management applied in the firm. It was revealed that at Grant Thornton Kenya, there was a clearly defined system of KM, and a majority agreed that there was sufficient budget allocation for KM. It was also established that majority acknowledged that senior managers looked at knowledge gap to identify competent staff. Majority agreed that they were aware of the KM policies. Knowledge Management dimension had a strong positive correlation to competitive advantage (rho=0.554).

On the second study objective, the study sought to know the effect of technology infrastructure on competitive advantage in audit firms. Most of the respondents agreed that the firm had a comprehensive, adequate database, and it was noted that employees used emails to share and exchange knowledge with others. It was noted that IT infrastructure had aided availability of knowledge when needed and could be trusted in making decisions. IT infrastructure had a positive correlation with the competitive advantage (rho= 0.650).
Finally, the last study objectives sought to know the effect of leadership style to the competitive advantage in audit firms. The findings revealed that organization embraced open door policy and many agreed that managers conducted reviews very well, and managers developed team objectives. Many respondents agreed that knowledge was shared freely in their respective departments and there was a continuous dialogue and instant feedback, which was effective. Knowledge Management dimension had a strong positive correlation with competitive advantage (\(\rho=0.554\)).

From the findings of the study, knowledge management dimension has proved to be a technique that can be employed by those firms wishing to attain competitive advantage. This dimension relevance and positivity towards firm performance can henceforth not be ignored. From the findings, it can be concluded that the information technology infrastructure has the highest bearing on the competitive advantage of audit firms. Audit firms should embrace the need for leaders from various firms to collaboratively share knowledge across the industry with the aim of exchanging ideas and creating solutions to the challenges facing the industry.

The study recommended that dimension of knowledge management practices had a significant positive effect on competitive advantage. It was also concluded that information technology infrastructure as a major contributor to competitive advantage in the audit industry. Based on these findings, audit firms should make substantial investment in information technology infrastructure to create conducive environment for knowledge management. Based on these findings, the study recommends that audit firm leaders should use effective leadership styles in leading their firms. In doing this, they should focus more on recognizing employees with potential to create and share knowledge and should create an environment friendly to knowledge development.

Further areas of research in Knowledge Management in the audit industry that need to be conducted include the effect of Knowledge Process Capability; Knowledge Acquisition, Knowledge Conversion, Knowledge Protection and Knowledge Application on Organizational Performance. The study also focused on Grant Thornton Kenya, the same study can be conducted for other audit firms in Kenya. This will it mean a larger sample and a confirmation may be made if the same practices are widespread across the country.
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<td>Competitive Advantage</td>
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<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
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<tr>
<td>CPA</td>
<td>Certified Public Accountant</td>
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<tr>
<td>E &amp; Y</td>
<td>Ernst &amp; Young</td>
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<td>IT</td>
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<td>KBV</td>
<td>Knowledge Based View</td>
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<td>KM</td>
<td>Knowledge Management</td>
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<td>Management by Execution</td>
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<td>Multifactor Leadership Questionnaire</td>
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<td>RBV</td>
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<tr>
<td>SECI</td>
<td>Socialization, Externalization, Combination and Internalization</td>
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<td>SPSS</td>
<td>Statistical Package Software for Social Sciences</td>
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

Modern business environment has become knowledge-intensive and therefore managers have to contend with the reality that the foundation of organizational competitiveness has shifted from physical and material resources to intangible resources (Bratić, Sc, & Welch, 2009) and knowledge in particular (Millar et al., 2016). The selection of Knowledge Management (KM) as company practice was driven by large organizations and consulting companies worldwide. The company practice has shown that knowledge, when properly used and leveraged, could drive companies to become more innovative and thus, more competitive (Conradie, 2010).

Knowledge management processes include knowledge identification, creation, acquiring of knowledge, transferring this knowledge, sharing this knowledge, and exploitation and they could affect companies by: creating knowledge, which will in turn contribute to improved firm’s performance. Similarly, as noted by Mohrman, Finegold and Moran, (2003) a firm’s performance can be improved when the organisation creates and uses knowledge and knowledge development moreover as noted by Marques and Simon, (2006) transfer and protection improve firm’s performance. There is a significant relationship between KM processes and organization performance (Salina & Wan, 2008).

According to Kruger and Johnson (2011), a firm’s knowledge administration technique should reflect its competitive strategy, the way it creates value for its customers, how that value supports an economic model and how the people in the particular company deliver on the value of economics. Companies struggle in developing appropriate metrics to assess the effectiveness of knowledge management initiatives (Kruger & Johnson, 2011). Kruger and Johnson (2010) conducted a research on Knowledge management maturity and concluded that, companies which recorded positive growth in Knowledge management maturity also recorded positive growth in Organizational performance; therefore, there is a positive relationship between knowledge management and organizational performance (Kruger & Johnson, 2011).

In carrying out her research, Johnson (2011) found that knowledge management should not only add value, but add value for clients and that clients should be direct beneficiaries of
value generated by knowledge management best practices (Johnson, 2011). Another research by Ahmad and Daghfous (2009), found out that in order for companies to maintain a competitive edge and remain at the top, they must have a good strategy to retain, develop, organize and transfer their resources, which requires systematic knowledge management. Knowledge management has great influence on firms’ strategy formulation and implementation. Many organizations already achieve great benefits through knowledge sharing activities such as improved competitiveness, increased visibility and flexibility (Ahmad & Daghfous, 2010).

Knowledge intensive organizations such as accounting firms have without doubt appreciated the value that comes with knowledge management, despite the fact that their knowledge management activities can as well be accomplished without substantially changing how they carry on with their business (Millar et al., 2016). According to Andon, Free, and O’Dwyer (2015) this notwithstanding, there are massive changes in the scope and roles of auditors due to the increase in the level of corporate fraud cases, advances in information communication technology, changes in the nature of auditing practice, intense competition for clients, partners and CPA graduates, globalization and mergers with other consulting companies and the constant widening of the expectation gap (Andon, Free, & O’Dwyer, 2015). This has therefore prompted investigations on other alternative means of such as utilization of generalized audit software (GAS) to enhancing their efficiency and cost effectiveness of their services (Ahmi & Kent, 2013).

As audit firms develop means and ways of acquiring and leveraging knowledge effectively within the client organizations, there is the likelihood of them being propelled to become very much adaptive, innovative and competitive as well (Johnson, 2011). Knowledge management therefore has and will remain to be a topic of discussion in a number of competitive firms. This however is despite the growing body of literature on knowledge management by practitioners and researchers which have gone as far as describing the immense potential for the use of knowledge management in knowledge intensive organizations (Millar et al., 2016).

Chief Knowledge Officer at E & Y Canada, relates the award-winning process his firm has used in an interview with Information Resources Management Journal. The International Journal of Innovative Research in Science and Techniques January-June 2011 Volume 2 Issue 1, he explained the challenges involved in determining which various types of
organizational knowledge to invest in by using some specific examples. He provided tips on the best way to enhance Knowledge Management by entering the three stages ahead of time: Envision the perfect knowledge future state (where are we going). Discover the knowledge esteem suggestions (why). Decide the knowledge system (by what means will we arrive).

A number of empirical studies done in Kenya include Cheruiyot, Jagongo and Owino (2012) who studied KM on Kenyan manufacturing enterprises, the study found that manufacturing enterprise were using KM to gain competitive advantage, which results in superior performance. Nyawade (2005) carried out a case study of BAT Kenya on Employee Perception of Knowledge Management Practices and established that employees perceived knowledge management practices to be restrictive and prohibitive of employee creativity and innovation. Osano (2007) studied KM among Kenyan public companies. Likewise, Murianki (2008) surveyed knowledge management structures amongst Internet Service Providers in Kenya. The study found that Knowledge management improves performance of employees on their duties in organization; enhances employee competence in the organization; while Wangari (2009) studied how critical success factors and KMS at EPZ limited and the study established that knowledge management practices were critical success factor, which influenced performance. Asava (2009) studied KM for competitive advantage Kenyan commercial banks, the study found that knowledge management affects employee performance in the bank and improve banks competitiveness.

Audit firms in Kenya are influenced by both the external and internal environment such regulatory changes, socio-cultural changes, technological changes, economic challenges, systems and structures and inadequate resources. Audit firms engage in knowledge management because of the numerous benefits that KM brings in enhancing business performance (Wong, Yee, Ling, Lin & Leong, 2012). For a company to be assimilated into a knowledge-based economy is usually turned into a critical stage by the adoption and implementation of KM practices among audit firms. For audit firms to increase learning and improve performance, they need to capture, share and use productive knowledge within their companies. New strategic imperative of organizations is progressively being acknowledged as Knowledge. Changing of operating environment according to Aosa (2002), is leading to the renovation of the business landscape. For adaptation of the changing business environment, strategy will be therefore vital. The study hence tries to
establish the influence of knowledge management practices on performance of audit firms in Nairobi County.

It is therefore very clear that there exists a wide gap between theory and research. Davenport (2011), for instance established that very few studies have emphasized knowledge generation and realization processes, and advocate the need to examine the different levels of knowledge management that consists of integrating it into business strategy, process, structure, culture and behavior (Margaryan, Milligan, & Littlejohn, 2011). As such, this study will seek to fill this gap by examine knowledge management from the perspective of Nairobi’s Audit firms. This study therefore examined the effect of knowledge management on competitive advantage of Grant Thornton Kenya.

1.2 Statement of the Problem

The business environment within which firms operate has been very unstable. The political anxieties, competition from new entrants, etc. as stated by Leggatt and Martin, (2003) are challenges greatly affecting growth. Adoption of urgent measures has helped control these challenges as this industry is of much importance to the country’s economy. However, they have been the cause of downfall for some companies, which were unable to be resilient. The operating environment changes, which in turn will cause a change in the business landscape, will need coming up with effective strategies (Aosa, 2002).

Audit firms respond to competition in different ways. KBV has identified that what audit firms need to improve the industry is advanced knowledge as stated by Malik and Malik, (2008). Despite knowledge being recognized as an important asset many audit firms are not doing enough to effectively manage this important asset for competitive advantage (Gan, Ryan & Gururajan, 2006). Furthermore, effective knowledge management can help audit firms to improve internal processes and client services (Rono, 2011). Audit firms can effectively use knowledge management to enhance their competitiveness. Newman (2009) views KM as a discipline sought to enhance individuals and companies by maintaining the present and future value of knowledge assets.

One study by Ambos and Schlegelmilch (2009) focused on knowledge management in consulting firms with emphasis on managing knowledge in an international perspective (Ambos & Schlegelmilch, 2009). Another study by Johnson (2011) in Indiana established that knowledge management process within CPA firms relies on the key factor of
knowledge sharing within the process. Once information is acquired, value is added, and the knowledge is stored it must be shared and integrated throughout the firm to be effectively used in best practices by all employees. Another important element of the knowledge management process within CPA firms is the balance between tacit and explicit content acquired by the firm.

In Kenya, Chweya, Ochieng, Ojera and Riwo (2014) studied knowledge management practices and its effect on firm performance. The study sought to establish the extent of knowledge creation; knowledge sharing; knowledge acquisition, level of organizational performance and determine the relationship between organizational performance and knowledge creation; knowledge sharing and knowledge acquisition in commercial banks in Kisumu city. The study found that there is a significant positive relationship between organizational performance and knowledge sharing.

Studies on effectiveness of KM to audit firms’ performance give related outcomes, which depict knowledge management effects, the state of these companies being studied. Despite the assumed link, it is still possible for KM to negatively affect organizational performance. Getting to know the extent to which KM affects business performance has been limited because of previous studies dealing with KM in a general manner as KM as a concept is deemed complex. Grant Thornton Kenya has put in place Knowledge Management System, but because of the firm’s capability in comparison to the big four global audit firms in Kenya, there still need for the management to address the issue of KM with the purpose of strengthening the creation, sharing, transferring and application of knowledge for the firm in both internal and external environments. In the same regard, studies on knowledge management in audit firms focused solely on largest four audit firms which are in control of Kenya’s auditing industry (Nancy, 2016) and as a result, the study choose Grant Thornton Kenya because not much has been done particularly with regards to second tier firms in audit sector. With the identification of the critical role that knowledge management plays, how do knowledge management practices influence competitive advantage of Grant Thornton Kenya?

1.3 Purpose of the study

The purpose of this study was to establish the contributions of knowledge management on competitive advantage of Grant Thornton Kenya.
1.4 Research questions

The study was guided by the following research questions:

1.4.1 What are the dimensions of knowledge management employed by audit firms in Kenya?
1.4.2 How does leadership style affect competitive advantage?
1.4.3 How does information technology and infrastructure affect competitive advantage?

1.5 Justification of the Study

1.5.1 Researchers and Academicians

Scholars and researchers who would like to debate or carry out more studies on effect of Knowledge Management on performance of audit firms will find this study useful as a basis of carrying out more studies in Kenya and beyond. The findings of these studies would develop a base from which researchers and scholars to formulate theses statements and proposals and carry out further studies.

1.5.2 The Accounting Profession

The findings of the study were to be essential to the profession. Due to the intensity of the work done by auditors, accountants, internal auditors and other accounting staff, an arena for knowledge management has been provided in this research.

1.5.3 Grant Thornton Kenya

Grant Thornton Kenya would benefit largely from this study especially with regards to the use of knowledge in the accounting practice. The firm was expected to be become aware of the various opportunities that were available if they put in practice the recommendations made in this study.

1.6 Scope of the Study

This is a case study of Grant Thornton Kenya, one of the world’s largest professional services network of independent accounting and consulting member firms which provide tax, assurance, advisory services. The study was conducted between January 2017 and June 2017, targeting a population of 160 members of staff. The respondents included management and other professional staff from all departments.
1.7 Definition of Terms

This section provides definition of key terminologies used throughout the project.

1.7.1 Knowledge

According to business dictionary, knowledge is awareness or understanding of a circumstance or fact, gained through association or experience (Business dictionary, 2017).

1.7.2 Knowledge Management

Knowledge management is the deliberate and systematic coordination of an organization’s people, technology, processes, and organizational structure in order to add value through reuse and innovation (Dalkir, 2010).

1.7.3 Competitive Strategies

Taking offensive or defensive actions to create defendable position in an industry to cope successfully with the five competitive forces and thereby yielding a superior return on investment for the firm. It is about being different by deliberately choosing different set of activities to deliver a unique mix of value (Porter, 2012).

1.7.4 Competitive Advantage

Competitive advantage as defined by Porter (2011) exists when the firm is able to deliver the same benefits as competitors but at lower cost (cost advantage) or deliver benefits that exceed those of competing product (differentiation advantage).

1.7.5 Leadership

Yukl (1989) made a comprehensive leadership definition as “influencing task objectives and strategies, influencing commitment and compliance in task behavior to achieve these objectives, influencing group maintenance and identification, and influencing the culture of an organization”.

1.7.6 Knowledge Sharing

Knowledge sharing can be explained as “the optimizations of explicit knowledge… achieved by the consolidation and making available of artifacts. The optimization of tacit knowledge is achieved through the creation of communities to hold, share, and grow the tacit knowledge” (Snowden, 1999).
1.7.7 Audit Firms
An organization that reviews activities to recognize inefficiencies, lessens costs, and generally accomplishes organizational objectives. Auditing firms may investigate potential fraud and guarantee consistence with pertinent directions and approaches (Financial Dictionary, 2017).

1.7.8 Technology Infrastructure
Alludes to an enterprise’s entire collection of equipment, programming, systems, server farms, offices and related gear used to develop, test, operate, monitor, manage and support information technology services (Broadbent & Weill, 1997).

1.8 Chapter Summary
In this chapter the research project has introduced and highlighted the background of the research problem, purpose of the study and research questions which the research proposal will seek to answer. The importance and scope of the study has also discussed the relevance and benefits of the study and the respective beneficiaries of the study within the provided scope that the researcher will put focus on. The chapter has also defined the key and important terminologies upon which the research proposal is built and based upon. The subsequent chapter will examine the Literature review based on the three major research questions of the study.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter endeavors to cogitate on the principal concepts of the research objective by examining and reviewing existing literature in the context of research topic. The overall objective of this chapter is to review the relevant literature on knowledge management and its role in enhancing organizational performance and creating competitive advantage. The first section reviews literature on the knowledge management systems in place while the second section reviews literature about the effect of administration style on knowledge execution and competitive advantage. The third section reviews literature on the information technology that led to sustainable competitive advantage from utilizing knowledge management system.

2.2 Dimensions of Knowledge Management

2.2.1 The Process of Knowledge Management

Today, organizations are taking their knowledge and using it to redefine the way works is performed. Because today’s activities are often more complex and require the expertise of many people, organizations are beginning to understand how different types of knowledge can be utilized to enhance their efficiency, effectiveness and ability to innovate, Alluri (2009). Learning administration devices run the range from standard, off the-rack email bundles to advanced joint effort devices outlined particularly to support community building. Generally tools falls into one or more of the following categories, Jhaveri (2011): Knowledge repositories; Expertise access tools; E-learning applications; Discussion and chat technologies; Search and data mining tools. What Knowledge Management Process does is, it catches an organization's aggregate aptitude wherever it lives in databases, on paper, or in individuals' heads and appropriating it to wherever it can help create the greatest result.

From the past few decades the literature has provided several benefits of KM from which we can understand that KM is presented as a set of processes and it aims to create value for the organization. It reflects the dynamic view of KM as a set of processes concerned with the usage, development, renewal and value creation of knowledge (Wiig, 2007).
Organizational knowledge consists of four sets of socially enacted knowledge processes: (i) creation, (ii) storage, (iii) transfer, and (iv) application. This view of organizations as knowledge systems represents both the cognitive and social nature of organizational knowledge and its embodiment in the individual’s cognition and practices as well as the collective (i.e., organizational) practices and culture. Skyrme (2003) is of the view that knowledge management is the explicit and systematic management of vital knowledge and its associated processes of creating, gathering, organizing, diffusion, use and exploitation. Any process that bolsters one of four components of KM can be seen as a KM process.

Although acquiring useful knowledge is an important process of knowledge creation, many consider that the real competitive advantage comes from the capability of an organization to generate new knowledge within the organization. In this specific circumstance, the key achievement considers has been moved from data preparing to knowledge creation and nonstop development (Malhotra, 2000). Information creation is not an orderly procedure that can be firmly arranged and controlled. It can even be considered as the minimum deliberate procedure of KM. The procedure is persistently advancing and developing and inspiration, motivation and unadulterated change assume a vital part (Bhatt, 2006).

Also, it has been broadly acknowledged among researchers that hierarchical information creation is vigorously impacted by social procedures. Subsequently, in the outstanding learning creation model of Nonaka and Takeuchi –SECI-three of the four particular stages, to be specific, socialization, externalization and blend, include broad social collaborations among association individuals (Chua, 2002). A few reviews in the past have communicated impressive enthusiasm for information sharing practices (Hicks, et, al., 2007), and advantages of learning exchange and sharing have been examined generally among researchers and specialists (Sveiby and Simons, 2012). Along these lines, a standout amongst the most imperative targets of KM is to unite scholarly assets and make them accessible crosswise over authoritative limits. In any case, formal or casual social procedures and social issues are similarly as essential as mechanical frameworks in information exchange and sharing.

Setting up cutting edge mechanical frameworks does not really make individuals exchange and offer information in an association. It is the sort, quality and recurrence of social procedures and the structure of authoritative culture that do. Notwithstanding the formal social procedures that can be controlled and figured out how to some degree, unconstrained,
unstructured information exchange is likewise crucial for an association's prosperity. Hence, it is important to create devoted systems to energize such unconstrained information trades and a unique accentuation ought to be given to casual relations (Davenport and Prusak, 2008). Knowledge sharing is critical. Knowledge is meaningful when it is codified, classified, given a shape, put in a useful format, and stored. Only then, can it be used by the right person, at the right time, in the right way. Storage and codification of knowledge is not only important for an effective use of knowledge but also it is important for re-using it when needed so that the knowledge in question is going to belong to the organization rather than the knower (Nemati, 2002).

2.2.2 Knowledge Management System

The value of KM can best be highlighted by for HP CEO Lew Platt’s words. “If only HP knew what HP knows, it could be so much more productive”. The concept of Knowledge Management (KM) was first pioneered by Peter Drucker in the 1950’s, and extensive research has been conducted on the topic in the intervening years. According to Peter Drucker (1999), land, labour and capital - the classical factors of production - have become secondary to knowledge as the primary resource for the new economy. Knowledge management in business organizations is a relatively recent concept, emerging from, according to Fong and Kwok (2009), the world of academia in the 1990’s to become a hot issue for business leaders. Prusak & Matson (2006) expand on this stating that “knowledge has always been an important driver of competitive advantage but changes in the economy have made it increasingly so. As it becomes harder to obtain privileged access to land, labour and capital, a firm’s proprietary knowledge remains difficult for other firms to replicate”.

Chinying Lang (2001) acknowledges that we are in the midst of an economic transition from an era of competitive advantage based on information to a new era based on knowledge creation. On a fundamental basis KM typically is the process of creating value from an organization’s intangible assets (Liebowitz, 2006), (Prusak & Matson, 2006) and is founded on core competences and capabilities developed by both individuals and the organisation over time. Tsoukas & Vladimirou (2001) consider that on the one hand individuals appropriate knowledge and expand their knowledge repertoires, and, on the other hand, how knowledge in organized contexts, becomes organizational. In light of radical, irregular change in the new business condition, associations require speedier and
quicker cycles of learning creation and activity. The worldwide economy has implied associations need to use their insight administration frameworks all the more adequately, and that the individuals who have the instruments to get to this wellspring of data will have the capacity to gain by its application.

Harrison and Kessels (2003) assert that the creation of new knowledge depends on existing organizational structure and capabilities. Organizational Knowledge is much talked about but little understood. It is the knowledge, values, understanding and experience that has been built up throughout an organisation over a period of time (Gallagher, 2011), and the capability members of an organisation have developed to draw distinctions in the process of carrying out their work. Knowledge is a liquid blend of surrounded involvement, values, logical data, and master knowledge that gives a structure to assessing and fusing new encounters and data. It begins and is connected in the psyches of knowers. In associations, it frequently winds up noticeably inserted in reports or vaults, as well as in authoritative schedules, procedures, practices, and standards. (Davenport & Prusak, 2004). McKenzie & Van Winkelen (2004) emphasise the importance of knowledge as a critical resource for organisations to draw upon, and along with, Jackson et al (2003), Barney & Hesterley (2005), Zheng et al (2010), Iqbal et al (2010), Salleh and Ching (2011), and Tsai et al (2012) they further explore the link between KM and CA.

Resources-based view (RBV) highlighted the added value of human capital in organisation strategic management literature by defining and linking concepts such as knowledge (Ndinguri et al, 2012), organizational learning (Fiol & Lyles, 1985; Fisher & White, 2000), and organizational leadership (Norburn & Birley, 1988). The ability to create and use knowledge enables the company to develop sustainable competitive advantages (Hunt & Arnett, 2006). Knowledge creation process enables firms to enhance learning inserted inside and move information into operational activities to enhance proficiency and make business more profitable (Toyama & Nagata, 2000). Given the distributed character of organizational knowledge, the key to achieving coordinated action does not so much depend on those ‘higher up’ collecting more and more knowledge, as on those ‘lower down’ finding more and more ways of getting connected and interrelating the knowledge each one has” (Tsoukas, 2005, cited by Lambe 2007). Knowledge is only useful for those who can effectively learn, and learning is only effective if useful knowledge is available (Strong, Davenport & Prusak, 2008). Knowledge Management is an umbrella term which
alludes to any deliberate endeavors to deal with the information of an association's workforce, which can be accomplished by means of an extensive variety of strategies including straightforwardly, using specific sorts of ICT, or all the more by implication through the administration of social procedures, the organizing of associations specifically ways or by means of the utilization of specific culture and individuals administration hones (Hislop, 2009).

Past research has documented that all knowledge has both explicit and tacit dimensions (Nonaka & Takeuchi, 1995; Hansen, 1999; Youngjin et al. 2007), and Nonaka and Takeuchi (1995) differentiate between ‘explicit’ knowledge, i.e. that which can be documented and stored on paper or electronically, and ‘tacit’ knowledge, i.e. that which is stored in people’s heads. It is the view of Haas & Hansen (2007) that existing research has only partially investigated how different types of knowledge sharing may affect task performance differently. Hansen et al. (1999, p. 109) argue that KM can be seen as following two primary strategies; codification and personalization. Codification involves the collection, coding and storage of data, information and knowledge that is accessible by others with appropriate access rights, and expanding on Nonaka’s theory, argues that explicit knowledge is knowledge that can be codified, such as simple software codes and market data.

Personalization accommodates knowledge sharing by osmosis inside the association; there are few formalized information move forms set up and learning is actually passed between people. At the point when an organization's representatives depend on express information to do their work a people-to-record approach is received. Implied information by differentiation is hard to verbalize in composing and is procured by individual experience. It incorporates logical mastery, operational know-how, bits of knowledge around an industry and business judgment. When people use tacit knowledge most often to solve problems, the person-to-person approach works best (Hansen et al, 1999). Tacit knowledge is believed to be one factor that distinguishes successful managers from others (Armstrong & Mahmud, 2008), and the origin of the construct of tacit knowledge is often attributed to the science philosopher, (Polanyi, 1996) who described it in his famous quote, “we can know more than we can tell”.

Nonaka and Takeuchi (1995) argue that effective organizational knowledge creation best
occurs through the spiral process where knowledge is converted from tacit to explicit in a continuous and dynamic cycle, as illustrated in Figure 1, The SECI Model.

![SECI Model Diagram](image)

**Figure 2.1: The SECI Model of Knowledge Generation**

**Source: Xu, F. (2013)**

It is when tacit knowledge and explicit knowledge interact that innovation occurs. Knowledge creation is facilitated by deliberately managing the cycle, and occurs probably unwittingly in most organizations. Organizational knowledge creation starts with socialization, where people share understanding and mental information. It forms into externalization, when people utilize similitudes or analogies to express concealed implicit information that is generally hard to convey. It moves into the blend stage for knowledge to be enunciated, shared and clarified. At long last, people learn by doing and disguising the new information. The spiral begins again as the experience-based operational knowledge learned in the first cycle provides a larger knowledge base for continuous innovation and growth. It is this model that demonstrates how knowledge is generated and recycled. Moreover, according to Nonaka, Toyama and Konno (2000), knowledge creation organisations create their knowledge through interactions between tacit and explicit knowledge. This process of knowledge conversion enables explicit and tacit knowledge to grow in both quantity and quality (Esterhuizen et al, 2011).
The literature extensively refers to the general tendency in human beings being resistant to sharing the knowledge they possess (Nandita, 2013), while, Szulanski (1996) found that various organizational and individual factors also contribute to what he called “knowledge stickiness”, that is the slowing down of easy and effective knowledge transfer and further asserted that ‘knowledge stickiness’ can be mitigated by providing supportive learning environments. Nonaka & Nishiguchi,(2001) believe that knowledge development, especially social knowledge development of organisations, cannot be taken for granted since knowledge is very fragile in them and since individual knowledge can be easily killed, organizational knowledge development as social activity can be quite difficult or, in the worst case, impossible”.

Sven Carlsson (cited by Mylonopoulos & Tsoukas, 2003) develops a theoretical argument concerning the role of information technologies in supporting inter-organizational knowledge management. He establishes the criticality of knowledge in inter-organizational networks and, by drawing on the resource-based view of the firm, emphasizes the role of such inter-organizational knowledge in competitive strategy and comparative advantage.

2.2.3 Knowledge Management Structure

Knowledge is information with value, from the human mind Davenport (2007). The dominant part of scholastics and knowledge managemnt specialists make a refinement between the three related however discrete terms of information, Information, and information. The three terms are various leveled in nature with information being the establishment whereupon data works to a bluff of learning. The term knowledge is often used interchangeably in practice and in literature, capabilities, with intangible assets, core competence or even skills (Likhi, 2001). Various cognitive theories exist that consider the pyramid of data, information and knowledge. Some research suggests that hierarchy should extend beyond these three basic building blocks. System theorist and professor of organization change Russell Ackoff’s hierarchy extend the defense’s pyramid to five by adding wisdom. Data, information, and knowledge can be considered, not as discrete entities, but as existing along a continuum, as illustration in figure 2. They exhibit a relationship with their context and the amount of understanding they either impart or require.

A few subjective speculations exist that consider the pyramid of information, data and
knowledge. Some examination proposes that progression ought to stretch out past these three fundamental building squares. Framework scholar and teacher of association change Russell Ackoff's chain of importance extend the protection's pyramid to five by including intelligence. Information, data, and learning can be viewed as, not as discrete elements, but rather as existing along a continuum, as delineation in figure 3. They display an association with their unique circumstance and the measure of understanding they either impact or require. Devenport and Prusak (2008), defined data “as a set of discrete, objective facts about events” and they suggest “in an organizational context, data is more usefully prescribed a structured records of transaction.

The data in itself inherent meaning and provides no sustainable basis for action. Further, they have described information as “a message, usually in the form of a document or an audible or visible communication”. Knowledge, on the other hand, is much more than transformed information and therefore cannot be represented in the form of information objects or data. According to Polanyi (2006). "We can know more than we can tell”, which can be agreed with the essential idea that the verifiable and the unequivocal measurements of information are reciprocal, all learning contains both measurements. Pure explicit or implicit knowledge, or the conversion of one into the other, is thus impossible.

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2.2.4 Knowledge Management Strategy

According to management guru Peter F Drucker (1995), “knowledge has become the key economic resource and the dominant, perhaps even the only, source of the competitive advantage. The genuine and controlling asset and the totally definitive 'element of creation' is currently neither capital nor arrive nor work, it is information. "Information, not land, work and capital, is currently the life blood of the enterprises" (Hauschild, Licht & Stein, 2011). Knowledge is seen as a value creator. Knowledge consists the most basic economic resource today.

Knowledge Management endeavors commonly focus on authoritative goals, for example, enhanced execution, upper hand, development, the sharing of lessons scholarly, reconciliation and nonstop change of the association. KM exertion cover with authoritative taking in and might be recognized from that by a more prominent concentrate on the administration of learning as a key resource and an emphasis on empowering the sharing of information (McAdam, et. al. 2000). Organization's upper hand is established in this information advantage and in the capacity to change this unrivaled learning into market-driven business forms. A learning based point of view of the firm has risen in the vital administration writing. This point of view expands upon and broadens the asset based hypothesis of the firm at first advanced by Penrose (2009) and extended by others (Barney, 2006).

Organizations that are aware of their organizational culture types can plan strategically and make informed decisions on the type of knowledge management initiatives to employ.
(Dyer 2005). Strategy can be determined as a balance between internal resources (strengths) and the opportunities raised from external setting (Grant, 2011). In other words, strategies surface due to mutual actions of an enterprise with its business setting together with its knowledge workers and all who participate in this process. Moreover, Barney (2006), states that a course of action is claimed to be a “competitive advantage” at the time when a company develops an appropriate set of actions which is not concurrently being developed by competitors. Fahey (2006), mentioned that two significant concepts i.e. “knowledge and strategy” are complex having dynamic definitions with many facets. Strategy-oriented knowledge consists of plenty of diverse fields, including “competitors, customers, suppliers, technologies, regulations and policies”.

An organization has the opportunity to observe the current course of actions to find out the way that it could utilize all potential “knowledge assets”, or consider the available and core knowledge to pinpoint which course of action will best fit the required advantages and suitable for its business setting (Halawi et al., 2006). In this manner, it will probably perceive the linkage amongst procedure and learning with respect to the way that the last mentioned and its fitting organization can possibly deliver "key preferred standpoint" for an association. As expressed by Zack (1999), the initial step for an undertaking to depict the associations amongst "information and system" is to absolutely express its key outline and figure out what sorts of scholarly assets are basic to finish the proposed game-plan in this way revealing its key knowledge gap. This strategic knowledge gap can be covered by a KM strategy, while Tiwana (2002), mentions that knowledge compels strategy and strategy compels KM. Knowledge is seen as a value creator. Knowledge consists the most basic economic resource today, which is depicted in figure 2.3.
2.2.5 Knowledge Management Assets

Check Lucier, a partner at the Booz-Allen & Hamilton, the consulting firm, was one of the first designated executives in knowledge management when he was designated as the Chief Knowledge Officer of the firm in 1994. It is estimated that about a fifth of the FORTUNE 500 companies employ someone who, in role if not always in title, is knowledge manager. India’s first Chief Knowledge officer, Hemant Manohar, was appointed in 2001 at KPMG India for taking charge of the India operations of its &100 million global Knowledge Management initiative. Jay Leibowitz (2011) in his book “Knowledge Management-Learning from Knowledge Engineering” has given major emphasis on an important dimension of knowledge management, i.e., “people and Culture aspects” in addition to methodologies, techniques and technology as applied to knowledge management.

The requirements for the wealth creation and economic growth have shifted away from traditional assets such as capital, labor and land towards intellectual assets. About three-quarters of world’s corporate market value resides today in assets such as intellectual property, customer data, financial records, strategies and trade secrets. These assets are all knowledge-based (Nakazawa, 2002). Another argument is firms have recognized that they can create value through their intangible assets too. Devenport and Prusak (2008) believe that sustainable differentiation and competitive advantage derive from Knowledge and this
realization has led to Knowledge being seen as a corporate asset that must be accorded the same value as more tangible assets.

According to Wiig (2007) the organization’s practicality relies on upon: “the focused nature of its knowledge based research capital and resources and the fruitful uses of these benefits in its operational activities to understand their incentive to satisfy the organization's destinations” Over the most recent decades, an expanding measure of commitments have been delivered in this advancing examination field, from both scholastics and specialists in tending to the appraisal of Intellectual Capital (Haanes and Lowendhal, 2007) and the activities of Knowledge Management. From these works it can be viewed that the assessment of Intellectual Capital and the implementation of KM initiatives, are two building blocks that should be jointly considered. Wiig (2007) argues that it is fundamental to determine which KM activities are required to obtain the desired intellectual capital results and capitalize their value for the company’s benefits.

The second perspective is more concerned with the economic feature of KM and includes a more static thought of information as resource, which can oversee and send keeping in mind the end goal to produce esteem. As respects, the writing gives diverse methodological apparatuses and models for recognizing and evaluating the information resources of associations. Marr and Schiuma (2001) bring together the different aspects and propose two taxonomies concerning the knowledge assets and the knowledge processes useful to manage knowledge assets.

2.3 Leadership Style on Effectiveness of KM Systems

2.3.1 Transformational leadership and Knowledge Management

A Leadership style is an overall method of leadership used by managers and supervisors. There is no doubt that leaders are the ones who set the standards for others in organizations and are one of the biggest driving forces that inspire and motivate members of the organization to achieve their goals. Therefore leaders have direct impact on how organizations should see and deal with knowledge management but if knowledge management is not being conducted on all levels in the organization starting from the top then it would not be as effective as expected (Singh, 2008).

A framework was established to implement quality management within an organization
actually a system of profound knowledge. While implementing it leadership and knowledge management were measured and it was found that to actualize such framework pioneers required ought to be participative, collective and motivating (Gapp, 2002). Transformational initiative can possibly impact worker's discernments through the profits that association get as human capital advantages and these pioneers additionally can possibly make those advantages more noteworthy by including them in the information administration forms, encouraging inter personal communication among employees and creating organizational culture (Birasnav, Rangnekar, & Dalpati, 2011). It is possible for transformational leadership to enhance organizational innovation through creating a participative environment or culture and it can do as such specifically or in a roundabout way by changing association's way of life which energizes learning sharing and administration in the association. It is in the control of transformational initiative to advance such culture so the workers have self-governance to talk about their encounters and knowledge (Nguyen and Mohamed, 2011).

There is relation between magnitude of knowledge acquisitions and transformational leadership. In today's challenging world organizational culture should be more empowered and that is achieved by transformational leadership which encourages people to be open about their choices and decisions. (Politis, 2011) He encouraged the role of participative leadership, it is this leadership style which relies heavily on the leader functioning as a facilitator rather than simply a leader who orders and wants his assignments done in time. Employee would not be agreeable in sharing learning unless representative realizes that he/she would be upheld by their pioneers.

Finally, Crawford (2005) contended that there is a reasonable connection between transformational leadership and knowledge management in organizations. Crawford's exploration is pre observational and made the point plainly that exact testing is expected to comprehend the relationship of transformational administration and hierarchical knowledge develops. Crawford's exploration gives some premise from which to estimate that transformational initiative may be causative variable impacting more noteworthy information administration abilities. Transformational administration and individual development are connected. It was found that transformational leaders are more innovative than transactional and laisse-faire leaders. Innovation is regarded as one of the key factor for knowledge leaders; it is the name for managing and creating information and knowledge
2.3.2 Transactional Leadership and Knowledge Management

The second variable we are studying in this research, affecting the knowledge management in organizations is the 'transactional leadership style'. This style of leadership is impacted by the idea of reward and discipline; such pioneers trust that the representative's execution is fundamentally needy upon these two variables. That implies that when there is a motivating force the laborers invested their best exertion and the reward is in money related terms in a large portion of the cases; while when they neglect to accomplish the set target they should be rebuffed (Oshagbemi & Ocholi, 2006). Similarly, transactional leaders impose their authority on their followers to take work from them and clearly state what they want and also give employees the opportunity to get detailed information and guidance before they accept an assignment. Such pioneers underline on present issues; they don't get included with the representatives errands unless a need emerges and in the start of a venture they give the specialists every one of the assets required for its fruition and after that the assignment turns out to be absolutely the duty of the workers (Popper & Zakkai, 2002).

Transactional leadership has two major segments, unexpected reward, and administration by execution (MBE). Here, unforeseen reward implies the reward that a worker is guaranteed by the director, to be obtained if the required target is accomplished by him or her and the MBE approach is utilized to ensure that one ought to never neglect to accomplish the coveted outcome because of the asset limitation. Pioneers must be clear in clarifying what they really expect and the hierarchical objective is accomplished they should give the acknowledgment. It was additionally separated from that manual that MBE is of two sorts, latent and dynamic. In MBE active, the leader clarifies the standards to be followed and also defines the unacceptable standards of work and is likely to punish if they are not followed. In this strategy, mistakes and errors are identified and steps are taken to correct them. While, in MBE passive, the leader plays a passive role who does not clarify the standards or the requirements to be met by the employees, but only gets involved when there is an obvious issue. Hence, in this case passive style is not considered to be unsystematic in correcting the negative issues (Ogunlana, 2008).

Whereas, Bass (1985) explained that transactional leaders are not significantly involved with the subordinates' work unless need arises when a problem occurs. On the other hand,
he also stated that transformational leaders strive to motivate their workforce, rouses their intellectual skills and acts as their role model. They also have the unique quality of inspiring employees to acquire goal accomplishing skills and improving their performance in achieving the corporate vision (Nemanich and Kellar, 2007). They also encourage, train and support their subordinates keenly and promote individual and team spirit among them. Consequently, their efforts are paid back in the form of improved employees’ performance and high returns from the employees (Yulk, 2006; Boerner et al, 2007).

Transactional leaders pay more attention to physical and security needs of the employees. The relationship between the leader and the subordinates mainly revolves around the attraction of reward system as a return for their efforts. It is also said that in transactional leadership one person takes the initiative to make a contact with others in order to make a contract of exchanging functions for the benefit of the organization (Birasnav, Rangnekar, & Dalpati, 2011). Leader's self-realization of importance of knowledge management really matters in the effectiveness of knowledge management’s practices in the organization and realization is needed in two dimensions, one internal other external. Internally it is achieved by establishing technological and socio-cognitive ways of managing knowledge and externally it is by realization of valuing customer focused knowledge management (Lakshman, 2009).

2.3.3 Laissez-faire and Knowledge Management

Whereas, the third variable in this study is the 'laissez-faire leadership style', in which the leader gives complete freedom to the employees to make decisions regarding the completion of a task while answering their questions wherever they find problems and the workers are provided with all the necessary resources and tools by the leader. Apart from that, the leaders only offer little guidance and the followers are expected to solve problems on their own (Crawford, 2005). This strategy proved successful in cases where the workforce is highly experienced, skilled and capable of doing their jobs, otherwise if the labor lacks the required expertise, the researchers found it to be ineffective and the weakest form of leadership which yields poor results for the organization, as there are some workers who are unable to solve problems, meet deadlines and expected performance on their own.

In such situations the working environment is quite relaxed, free of work pressure and less interference from the manager, but still it brings frustration and demonization among the
teams when they are unable to deliver the desired results, without the required feedback and assistance from the manager. However, laissez-faire strategy contributes towards employee empowerment and gives a visionary worker the opportunity to perform according to his or her own will. Laissez-faire is a pioneer who dependably flees when there is a need to settle on an imperative choice or when there is a major issue (Ogunlana, 2008).

The phenomenon of knowledge management is relevant all in all authoritative structure, taking into every one of the levels of progressive system. While considered experimentally it was found that the connection between the diverse parts of information administration and transformational authority, value-based initiative and self-administration have a connection with the achievement of learning structures. Moreover the leaders should be able to give an empowering environment to the employees. Although according to the empirical findings, which are quite limited in this aspect, as well as the theoretical assumptions of a number of authors, there is a need for participative collaborative leadership style in order to facilitate the flow of knowledge. It was therefore pointed out that empirical testing of the knowledge attributes in an organization should be done, to establish the relationship between management of knowledge and transactional leadership in a firm. (Crawford, 2005).

The researcher selected a sample of 1,046 males and females enrolled in liberal classes who were side by side employed in different economic sectors. In the first round they were asked to answer the questions based on the behavioral aspects of knowledge management in which the questions taken from the Barth (2003) typology of personal knowledge management categories. In the round they were asked to fill in the Multifactor Leadership Questionnaire 5-S (MLQ) derived from Bass (1985) which included scales measuring the traits of the three administration styles: transformational, transactional and laissez-faire. It was examined that free enterprise turned out to negatively affect learning administration, which shows that a pioneer's part is extremely basic in overseeing information practices in the corporate. Therefore, the negative connection between the two parts demonstrated an inverse relationship, implying that when learning administration conduct expands, the degree of free enterprise diminishes (Crawford, 2005). Laissez-faire leadership style exhibits ineffectiveness, unproductiveness and dissatisfaction. These leaders give followers freedom to do their jobs and avoid taking the responsibility their position demands. They also avoid developing a relationship with their subordinates (Ogunlana, 2008).
Research studies carried out in firms to link leadership, particularly, transformation leadership, KM, and human capital benefits are limited. A few studies investigated the part of transformational administration styles on individual representatives, execution and hierarchical execution through learning procurement, information creation, information sharing, and learning abuse. Gowen et al. (2009) states that transformational pioneers make changes in general KM administration forms in medicinal services establishments. Crawford (2005) discovered that transformational leadership contributed to 19.5% variance in KM. While investigating the role of leadership styles in KM, Politis (2001) found that leaders having behavioral and interpersonal skills were more effective in KM process. These skills are an integral part of transformational and transactional leadership. Nguyen and Mohamed (2011) strongly suggest that leaders are highly influential in KM practices. Nowadays, transformational leadership can play such a significant role in enhancing the organizations’ environment and helping to apply knowledge in an efficient way by managing the knowledge in a way required for improvement of organizational learning.

2.4 Information Technology on Effectiveness of KM Systems
2.4.1 Information Technology and Knowledge Transfer

Knowledge Sharing constitutes the most important part of KM. The aim of sharing employees’ knowledge is to transfer their values into the organization recourses (Dawson, 2000). Knowledge sharing between individuals is explained by Ipe (2003) as "the process by which knowledge held by an individual is converted into a form that can be understood, absorbed, and used by other individuals". The term sharing refers to individuals who present their knowledge in a form that can be used by others in the organization. In addition, sharing includes a conscious action on the part of the individual which does not involve the intention of taking ownership of the knowledge; instead ownership of the knowledge belongs to both sender and recipient (Ipe, 2003). Knowledge sharing not only boosts individuals’ competency but also causes them to produce new knowledge (Sveiby, 2001). Wah (2000) asserts that individuals who hoard knowledge generate a huge impediment in the process of KM. On the other hand, Goh (2002) explains that if economic competition exists in an organization, knowledge is equated with power, and it is natural that people should hoard knowledge.

Knowledge transfer and sharing are a key process in KM. Transfer occurs at numerous levels: from persons to explicit sources, from persons to sets, between sets, transfer and
sharing of knowledge between persons and from the set to the business. Transfer and sharing are important process of KM in structural settings by knowledge to locations where it is wanted and can be used. This is not a simple process because in many organizations they frequently do not identify what they know and frequently process is weak in system. Knowledge transfer in organizations can drive communication process and information flow. IT can increase knowledge transfer through some tools of formal communication such as email, teleconference, and internet (Alavi & Leidner, 2007). Eppler and Mengis (2003) stated that the development of IT has helped to increase the amount of information. Bawden and Robinson (2008) said: The new technology in the field of information and communications are designed to facilitate quick access to information. Filippov and Lastrebov (2010) stated that information and communication technology have increased the ability to produce and access information.

A study conducted among audit firms in the United States indicated that knowledge transfer plays an important role in enhancing auditor professional skepticism, thereby improving the accuracy of auditor judgments. Additionally, as recommended by Nelson (2009), master learning, position, and judgment were huge figures the arranging of a review engagement. In any case, attribute impacts (as caught by firm impacts) were not critical in clarifying examiners' judgments. These outcomes are essential in that they show the hugeness of the part that information move works in encouraging inspectors' activity of proper polished methodology in review engagement arranging.

In another paper, analyzed the impact of newly emerging KM concept on competitive patterns for professional service firms (e.g., consultants, accounting firms, or advertising agencies). Their analysis revealed that in a competitive set up, when the ability to exploit economies of scale is large enough, firms will focus on building KM system aimed at creating higher quality services to clients. Meanwhile, in a dynamic set up, KM system may end up hurting profits and lead to industry shakeout. The result also offered support to a number of recent trends in consulting firms, including increased focus on knowledge-creation activities by modern KM system, the wave of mergers between consulting firms, and the recent emergence of “retail consulting” services.

In a study of Oliver (Oliver, 2008) entitled: “knowledge management practices to support the continuous development.” The purpose of this study was to find out knowledge management practices with regard to the operations, data were collected by postal survey
of Australian organizations that possess the ISO9000 standard. The study results showed that the organizations most successful has provided guidance and recommendations in sharing (experiences, progress projects, best practices, success, failure), as well as the sharing of experiences acquired from the general environment, and finally take advantage of the organizational structure that could facilitate communication between employees.

2.4.2 Information Technology and Knowledge Application

One of the important parts of the knowledge system in the organization by basis of competitive advantage exists is knowledge application. In business, knowledge is used to improve the values, actions and processes. Knowledge application implies the use of knowledge to solve problems and aide decision making by organizations’ management. Knowledge cannot make structural value. Its application of new knowledge by individuals is complex (Alavi and Tiwana, 2003). All abilities are combined by IT human skill to offer unique services to the organization. There are several ideas to help improve employee knowledge; employees’ education level can be developed from time to time to improve their appreciation of the importance of knowledge management and IT. Employees can be exposed to KM and IT ideas and actions in order to get their support, a devoted IT skill should be assigned to manage IT efficiently (Rasli & Maseri, 2008).

The IT group can play important role in the strategic decision processes. IT specialists are often involved in necessity studies, systems structure, installation of hardware and software. IT knowledge employees can design and handle an organization, IT infrastructure and manage IT activities of the competitors for an organization’s business (Wang et al, 2006). Knowledge application has positive effect and improves by IT and IT helps the capture and updating. IT can also improve the speed of knowledge application by codifying (Alavi & Leidner, 2001, Lee & Choi, 2003). To the extent that IT has led to a reduction in the traditional boundaries between hierarchical levels (vertical boundaries) and between functions (horizontal boundaries), these technologies favor the development of organic structures where information, ideas and knowledge can flow rapidly through the organization and hence improve the chances of processing and generating knowledge effectively.

In a study carried out by (Altaweel & Rasheed, 2005) study entitled: “The impact of information technology in knowledge management processes: a field study in a sample of
industrial companies in the province of Neenawa.” The purpose of this study was to build a conceptual framework and field to determine the impact of information technology in knowledge management processes in a sample of industrial companies to contribute to the Neenawa province in Iraq. To achieve the objectives of the study a questionnaire were developed, and distributed to a sample consisting of (64) individual who are heads of departments, and members of boards, directors and managers in the surveyed companies formations. The study found a set of conclusions the most important is having a significant effect between information technology and knowledge management processes in companies surveyed, and knowledge management processes, all is not derived efficiency from software and the hardware and also equipment did not contribute positively to the processes of diagnosis knowledge.

Hussein conducted a study (Hussain, 2010) entitled: “Knowledge management in small and medium-sized enterprises in developing countries.” The objective of this study is to reach the state of knowledge management in small and medium-sized enterprises in developing countries, as well as test the factors that affect the adoption of knowledge management in small and medium-sized enterprises in developing countries. Although there are many organizations have realized the importance of knowledge management in business growth and development, but the results of the study indicated that small and medium-sized enterprises in developing countries did not realize this importance. The study took the lack of attention this into consideration and suggested a particular input to knowledge management in small and medium-sized enterprises in developing countries.

2.4.3 Information Technology and Knowledge Storage

In companies that create knowledge, they do not remember, forget or lose the developed knowledge (Duffy, 2000). Therefore, organization, storing and recovery of organizational knowledge are important elements of effective organizational KM. Knowledge exist in various elements such as information stored in databases system, documented organizational actions and organized people knowledge stored in systems. Knowledge storage refers to development of organizational memory and the means for accessing it. Knowledge storage uses IT for storing of knowledge. Data warehouse is a centralized source that integrates and creates data. Data warehouse then helps to find important data (Alavi and Leidner, 2001). Data mining is a useful technique for uncovering such
information. Data mining is explained as the process of searching for unknown correlation in the data by looking for interesting patterns.

The study of (Kumar & Kumar, 2006) entitled: “knowledge management based on information technology in the higher education system in India: addressing the quality of the business and determine the right priorities.” This study aimed to try to consider knowledge management based on information technology as a management tool to evaluate the technical work in institutions of higher education in India. Have been discussing various possible means in order to make a knowledge management based on information technology impact in the Indian education system, the statistical method was used to analyze the data collected from educational institutions in different regions in India. The results of the study indicated that knowledge implementation management based on information technology not only leads to better quality of services, but to lower the costs of higher education in India.

The study by (Saadi, 2010) entitled “Effect of Information Technology on the audit profession in the corporate industrial sector’s in Jordan: An Empirical Study,” the aim of this study was to investigate the views of auditors in industrial companies. The study sample consisted of auditors who work in industrial companies numbering (50) auditors, the questionnaire was distributed to them to find out their views on the use of computers in the field of planning, implementation and control and show if there is a trace of the use of information technology in the planning, implementing the lack of impact in the use of information technology in censorship. The study conducted by (Almaani, 2009) entitled “Trends of Managers in Jordanian ministries centers to the role of knowledge management: An Empirical Study” This study aimed to identify the trends of managers in Jordanian ministries revolves around the application of the concept of KM and its impact on their job performance, and test differences in those trends depending on the different demographic characteristics, included in the study (260) director in ministries centers.

One of the most important results of the adoption of Jordan Ministries concept of KM found, that the respondents feel a high level of functionality. The existence of a statistically significant effect of the following elements of knowledge management: (knowledge generation, team knowledge, knowledge storage, sharing of knowledge, the application of knowledge, and technology and knowledge). On the level of functionality those respondents feel, as interpreted variable knowledge management 40.9% of the variation in
the level of job performance, according to the value of the coefficient of determination R2. And the existence of differences of statistical significance in the trends of the respondents towards the adoption of Jordanian ministries of the concept of knowledge management due to their demographic characteristics with the exception of a variable length of service. The study also showed no statistically significant differences in the attitudes of respondents towards the level of job performance due to their demographic characteristics with the exception of the period of service.

2.4.4 Information Technology and Knowledge Acquisition

Getting information is no longer the problem. The difficulty lies in obtaining quality information, where quality is measured in terms of accuracy, reliability, precision, and timeliness, and the extent to which the information is relevant in the decision making (Huber, 1990). One of the main critical aspects in organization is accessibility of IT for employees (Peck et al, 1999). Finding persons with IT skill and maintaining them in the right place is the key to organizational efficiency. Employees are those who handle business concerns, communicate through the organization (Gupta & Govindarajan, 2010). Highly motivated employees in IT skill could provide organization to improve decision making. Employees must easily access necessary information and apply IT to create new knowledge. To reach desired business performance, the organization should have knowledgeable, skillful, and motivated employees in IT. Employees should have ability understanding IT. Employees have to be trained in specific parts of IT and be able easily use IT infrastructure (Azari, 2008).

Information filtering has become an important type of IT support for knowledge employees, who are faced with ever growing amounts of information. Management support also focuses on creating a knowledge infrastructure and support system that improves and enables the sharing and application of knowledge at the suitable levels (Attaran, 2003). IT can play important role to provide information to maintenance the method and circumstances that support knowledge management. IT support is the amount of KM which is supported by IT use. IT is a vital element for knowledge transfer and creation (Gold et al, 2001). Employees can easily access to the necessary knowledge.

The IT revolution has facilitated the processes of searching for and recovering information, but at the same time it has led to an important growth in the database industry. Firms must
be able to use IT to obtain useful information for their decision-making. Song et. al. (2006) stated that the development of many technological applications enhanced organizational capacity and caused a massive influx of information and their use in organizations. Singh et. al. (2006) said that: information technology has a significant effect on knowledge management. Zhang (2008) stated that it has almost become a consensus that with the development of information and communication technologies, human society has evolved into a knowledge era.

2.4.5 Information Technology and Technical Capabilities

In the business world, IT has become a common force and from that time until now, IT can be used for information storage, information protection, information process, information transferring. In addition, IT can significantly help in achieving the organization goals. Internet, browsers, data mining, data warehousing and other useful programs can arrange and improve organization KM and thus improve organization performance (Ray, 2008) as well as help gain competitive advantage. The role of IT in storage, transfer and sharing of knowledge is very important. KM without IT is useless for competitive ends. Knowledge formation and distribution are significantly enhanced by IT that improves storage, communication, transfer and sharing of organizational knowledge (Lee & Suh, 2003; Ray, 2008). Thus, many organizations utilize IT, especially to store and transfer explicit knowledge. IT can be categorized into seven elements; IT technology, tools, and organization information, IT support, IT skill, IT accessibility for employee and IT infrastructure and investment.

One of the main critical aspects in organization is accessibility of IT for employees (Peck et al, 2009). Finding persons with IT skill and maintaining them in the right place is the key to organizational efficiency. Employees are those who handle business concerns, communicate through the organization (Gupta & Govindarajan, 2006). Highly motivated employees in IT skill could provide organization to improve decision making. Employees must easily access necessary information and apply IT to create new knowledge. To reach the desired level of business performance, the organization should have skillful, motivated and motivated employees in IT. Employees should have ability understanding IT. Employees have to be trained in specific parts of IT and be able easily use IT infrastructure (Azari, 2008).
IT is very important in organizations for achieving goals by using an appropriate IT infrastructure. Knowledge management pushes management to high investments in IT (Borghoff, 2007). KM is about storage, transmitting and sharing of organizational information asset. Managing an organization’s knowledge requires specific set of IT infrastructure and IT. Management therefore should provide adequate budgets for Knowledge management, IT, IT infrastructure and IT related activities and the potential of developing technologies for an organization’s business (Rasli & Maseri, 2008). Many organizations increasingly invest in IT. Implementing IT infrastructures requires substantial financial and non-financial investment. IT infrastructure flexibility is the capability to easily support a wide variety of hardware, data, communication, software, applications, abilities, skills, commitments and the employee’s factor. All these can be achieved by significant IT investment in organizations (Chanopas et al, 2006).

Kasim (2010) stated information technology investment had a significant relationship in developing knowledge management. Whelan & Teigland (2010) concluded that technology caused the explosion of information, because of lower cost of multimedia technology, which made simple the process of accessing information and assist in sharing of information. Furthermore, Safarzadeh, et. al. (2011) showed that there is a significant relation between information technology and knowledge management. Moreover, Paghaleh, et. al. (2011) indicated that information technology grants knowledge management two major abilities: the ability to disclose knowledge and the ability to create fast connections among knowledge channels. Finally, Fernandez et. al. (2004) found that organizing knowledge management has contributed to knowledge generation, which seeks to improve the organizations’ performance. Kasim (2008) indicated that there is a strong relationship between knowledge management practices and organization's performance.

At the end, Banes (2011) stated that the challenge of knowledge management is to determine what information within an organization qualifies as "valuable." All information is not knowledge, and all knowledge is not valuable. The key is to find the worthwhile knowledge within a vast sea of information. Furthermore, Sebastian and Korrapati (2007) said: Ineffective or inappropriate information technology can result in incalculable losses through reduced information technology team productivity and substandard organizational output. Moreover, Albers (2012) stated that knowledge may be spread throughout the organization and not be available where it might best be put to use.
2.5 Chapter Summary

This chapter reviewed literature on effect of knowledge management on the competitive advantage of audit firms. The first part reviewed literature on how Dimensions of knowledge Management and their impact on the performance of firms, while the second section covered literature on the role of technological infrastructure towards building the competitiveness of a firm. Lastly, the subsection on leadership style and how leadership elements contributed to the success of a firm. The next chapter looks at the research methodology which details how data was collected and analyzed.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodological that was used in the study. It begins with the descriptive research design followed by the target population, data collection methods, data analysis techniques as well as research procedures. The body of research on knowledge management may be established and advanced with confidence only by the rigorous application of appropriate methodologies and methods of research.

3.2 Research Design

A research design is described as a logical sequence that connects empirical data to a study’s initial research questions and ultimately to its conclusions. It therefore helps to deal with the questions of what to study, what data are relevant, what data to collect, and how to analyze the results (Yin, 2014). The study will adopted a mix of descriptive and inferential research design. Bryman (2012) explains that descriptive/survey research is concerned with describing the characteristics of a particular individual, or of a group. Descriptive research is therefore concerned with specific predictions, with narration of facts and characteristics concerned with individuals, group or situations. Both qualitative and quantitative data were used in the analysis. The design was considered the most appropriate research design because it is fast and straightforward compared to any other method and tends to be relatively inexpensive. Additionally, the design if properly done enables one to generalize from a small group to the large group from which the subgroup has been selected.

3.3 Population and Sample Design

3.3.1 Population

A complete study of all members in a specified area of interest to the researchers is what is referred to as target population (Kothari, 2009). Saunders Lewis and Thornhill (2009) adds that population consist of all the groups of individuals, items, objects and events that have similar apparent characteristics. In this study the population consisted of the 160 employees at the Grant Thornton Kenya. In this study the population consisted of the Grant Thornton...
Kenya employees. The target population of the study was all the members of staff working at Grant Thornton Kenya. Other characteristics that the employees had to be present at the time the study was conducted.

**Table 3.1: Target Population**

<table>
<thead>
<tr>
<th>Department</th>
<th>Total No of staff</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>20</td>
<td>12.5%</td>
</tr>
<tr>
<td>Tax</td>
<td>12</td>
<td>7.5%</td>
</tr>
<tr>
<td>Advisory</td>
<td>14</td>
<td>8.75%</td>
</tr>
<tr>
<td>Legal/Secretarial</td>
<td>12</td>
<td>7.5%</td>
</tr>
<tr>
<td>Outsourcing</td>
<td>30</td>
<td>18.75%</td>
</tr>
<tr>
<td>Audit</td>
<td>72</td>
<td>45%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>160</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>


3.3.2 Sampling Design

3.3.2.1 Sampling Frame

According to Churchill and Brown (2007), a sample frame includes a list of geographical areas, institutions, individuals, as well as other units added. Cooper and Schindler (2008) define asampleframetobealistofelementstofromwhichthesampleisactuallydrawnand is closely related to the population. It is a complete and correct list of population members only. Kothari (2006) points out that this list should be up-to-date, comprising the population of the research. The sampling frame that was used for the study was the Central Office staff list.

3.3.2.2 Sampling Technique

The study employed purposive and stratified random sampling techniques. In the purposive sampling the researcher shall select the respondents on the basis of their knowledge, commendable experience and vital information presumed important to the study (Trochim, 2006). According to Powell & Silipigni (2004), purposive sampling is based on one’s knowledge of the population and the objectives of the research. The choice of an auditor to be interviewed depends on the willingness of the auditor to participate. To be suitable for interview, the auditor must have worked in the audit firm for a
maximum of at least one year. The one-year eligibility criterion was due to the assumption that within this period they would have familiarized themselves with the knowledge management activities in the firm.

### 3.3.3.3 Sampling Size

Thietart, et al., (2001) defines a sample size as the set of elements from which data is collected. The sample size enables the researcher to have adequate time and resources in piloting and designing the means of collecting data. Cooper and Schindler (2008) aver that how large a sample should be is a function of the variation in the population parameters under study and the estimating precision needed by the researcher. The sample size ensures that the information is detailed and comprehensive. A sample of Grant Thornton Kenya employees was selected from a population of Grant Thornton Kenya employees; this represents Grant Thornton Kenya percent of the total population under study. This sample size was considered appropriate and conformed to the provisions of Cooper and Schindler (2014), a sample size of more than 10 to 30 percent is usually recommended for social sciences.

#### Table 3.2: Sample size

<table>
<thead>
<tr>
<th>Department</th>
<th>Total No of staff</th>
<th>Sample Ratio</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>20</td>
<td>50%</td>
<td>10</td>
</tr>
<tr>
<td>Tax</td>
<td>12</td>
<td>50%</td>
<td>6</td>
</tr>
<tr>
<td>Advisory</td>
<td>14</td>
<td>50%</td>
<td>7</td>
</tr>
<tr>
<td>Legal/Secretarial</td>
<td>12</td>
<td>50%</td>
<td>6</td>
</tr>
<tr>
<td>Outsourcing</td>
<td>30</td>
<td>50%</td>
<td>15</td>
</tr>
<tr>
<td>Audit</td>
<td>72</td>
<td>50%</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>160</strong></td>
<td><strong>50%</strong></td>
<td><strong>80</strong></td>
</tr>
</tbody>
</table>

### 3.4 Data Collection Methods

Data collection refers to the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions and evaluate outcomes. Regardless of the field of study or preference for defining data (quantitative, qualitative), accurate data collection is important in maintaining research
integrity. Both primary and secondary sources of data were used in the study. The primary sources of data included structured questionnaires. Follow up was done through telephone and email. The questionnaire consisted of four parts. The first part contained general questions that determined the demographic information and other necessary information for creating the respondent’s profile such as age, gender and level of education. The second part addressed the policies and design of the existing knowledge system within the firm. The third part had questions on the first research questions. The third part posed questions that would allow the participants to provide information on the effect of technological infrastructure on the management of knowledge; such as the use of the intranet and availability of a comprehensive database. The final part of the research questionnaire was used to establish the effect of leadership style on the management of knowledge within the audit firm.

3.5 Research Procedures

According to Mugenda and Mugenda (2009), the pre-testing of a questionnaire entails conducting a preliminary test in data collection to cross-check the tools and procedures in order to pinpoint and eliminate problems, make revisions to the research instruments in a bid to ensure the data collected is reliable and valid. The researcher undertook five questionnaires amongst the Grant Thornton staff to ascertain the reliability of the instrument.

As aforementioned, the researcher collected the primary data using questionnaires. The researcher first obtained an introduction letter from the administration of the United States International University-Africa upon recommendation by the supervisor. Thereafter, the researcher obtained a clearance letter from Grant Thornton where the study was conducted. The researcher then issued the questionnaires, which contained a brief introduction of the purpose of the research and how the information provided by the participants was used. The participants were given two weeks within which to respond to the questionnaires.

3.6 Data Analysis Methods

The main purpose of the data analysis method that was used was to sum up observations in a way that provided answers to research questions. The qualitative and quantitative data analysis technique was used to analyze data. The Statistical Package for Social Scientists (SPSS) version 20.0 was applied in the analysis of the data collected from the close-ended questionnaires. The software package offers the most comprehensive solution for reporting.
modeling and analysis of data and it also offers a variety of data formats and programs that make it easy to edit and transfer data from one program to another. Descriptive analysis of the data collected was used. The data analysis involved measures of central tendency and frequencies.

The study aimed to establish relationship between the three explanatory variables and competitive advantage and so the inferential analysis was necessary. One-way analysis of variance (ANOVA) was also checked to determine the significance of the relationship between knowledge dimensions, Information technology, and style of leadership on firm competitive advantage of the audit firms while regression analysis was be used to determine the direction of the relationship. Further, Pearson’s correlation analysis was also carried out to measure the strength of the association between these variables. The Pearson’s bivariate correlation was used to test relationship between competitive strategy and firm performance. The degree of association in magnitude and statistical significance joint effect based on multiple linear regression analysis formed the following model:

\[ Y = \alpha + \beta_1 \text{DKM} + \beta_2 \text{ITF} + \beta_3 \text{LS} + \epsilon \]

\( Y = \) Competitive Advantage of Audit Firm
\( \alpha = \) Constant terms, \( \beta_1 = \) Beta co-efficient, \( \text{DKM} = \) Dimension of Knowledge Management, \( \text{ITF} = \) Information Technology, \( \text{LS} = \) Leadership Style, \( \epsilon_i = \) error term

### 3.7 Chapter Summary

Research is said to be valid when conclusions are true. This chapter established the methodological framework of the study. The study advanced the use of triangulation in knowledge management studies whereby both quantitative and qualitative research approaches were considered complementary of each other with a dominantly qualitative and less dominantly quantitative emphasis. The nature of data which was collected and the research questions influenced the choice of the research method. The main population of the study was employees of Grant Thornton Kenya. The researcher also used the purposive sampling technique in determining the auditors to be interviewed. Chapter four presents the results and findings of the study.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

In this chapter, results and findings of the analyzed data were presented into sections based on the research questions. Demographic findings are presented first followed by the findings on directive, supportive, participative and achievement oriented leadership styles and their effect on employee performance.

4.1.1 Response Rate

A total of 80 questionnaires were given out. Of these, 78 were filled and returned. This represented a response rate of 97.5% which is deemed acceptable as illustrated in Table 4.1.

Table 4.1: The Response Rate

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filled and Returned</td>
<td>78</td>
<td>97.5</td>
</tr>
<tr>
<td>Not returned</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

4.2 Demographic Information

In this section, results of the demographic information from the respondents as per the questionnaires are presented. The information that was sought under this section included; the gender of the respondents, the age distribution of the respondents, employment status of the respondents, the work experience as well as the level of education that each respondent had.

4.2.1 Classification of Respondents by Gender

The gender distribution of this study as illustrated in figure 4.2 showed that 67.1% of the respondents were male whereas 30.4% were female, 2.5% failed to indicate gender as shown. This shows that majority of the senior employees in the Grant Thornton were male.
4.2.2 Classification of Respondents by Age

Of the 79 respondents, about 53.2% were within the age bracket of 26 and 35 years whereas those within the age bracket of 18 and 25 years accounted for 36.7%, 8.9% for those were between 36 and 45 years and finally those above the age of 46 years accounted for 0% as shown in figure 4.2.

4.2.2 Classification of Respondents by Level of Education

Of the 79 respondents, about 53.2% were within the age bracket of 26 and 35 years whereas those within the age bracket of 18 and 25 years accounted for 36.7%, 8.9% for those were between 36 and 45 years and finally those above the age of 46 years accounted for 0% as shown in figure 4.2.

4.2.2 Classification of Respondents by Level of Education

The results in figure 4.3 show the number of respondents by levels of education. From this figure, it is seen that majority of the respondents, 65.8%, held bachelor’s degrees. Further to this, those with a certificate or diploma were 16.5%, Postgraduate studies accounted for 13.9%, while those with other credentials accounted for only 2.5%.
4.2.3 Classification of Respondents by Work Experience

Figure 4.4 shows the number of years that each respondent had worked for Grant Thornton Kenya. From the findings, most of the respondents (65.2%) had worked for over 15 years, those who had worked for a period of between 11 and 15 years accounted for 27.5% whereas, those who had worked for a period of between 6 to 10 years accounted for 4.3%.

Figure 4.4: Classification of Respondents by Years of Experience

4.2.4 Classification of The Respondents Roles

Figure 4.5 shows the number of respondents by their respective roles in the firm, Senior managers were the majority and represented 44.3%, Associate were 31.6% of the respondents while the managers accounted for 10.1%. Both Directors and Partner were 6.3% of the total, and 1.3% failed to indicate their role at the firm.

Figure 4.5: Classification of Respondents by Education
4.3 Dimensions of Knowledge Management

The first objective of the study was to examine the dimension of knowledge management applied in the firm. Respondents were required to rank their level of agreement in a five point Likert scale, about the Knowledge Management Systems applied in the firm. Different statements were put across to gather the intended measure of KM in terms of defined systems, budgetary allocation, identification of knowledge gaps, availability of CKO, awareness of KM, policies of KM, knowledge acquisition mechanisms, delivery of better services, motivation of auditors, mentors in KM, and knowledge sharing.

4.3.1 Descriptive on Dimensions of Knowledge Management

To begin with, it was revealed that at Grant Thornton Kenya there was a Clearly defined systems, KM, 47% agreed with 42% strongly agreeing. It was also noted that 47% agreed that there was sufficient budget location for KM, 29% strongly agreed and 18% were neutral. It was also established that 52% acknowledged that senior manager looked at knowledge gap to identify competent staff, 25% were in strong agreement while 20% were uncertain. The presence of chief knowledge officer was also confirmed with 35% of the respondents agreeing while 24% were in strong agreement, however 22% were neutral and those who disagreed were 11% while 5% strongly disagreed.

The findings established that 38% agreed that they were aware of the KM policies, 33% strongly agreed while 16% were uncertain, those who strongly disagreed, or disagreed were 3% and 9% respectively. It was also revealed that 41% strongly agreed that inability to
apply the right knowledge and skills was attributed to failure to identify internal knowledge, 30% agreed while 18% were neutral with only 8% disagreeing. To establish if knowledge was acquired through on job training, mentoring and seminars all respondents were positive, it was also established that 51% of the respondents strongly agreed that KM had improved service delivery, 38% agreed with 10% being neutral.

The findings also revealed that the firm encouraged employees to seek new ideas, this was confirmed by 61% who strongly agreed, 30% agreed and only 8% were uncertain. It was also revealed that 46% strongly agreed that the firm makes use of apprentices and mentors to transfer knowledge, 42% agreed while 10% were neutral. The force behind the push for KM was revealed to be the motivation from competitors and to confirm this, 49% agreed while 27% strongly agreed, only 18% were neutral. It was also noted that the increase in mobility of auditors has motivated KM, as 39% agreed, and 34% strongly agreed, 19% were however neutral and only 4% disagreed. Most of the respondents representing 48% agreed that the firm has developed strategies to align operations to the changing KM systems, 43% strongly agreed while 8% were neutral. Also 44% agreed that they don’t have difficulty in applying work methods trained on, 8% disagreed, and 5% were neutral. Finally, 30% agreed that they share information with other players in the audit industry for better KM, 27% were however neutral while 5% disagreed, and 3% strongly disagreed, and only 2% strongly agreed. The summary is shown in Table 4.2
Table 4.2: Dimensions of KM and Firm’s Competitive Advantage

<table>
<thead>
<tr>
<th>Dimension</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>N</th>
<th>%</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearly defined systems for KM</td>
<td>0</td>
<td></td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>6</td>
<td>37</td>
<td>47</td>
</tr>
<tr>
<td>Budget dedicated to KM</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>14</td>
<td>18</td>
<td>37</td>
<td>47</td>
</tr>
<tr>
<td>Knowledge gaps to identify competent staff</td>
<td>0</td>
<td></td>
<td>1</td>
<td>1</td>
<td>16</td>
<td>20</td>
<td>41</td>
<td>52</td>
</tr>
<tr>
<td>Chief Knowledge Officer (CKO) or an equivalent.</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td>11</td>
<td>17</td>
<td>22</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>KM policies of my firm.</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>9</td>
<td>13</td>
<td>16</td>
<td>30</td>
<td>38</td>
</tr>
<tr>
<td>Failure to identify internal knowledge</td>
<td>0</td>
<td></td>
<td>6</td>
<td>8</td>
<td>14</td>
<td>18</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Knowledge acquisition</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>31</td>
<td>39</td>
</tr>
<tr>
<td>KM improved services</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>10</td>
<td>30</td>
<td>38</td>
</tr>
<tr>
<td>Encourages new ideas</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>8</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Make use of apprentices and mentors to transfer knowledge</td>
<td>0</td>
<td></td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>10</td>
<td>33</td>
<td>42</td>
</tr>
<tr>
<td>Competitors has motivated the acquisition of KM</td>
<td>0</td>
<td></td>
<td>2</td>
<td>3</td>
<td>14</td>
<td>18</td>
<td>39</td>
<td>49</td>
</tr>
<tr>
<td>Increase in mobility of auditors has motivated KM</td>
<td>0</td>
<td></td>
<td>3</td>
<td>4</td>
<td>15</td>
<td>19</td>
<td>31</td>
<td>39</td>
</tr>
<tr>
<td>Align operations to the changing KM systems</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>8</td>
<td>38</td>
<td>48</td>
</tr>
<tr>
<td>Difficulty in applying work methods trained on</td>
<td>0</td>
<td></td>
<td>6</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>35</td>
<td>44</td>
</tr>
<tr>
<td>Shares information with other players in the audit industry for better KM</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>21</td>
<td>27</td>
<td>24</td>
<td>30</td>
</tr>
</tbody>
</table>

SD-Strongly disagreed; D-Disagree; N-Neutral; A-Agree; SA-Strongly agree.
4.4 Effect of Information Technology Infrastructure on Firm’s Competitive Advantage

On the second study objective, the study sought to know the effect of technology infrastructure on knowledge management in audit firms. The following dimensions were tested; availability of database, use of email, training programs, information trust, document management system, electronic files, availability of intranet, free sharing of knowledge, and lastly, effective communication. Different constructs were posed to test their level of agreement in five point Likert scale as shown in Table 4.3.

4.4.1 Descriptive on Effect of IT Infrastructure on Firm’s Competitive Advantage

First, most of the respondents 53% strongly agreed that the firm had a comprehensive, adequate database, while 34% agreed, leaving 10% who were neutral. It was also noted that 56% strongly agreed that employees used emails to share and exchange knowledge with others, 37% agreed while few than 4% were neutral on the same and only 1% strongly disagreed.

Thirdly, it was noted that 58% were uncertain that IT had encouraged personnel to join training programs outside the firm, 41% however strongly agreed while 32% agreed and only 5% disagreed. To establish if IT infrastructure had aided availability of knowledge when needed and could be trusted in making decisions, 46% agreed and 42% strongly agreed. Only 8% had a neutral feedback while 4% disagreed. Forty nine percent of the respondent agreed that the organization’s portal had assisted in the transfer of knowledge was sought. With majority at 37% in strong agreement while 8% were neutral while a distant 3 percent disagreed and strongly disagreed respectively.

Additionally, majority of the respondents at 49% agreed while 37% strongly agreed with the construct that the availability of document system on portal was assisting in knowledge transfer. More than half (52%) of the respondents agreed that electronic files storing knowledge in the organization could easily be retrieved, and 43% strongly agreed. Less than a handful (4%) were neutral on this construct.

Sixty eight percent strongly agreed that intranet had enabled exchange and sharing of knowledge with others, 27% strongly agreed and 3% were neutral. Majority of the respondents at 62% strongly agreed that IT had enabled free sharing of knowledge within the various departments, 29% strongly agreed and 8% were neutral. Finally, when asked
about whether IT infrastructure had facilitated effective communication in the firm, respondents overwhelmingly strongly agreed at 59%, agreed at 34% while only 3% maintained neutral ground and disagreed respectively.

Table 4.3: Effect of Information Technology and Firm’s Competitive Advantage

<table>
<thead>
<tr>
<th>Information Technology Infrastructure</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive database</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>10</td>
<td>27</td>
<td>34</td>
<td>42</td>
<td>53</td>
<td>4.40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of emails</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>29</td>
<td>37</td>
<td>44</td>
<td>56</td>
<td>4.49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attracting outside personnel</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>46</td>
<td>58</td>
<td>25</td>
<td>32</td>
<td>32</td>
<td>41</td>
<td>4.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of Information</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>36</td>
<td>46</td>
<td>33</td>
<td>42</td>
<td>4.27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Document system on portal</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>8</td>
<td>39</td>
<td>49</td>
<td>29</td>
<td>37</td>
<td>4.17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presence of electronic files</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>41</td>
<td>52</td>
<td>34</td>
<td>43</td>
<td>4.40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presence of intranet</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>21</td>
<td>27</td>
<td>54</td>
<td>68</td>
<td>4.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free knowledge sharing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>8</td>
<td>23</td>
<td>29</td>
<td>49</td>
<td>62</td>
<td>4.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective communication</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>27</td>
<td>34</td>
<td>47</td>
<td>59</td>
<td>4.53</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.5 Effect of Leadership Style on Knowledge Management

Finally, the last study objectives sought to know the effect of leadership style to the knowledge management in audit firms. Leadership style was assessed in terms of open door policy, management’s role, knowledge reviews, development of team objectives, free knowledge sharing, continuous dialogue and respect, Feedback, effective communication, guidance and support, staff recognition, promotions, teamwork and cooperation, promotion of trust and The level of agreement of the respondents was ranked in a five point Likert scale as shown in Table 4.4.

4.5.1 Descriptive on Effect of Leadership Style on KM

To start with, respondents were asked if the organization embraced open door policy. The responses were fairly distributed with 48% strongly agreeing while 47% agreed; only 3%
were neutral, over half of the respondents at 52% of showed an agreement that efficiency as a result of management’s efforts, with 38% recording agreement and the rest opted to be nowhere on this statement. While 49% of the respondents felt the managers conducted reviews very well, 42% strongly agreed with the statement. Also, 52 percent of respondents greatly agreed that managers developed team objectives while 41% agree

Forty six percent of the respondents agreed that knowledge was shared freely in their respective departments against 33%, 16% and less than 3% strongly agreed, remained neutral and disagreed respectively. When asked about continuous dialogue and instant feedback, respondents were evenly distributed with 48% agreed, and 32% strongly agreed, 14% were neutral. Next, the majority of the respondents at 32% agreed that the communication from senior managers was effective, 30% strongly agreed and only 20% felt neutral. In the same required, question on whether the firm issued monetary/non-monetary rewards for knowledge sharing attracted 42% who strongly agreed, followed by 37% who agreed, the rest at 13% were neutral while 5% disagreed.

The findings on whether supervisors and managers participated and provided guidance in the knowledge development indicated a high 34% strongly agreed while 30% agreed while 23% had a neutral view, however 5% strongly disagreed. On whether promotion provided basis for employee promotion, the findings were evenly distributed; 32% agreed, 28% strongly agreed, 27% were neutral, 1% disagreed while 8% strongly disagreed. Additionally, 52% strongly agreed that the management insisted on teamwork and cooperation over competition, 37% agreed while 8% were neutral. Finally, it was interesting to note that most of the respondents were quick to respond that management promoted trust, care and concern among auditors. This was reflected in the high response rate (43%) agreed, 42% strongly agreed with the statement while 11% were neutral as shown in table 4.4
### Table 4.4: Effect of Leadership Style on Firm’s Competitive Advantage

<table>
<thead>
<tr>
<th>Leadership Style</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Open door policy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Knowledge efficiency</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Knowledge review</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Develop team objectives</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Sharing of knowledge</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Continuous feedback</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Effective communication</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Monetary/ non-monetary rewards</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Guidance from management</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>Promotions on ability to knowledge creation</td>
<td>6</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>21</td>
<td>27</td>
</tr>
<tr>
<td>Teamwork and cooperation</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Mutual respect, trust, care</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>11</td>
</tr>
</tbody>
</table>

#### 4.6 Knowledge Management Practices and Competitive Advantage

The study established that knowledge management practices help a company to increase firm profitability, quality service delivery, sustenance of competitive advantage, effective collaboration between departments, and high level of client orientation and acquisition. These competitive advantages vary with the extent of application of knowledge management practices.

#### 4.6.1 Descriptive on Knowledge Management Practices and Competitive Advantage

The table below shows that adoption of knowledge management practices made the audit firms experience competitive advantage. It was revealed that on majority at 51% and 44% agreed and strongly agreed that KM influenced quality service delivery. Also 47% agreed
that it also influenced alignment of knowledge to business strategy, 33% strongly agreed while 18% were neutral. Forty eight percent also agreed that it affected competitive Advantage Sustenance, 30% agreed while 19% were neutral. With regard to profitability, 47% agreed that it increased profitability and performance, 39% strongly agreed and 13% were neutral on the issue. It was also established that 25% agreed that KM affected client retention and acquisition, 22% strongly agreed, 20% were however neutral and those who strongly disagreed and disagreed were 13% and 16% respectively. KM also had an impact on effective collaboration between departments and to this statement 47% agreed while 38% strongly agreed, 13% were neutral. The findings also noted d that 22% agreed that business was impacted due to lack of KM and loss of skills, 22% strongly agreed while 20 were neutral and those who disagreed and strongly disagreed were 13% and 16% respectively.

Table 4.5: Descriptive on KM Practices and Competitive Advantage

<table>
<thead>
<tr>
<th>KM Measure</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality service delivery</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Alignment of knowledge to business strategy</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Competitive Advantage Sustenance</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<td>8</td>
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<tr>
<td>Increased Profit</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Business Impact on loss of skills</td>
<td>10</td>
<td>13</td>
<td>13</td>
<td>1</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>

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4.7 Diagnostic Tests for Regression Model

In this section, assumptions test for multiple regression model were performed as presented here in.

4.7.1 Normality Test

To begin with, the model must be normal and so normality test was conducted. With a mean of 8.670E-15 with standard deviation of 0.8774 and N being 78 reveals that the data collected was approximately normal. Since a normally distributed data has got a mean and standard deviation of 0 and 1 respectively.

4.7.2 Multicollinearity Test

Multicollinearity is deemed to exist whenever there are more than one variable meant to assess the same items (Atikiya, 2015). The independent variable was measured by three variables; dimension for knowledge management, information technology infrastructure and leadership style. Therefore, there was need to test for multicollinearity so that the regression and other statistical results are not affected. Table 4.5 shows multicollinearity test that was conducted using tolerance and variance inflation factor (VIF). A tolerance value close to 1 implies that there is very little multicollinearity while those values near 0 imply multicollinearity may be pose a threat. While tolerance value shows present or absence of multicollinearity, VIF show how the variance has been inflated by multicollinearity. From the Table 4.5 the tolerance values range between 0.5 and 0.7 while VIF variance range between 1.7 and 2.3. This meant that multicollinearity could not pose any serious issues when explaining the results of the multivariate analysis.

<table>
<thead>
<tr>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Management Dimension</td>
<td>.573</td>
<td>1.744</td>
</tr>
<tr>
<td>Information Technology Infrastructure</td>
<td>.560</td>
<td>1.786</td>
</tr>
<tr>
<td>Leadership Style</td>
<td>.509</td>
<td>1.963</td>
</tr>
</tbody>
</table>

4.7.3 Reliability Test

To investigate the reliability of the data collection instrument the, a Cronbach reliability test was done on the variables. Cronbach Alpha test for reliability dictates that for the
variable to be considered reliable they need to have a Cronbach Alpha value of 0.7 and above. For the four variables of study (KM Dimension, IT Infrastructure, Leadership Style, and Competitive advantage) the value had a range of 0.7-0.8 and therefore making the reliable as indicated in table 4.7.

Table 4.7: Reliability Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>KM Dimension</td>
<td>0.889</td>
<td>14</td>
</tr>
<tr>
<td>IT Infrastructure</td>
<td>0.774</td>
<td>7</td>
</tr>
<tr>
<td>Leadership Style</td>
<td>0.877</td>
<td>13</td>
</tr>
<tr>
<td>Competitive advantage</td>
<td>0.809</td>
<td>8</td>
</tr>
</tbody>
</table>

However for the first objective to be reliable, the variable (Align operations to the changing KM systems) had to be deleted resulting into a Cronbach Alpha value of 0.889 from 0.643 as shown in table Table 4.8
Table 4.8: Item-Total Statistics for KM Dimension

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearly defined systems for KM</td>
<td>.643</td>
<td>15</td>
<td>58.87</td>
<td>107.827</td>
<td>.548</td>
<td>.618</td>
</tr>
<tr>
<td>Budget dedicated to KM</td>
<td></td>
<td></td>
<td>59.23</td>
<td>104.263</td>
<td>.568</td>
<td>.607</td>
</tr>
<tr>
<td>Knowledge gaps to identify competent staff</td>
<td></td>
<td></td>
<td>59.21</td>
<td>107.026</td>
<td>.568</td>
<td>.616</td>
</tr>
<tr>
<td>Chief Knowledge Officer (CKO) or an equivalent.</td>
<td></td>
<td></td>
<td>59.61</td>
<td>102.328</td>
<td>.521</td>
<td>.603</td>
</tr>
<tr>
<td>KM policies of my firm.</td>
<td></td>
<td></td>
<td>59.28</td>
<td>103.348</td>
<td>.542</td>
<td>.605</td>
</tr>
<tr>
<td>Failure to identify internal knowledge</td>
<td></td>
<td></td>
<td>59.15</td>
<td>106.333</td>
<td>.427</td>
<td>.617</td>
</tr>
<tr>
<td>Knowledge acquisition</td>
<td></td>
<td></td>
<td>58.61</td>
<td>112.899</td>
<td>.270</td>
<td>.637</td>
</tr>
<tr>
<td>KM improved services.</td>
<td></td>
<td></td>
<td>58.76</td>
<td>109.328</td>
<td>.441</td>
<td>.625</td>
</tr>
<tr>
<td>Encourages new ideas</td>
<td></td>
<td></td>
<td>58.69</td>
<td>111.045</td>
<td>.328</td>
<td>.631</td>
</tr>
<tr>
<td>Make use of apprentices and mentors to transfer knowledge</td>
<td></td>
<td></td>
<td>58.87</td>
<td>107.341</td>
<td>.547</td>
<td>.617</td>
</tr>
<tr>
<td>Competitors has motivated the acquisition of KM</td>
<td></td>
<td></td>
<td>59.17</td>
<td>105.600</td>
<td>.623</td>
<td>.610</td>
</tr>
<tr>
<td>Increase in mobility of auditors has motivated KM</td>
<td></td>
<td></td>
<td>59.14</td>
<td>104.723</td>
<td>.604</td>
<td>.608</td>
</tr>
<tr>
<td>Align operations to the changing KM systems.</td>
<td></td>
<td></td>
<td>58.14</td>
<td>56.637</td>
<td>.251</td>
<td>.889</td>
</tr>
<tr>
<td>Difficulty in applying work methods trained on</td>
<td></td>
<td></td>
<td>58.96</td>
<td>108.641</td>
<td>.388</td>
<td>.624</td>
</tr>
<tr>
<td>Shares information with other players in the audit industry for better KM</td>
<td></td>
<td></td>
<td>59.27</td>
<td>106.627</td>
<td>.405</td>
<td>.619</td>
</tr>
</tbody>
</table>

4.8 Correlation and Regression Analysis

This section contains the inferential analysis on the effect of knowledge management practices on the audit firm’s competitive advantage.

4.8.1 Correlation Analysis for Competitive Strategies and Firm Performance

The study adopted Spearman’s correlation coefficients to establish the direction and intensity of the relationship between the independent variables and the dependent variable. According to Gujarati and Porter (2009) Spearman correlation coefficients is appropriate for scaled variables. From Table 4.6 all the three independent variables it was found that they have got strong and positive relationship with the firm performance. Starting with leadership style which was the strongest (rho=0.661), followed by IT infrastructure (rho=
which was stronger than Knowledge Management dimension that had a strong (rho=0.554) impact on firm competitive advantage as shown in table 4.9

Table 4.9: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Firm CA</th>
<th>KM Dimension</th>
<th>IT Infrastructure</th>
<th>Leadership Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm CA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KM Dimension</td>
<td>.554**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT Infrastructure</td>
<td>.650**</td>
<td>.558**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Leadership Style</td>
<td>.661**</td>
<td>.613**</td>
<td>.624**</td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).

4.8.2 Regression Analysis

The results of the regression that help to make inference about the model and the relationship between the variables under investigation. The aim of the study was to determine the effect of knowledge management on the firm’s competitive advantage. In this regard, a regression model was fitted to make inferential analysis. The model used stated that \[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \]. From the model summary displayed in Table 4.9, R and Adjusted R Square were 0.548 and 0.529 respectively. This means that there was a positive linear linkage between the practices of knowledge management and firm’s competitive advantage. The explanatory power of the model stands at 54.8%. Knowledge Management being the independent variable determines 54.8% of audit firm’s competitive advantage as displayed in table 4.10

Table 4.10: Model Summary of KM and firm’s’ Competitive Advantage

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.740a</td>
<td>.548</td>
<td>.529</td>
<td>.36206</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), KM Dimension, IT Infrastructure, Leadership Style
b. Dependent Variable: Firm Competitive Advantage
Table 4.11 reveals the findings of the Analysis of Variance (ANOVA) for the regression model that was applied. ANOVA showed an F-statistics of 29.465 and p-value 0.000. Since the p-value is less than 0.05, this implies that relationship between the knowledge management and competitive advantage is significant.

Table 4.11: KM and Audit Firms Competitive Advantage ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>11.587</td>
<td>3</td>
<td>3.862</td>
<td>29.465</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>9.569</td>
<td>73</td>
<td>.131</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>21.157</td>
<td>76</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), KM Dimension, IT Infrastructure, Leadership Style
b Dependent Variable: Firm Competitive Advantage

Regression coefficients shows that there was a positive relationship between knowledge management dimension and competitive advantage (β = 0.137) however it was not significant (p>0.05). This implies that a unit change in dimension of knowledge management increases audit firm’s competitive advantage by 0.103 units while holding information technology and leadership style constant.

Secondly, there was a positive and significant relationship between information technology infrastructure and audit firm’s competitive advantage (β = 0.366, p value <0.05). This implies that a unit change in information technology infrastructure increases audit firms’ competitive advantage by 0.413 units while holding knowledge management dimension and leadership style constant.

Thirdly, there was a positive and significant relationship between leadership style and competitive advantage of audit firms. (β = 0.348, p value <0.05). This implies that a unit change in leadership style increases audit firm’s competitive advantage by 0.343 units while holding knowledge management dimension and information technology infrastructure.
Table 4.12: Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.418</td>
<td>.408</td>
<td></td>
<td>1.024</td>
</tr>
<tr>
<td>Dimension of KM</td>
<td>.103</td>
<td>.078</td>
<td>.137</td>
<td>1.321</td>
</tr>
<tr>
<td>IT infrastructure</td>
<td>.413</td>
<td>.119</td>
<td>.366</td>
<td>3.476</td>
</tr>
<tr>
<td>Leadership Style</td>
<td>.343</td>
<td>.109</td>
<td>.348</td>
<td>3.159</td>
</tr>
</tbody>
</table>

a Dependent Variable: Competitive Advantage

\[ Y_{i, t} = \alpha + \beta_1 DKM + \beta_2 ITF + \beta_3 LS + \epsilon_{i, t} \]

\[ Y = 0.418 + 0.103DKM + 0.413ITF + 0.343LS + 0.362 \]

4.9 Chapter Summary

Chapter four has provided results and findings as per the data collected from the respondents who were the employees of Grant Thornton Kenya. Analysis on the background information, determination of vital factors of knowledge management dimensions, Information technology infrastructure and leadership style on competitive advantage of audit firms was provided in this chapter. Findings from the correlation and regression analysis are congruent as they all lead to the same deduction. The following chapter entails the summary, discussion, conclusions and recommendation about the findings of the study.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the research findings on the effect of knowledge management on the audit firms’ competitive advantage. The areas covered in this chapter are as follows; the summary of the research, discussion of research findings, conclusions of the study and the recommendations.

5.2 Summary

The motive behind carrying this study was to investigate the effect of the knowledge management on the competitive advantage of audit firms in Nairobi Kenya. This was to be achieved under the guidance of the three (3) specific research questions that sought to find:

1) what are the dimensions of knowledge management employed by audit firms in Kenya?
2) How does leadership style affect competitive advantage?
3) How does information technology and infrastructure affect competitive advantage?

All the itemized information has revolved on these three pillars of the study that would help the overall purpose to be achieved.

The study adopted a survey research design. The target population for the study were all the one hundred and fifty employees of Grant Thornton Kenya. Of these companies, a sample was of 47 companies was selected purposively. Data was collected for surveying by use of structured questionnaire. Each questionnaire was made up of two parts where the first part collected general information about the audit firm and the second contained the specific statement that sought to get views of the respondents. Questionnaires were self-distributed with the help of research assistant to the targeted population. The study employed Pearson’s bivariate correlation and multiple linear regressions for analysis. Data collected were entered in SPSS (version 20) which was also used to summarize the responses to give both the descriptive and inferential statistics. After analysis output were summarized using percentages and frequencies then presented using tables and charts. Out of the 80 questionnaires distributed, only 78 were filed and returned representing a response rate of 97.5% which was sufficient for the study.
The first objective of the study was to examine the dimension of knowledge management applied in the firm. It was revealed that at Grant Thornton Kenya there was a clearly defined system of KM, and a majority agreed that there was sufficient budget location for KM. It was also established that majority acknowledged that senior manager looked at knowledge gap to identify competent staff. Majority agreed that they were aware of the KM policies, although many admitted that inability to apply the right knowledge and skills was attributed to failure to identify internal knowledge. It was also revealed that knowledge was acquired through on job training, mentoring and seminars. Use of KM has improved service delivery, and firms encouraged employees to seek new ideas this has also been promoted by use of apprentices and mentors to transfer knowledge. The force behind the push for KM was revealed to be the motivation from competitors although the firm has developed strategies to align operations to the changing KM systems, and most of the respondents agreed that they don’t have difficulty in applying work methods trained on. Knowledge Management dimension had a strong positive correlation to competitive advantage (rho=0.554).

On the second study objective, the study sought to know the effect of technology infrastructure on knowledge management in audit firms. Most of the respondents agreed that the firm had a comprehensive, adequate database, and it was also noted that employees used emails to share and exchange knowledge with others. It was noted that IT infrastructure had aided availability of knowledge when needed and could be trusted in making decisions. Many agreed that the respondent agreed that the organization’s portal had assisted in the transfer of knowledge and majority agreed with the construct that the availability of document system on portal was assisting in knowledge transfer, and majority agreed that intranet and IT had enabled free sharing of knowledge within the various departments. IT infrastructure had a positive correlation with the competitive advantage (rho= 0.650).

Finally, the last study objectives sought to know the effect of leadership style to the knowledge management in audit firms. The findings revealed that organization embraced open door policy and many agreed that managers conducted reviews very well, and managers developed team objectives. Many respondents agreed that knowledge was shared freely in their respective departments and there was a continuous dialogue and instant feedback, which was effective. Many agreed that the firm issued monetary/non-monetary rewards for knowledge sharing and supervisors and managers participated and provided
guidance in the knowledge development. Promotion were offered based on the ability to provide knowledge. Additionally, many agreed that the management insisted on teamwork and cooperation over competition, and management promoted trust, care and concern among auditors. Knowledge Management dimension had a strong positive correlation with competitive advantage (rho=0.554)

5.3 Discussion of the Findings

5.3.1 Knowledge Management Dimension and Firm Competitive Advantage

It was revealed that at Grant Thornton Kenya there was a clearly defined system of KM. Today, organizations are taking their knowledge and using it to redefine the way works is performed. Because today’s activities are often more complex and require the expertise of many people, organizations are beginning to understand how different types of knowledge can be utilized to enhance their efficiency, effectiveness and ability to innovate (Alluri, 2009). Although acquiring useful knowledge is an important process of knowledge creation, many consider that the real competitive advantage comes from the capability of an organization to generate new knowledge within the organization. In this specific circumstance, the key achievement considers has been moved from data preparing to knowledge creation and nonstop development (Malhotra, 2000).

It was also established that majority acknowledged that senior manager looked at knowledge gap to identify competent staff. Resources-based view (RBV) highlighted the added value of human capital in organisation strategic management literature by defining and linking concepts such as knowledge (Ndinguri et al, 2012), organizational learning (Fiol & Lyles, 1985; Fisher & White, 2000), and organizational leadership (Norburn & Birley, 1988). The ability to create and use knowledge enables the company to develop sustainable competitive advantages (Hunt & Arnett, 2006). Knowledge creation process enables firms to enhance learning inserted inside and move information into operational activities to enhance proficiency and make business more profitable (Toyama & Nagata, 2000).

Majority agreed that they were aware of the KM policies as stated by Liang et. al. (2007), managers implement KM programs to gain advantage, increase productivity, and remain competitive. Within this context, an organization’s ability to effectively implement knowledge-based activities becomes increasingly important for the development and
sustenance of a competitive advantage. As observed by Radwan (2013) in Pharmaceutical Firms, knowledge management programs provide firms with the ability to communicate and share knowledge which acted as a firm’s differentiation strategy. The study also found that policies and strategies of knowledge management have a positive relationship with a form’s differentiation strategy. The study also found that firm’s size has appositive relationship with a firm’s differentiation strategy.

The findings reveal that the firm has developed strategies to align operations to the changing KM systems, people learn by doing and disguising the new information. Moreover, according to Nonaka, Toyama and Konno (2000), knowledge creation organisations create their knowledge through interactions between tacit and explicit knowledge. This process of knowledge conversion enables explicit and tacit knowledge to grow in both quantity and quality (Esterhuizen et al, 2011). The literature extensively refers to the general tendency in human beings being resistant to sharing the knowledge they possess (Nandita, 2013), while, Szulanski (1996) found that various organizational and individual factors also contribute to what he called ‘‘knowledge stickiness’’, that is the slowing down of easy and effective knowledge transfer and further asserted that ‘knowledge stickiness’ can be mitigated by providing supportive learning environments.

Knowledge Management dimension had a strong positive correlation to competitive advantage (rho=0.554). This supports findings by Radwan (2013) study, respondents proved that presence of knowledge management programs in the firm had prompted the high customer retention as well as helped in delivering high quality services. Similarly, Michael (2014) study of hotel firms in the coastal Kenya revealed that adoption of Knowledge Management Programs had a significant impact on the hotel’s competitive advantage.

5.3.2 Information Technology Infrastructure and Firm Competitive Advantage

It was also noted that employees used emails to share and exchange knowledge with others. employees’ knowledge is to transfer their values into the organization recourses (Dawson, 2000). Knowledge sharing between individuals is explained by Ipe (2003) as "the process by which knowledge held by an individual is converted into a form that can be understood, absorbed, and used by other individuals". The term sharing refers to individuals who present their knowledge in a form that can be used by others in the organization. In addition, sharing includes a conscious action on the part of the individual which does not involve the
intention of taking ownership of the knowledge; instead ownership of the knowledge belongs to both sender and recipient (Ipe, 2003). Knowledge sharing not only boosts individuals’ competency but also causes them to produce new knowledge (Sveiby, 2001). Wah (2000) asserts that individuals who hoard knowledge generate a huge impediment in the process of KM. On the other hand, Goh (2002) explains that if economic competition exists in an organization, knowledge is equated with power, and it is natural that people should hoard knowledge.

It was noted that IT infrastructure had aided availability of knowledge when needed and could be trusted in making decisions. Among audit firms in the United States indicated that knowledge transfer plays an important role in enhancing auditor professional skepticism, thereby improving the accuracy of auditor judgments. Additionally, as recommended by Nelson (2009), master learning, position, and judgment were huge figures the arranging of a review engagement. In any case, attribute impacts (as caught by firm impacts) were not critical in clarifying examiners’ judgments. These outcomes are essential in that they show the hugeness of the part that information move works in encouraging inspectors’ activity of proper polished methodology in review engagement arranging.

Many agreed the organization’s portal had assisted in the transfer of knowledge and majority agreed with the construct that the availability of document system on portal was assisting in knowledge transfer. In companies that create knowledge, they do not remember, forget and lose of the developed knowledge (Duffy, 2000). Therefore, storing, organization, and recovery of organizational knowledge are important parts of effective organizational KM. Knowledge exist in many forms such as information stored by databases system, documented organizational actions and organized people knowledge stored in the system. Knowledge storage refers to development of organizational memory and the means for accessing its idea. Many organizations save large volumes of transactional data. However, data is rarely of direct benefit. Knowledge storage uses IT for storing of knowledge. Data warehouse is a centralized source that integrates and creates data. Data warehouse then helps to find important data Data mining is a useful technique for uncovering such information. Data mining is explained as the process of searching for unknown correlation in the data by looking for interesting patterns.

IT infrastructure had a positive correlation with the competitive advantage (rho= 0.650). Gold et al., (2001) in their findings established that IT can play important role to provide
information to maintenance the method and circumstances that support knowledge management. They further allude that IT is a vital element for knowledge transfer and creation and through information technology, employees can easily access to the necessary knowledge. Mahapatra (2000) notes that Information technology (IT) plays a key role in enabling knowledge management. From the findings, respondents showed in deed investing in technological infrastructure would help achieve economies of scale. In 2015, Hansen et al., purported the only way to beat the market was to employ technology which would support knowledge creating, sharing and storage, this proposition has been confirmed by the current study findings. Duffy (2000) consider IT as playing its role in managing, storing and accessing documents and databases, but for any KM project to be successful IT professionals should be well aware about the various knowledge management processes. IT when integrated with KM processes becomes a major player in companies for KM processes.

5.3.3 Leadership Style and Firm Competitive Advantage

The findings revealed that organization embraced open door policy. According to Politis (2011) with the dynamic organizational culture there should be more empowerment and that is achieved by transformational leadership which encourages people to be open about their choices and decisions. Politis (2011) also encouraged the role of participative leadership, it is this leadership style which relies heavily on the leader functioning as a facilitator rather than simply a leader who orders and wants his assignments done in time. Employee would not be agreeable in sharing learning unless representative realizes that he/she would be upheld by their pioneers.

The findings revealed that managers developed team objectives, Oshagbemi and Ocholi (2006) established that leadership is impacted by the idea of reward and discipline; such pioneers trust that the representative's execution is fundamentally needy upon these two variables. That implies that when there is a motivating force the laborers invested their best exertion and the reward is in money related terms in a large portion of the cases; while when they neglect to accomplish the set target they should be rebuffed. Similarly, transactional leaders impose their authority on their followers to take work from them and clearly outline what they require and also give employees the opportunity to get detailed information and guidance before they accept an assignment.
Many respondents agreed that knowledge was shared freely in their respective departments. Knowledge is a very vital resource in the firm that allows for a sustainable competitive advantage in a dynamic, competitive economy (Foss & Pedersen, 2002). To gain a competitive advantage it was necessary for organizations to have a set of staffing and training systems that enables it to focus on selecting qualifies employees with specific knowledge, and skills, abilities, to transfer knowledge from experts (Damodaran & Olphert, 2000). Due to the potential benefits accrued from knowledge sharing, many firms have set up time and finances to invest in knowledge management (KM) initiatives that are not limited to development of knowledge management systems (KMS) that fast track the process of facilitating the collection, storing, and circulation of knowledge (Alavi and Leidner, 2001).

The findings revealed the management promoted trust, care and concern among auditors. Whereas, Bass (1985) found that transactional leaders are significantly involved with the subordinates' work unless need or a problem arises. On the other hand, he also stated that transformational leaders motivate their workforce, rouses their intellectual skills and acts as role models. Moreover, they also have the ability to inspire the employees into acquiring goal accomplishing skills and improving their performance in achieving the corporate vision (Nemanich and Kellar, 2007). They encourage, train and support their subordinates keenly and promote individual and team spirit among them. Consequently, it is paid back in the form of improved employees performance high returns (Yulk, 2006; Boerner et al, 2007).

Knowledge Management dimension had a strong positive correlation with competitive advantage (rho=0.554) Intellectual capital is the imperceptible value of a firm, which is unique from its assets. In the past, there has been competing for the market share, with increased competition for human capital. Ahmadian and Ghorbani (2013) analysed the relationship between intellectual capital and firm’s performance. The results indicated that there was a significant association between components of intellectual capital and performance of an organisation.

5.4 Conclusion

5.4.1 Knowledge Management Dimension and Firm Competitive Advantage
From the findings of the study, knowledge management dimension has proved to be a technique that can be employed by those firms wishing to attain competitive advantage. This dimension relevance and positivity towards firm performance can henceforth not be ignored. It can also be said that firms need to learn more areas in which they are supposed to exploit for better knowledge utilization. This study leads to a conclusion that audit firms should embrace the concept of knowledge management with greater emphasis than before. Survival and success of any firm depends on firms’s ability to generate, share, store knowledge.

5.4.2 Information Technology Infrastructure and Firm Competitive Advantage

From the findings, it can be concluded that the information technology infrastructure has the highest bearing on the competitive advantage of audit firms. The idea of investing in a comprehensive database, using emails, website portals, intranet and electronic files for data sharing will ensure the firm gains competitive advantage over others. Firms need to consider and recent technological advancements inasmuch knowledge management is concerned.

5.4.3 Leadership Style and Firm Competitive Advantage

Inference on effective leadership style that facilitates free knowledge sharing, motivation of employees and creating environment for knowledge generation and development would facilitate better knowledge management within the firm. In order for the organization to utilize knowledge for own betterment, it must be able to hire right individuals with desirables leadership skills that would promote knowledge development. Moreso, audit firms should embrace the need for leaders from various firms to collaboratively share knowledge across the industry with the aim of exchanging ideas and creating solutions to the challenges facing the industry.

5.5 Recommendations

5.5.1 Recommendations for Improvements

5.5.1.1 Dimension of KM and Competitive Advantage

The findings showed that dimension of knowledge management practices had a significant positive effect on competitive advantage. Based on this, the study recommends that the audit firms should emphasizes the need for knowledge management among employees, put
necessary framework to facilitate knowledge creation, transfer and sharing within the organization.

5.5.1.2 Information Technology Infrastructure and Competitive Advantage

The findings of the study show information technology infrastructure as a major contributor to competitive advantage in the audit industry. This means that continued development and use of IT infrastructure may yield better results thus companies wish to outperform the market can embrace this to realize better firm competitive advantage hence great performance. Based on these findings, audit firms should make substantial investment in information technology infrastructure to create conducive environment for knowledge management.

5.5.1.3 Leadership Style and Competitive Advantage

From the findings, it is clear that the style of leadership by management has a significant bearing on the management of knowledge within the organization. Knowledge is freely shared when management promotes open door policy, conduct reviews fairly, assist in developing team objectives, provide monetary/non-monetary incentives for knowledge sharing, offer promotions for knowledge creation as well as encouraging teamwork over competition. Based on these findings, the study recommends that audit firm leaders should use effective leadership styles in leading their firms. In doing this, they should focus more on recognizing employees with potential to create and share knowledge and should create an environment friendly to knowledge development.

5.5.2 Recommendation for Further Studies

Further areas of research in Knowledge Management in the audit industry that need to be conducted include the effect of Knowledge Process Capability; Knowledge Acquisition, Knowledge Conversion, Knowledge Protection and Knowledge Application on Organizational Performance. This is because Knowledge Process Capability is the backbone of Knowledge Management practices, and if not managed well, there is a risk of organizations not reaping the benefits of Knowledge Management. It will be important therefore to explore further whether there is a link between Knowledge process capabilities and organizational performance. The study also focused on Nairobi County, the same study can be conducted for audit firms in Kenya. This will it mean a larger sample and a confirmation may be made if the same practices are widespread across the country.
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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

May 2017

Dear respondent,

I am a student at United States International University Africa (USIU-Africa) pursuing a Masters of Business Administration program. In partial fulfillment of my course work, I would like to conduct a research project to assess EFFECT OF KNOWLEDGE MANAGEMENT ON COMPETITIVE ADVANTAGE OF AUDIT FIRMS IN KENYA: CASE OF GRANT THORNTON KENYA. Kindly therefore, complete the attached questionnaire with accurate information that will be used entirely for this research while observing utmost confidentiality.

Your assistance is highly valued. Thank you in advance.

Yours faithfully,

Ephraim Odero
APPENDIX II: QUESTIONNAIRE

EFFECT OF KNOWLEDGE MANAGEMENT ON COMPETITIVE ADVANTAGE OF AUDIT FIRMS IN NAIROBI COUNTY: CASE OF GRANT THORNTON KENYA.

Knowledge Management (KM) is defined as any systematic activity related to the capture, sharing and creation of knowledge by an organization. The purpose of this survey is to find out impact of knowledge management in attaining competitive advantage in audit firms in Nairobi County. Three variables are examined; dimension of knowledge management applied by the firm, the information system and the style of leadership exhibited in the firm. Please note that your responses are confidential and that my reporting will not include your individual name. Kindly respond to the following questions by ticking on the appropriate box (✓) or filling the answers in the blank spaces.

SECTION A: DEMOGRAPHIC INFORMATION

You are requested to fill out your personal information in the spaces below. Please tick only one response.

1. Please indicate your gender
   Male [ ] Female: [ ]

2. Please indicate your age?
   18-25 [ ] 26-35 [ ] 36-45 [ ] 46 and above [ ]

3. Highest Level of education
   Certificate/Diploma [ ] Degree [ ] Postgraduate [ ] Other [ ]

4. Number of years worked in this company?
   Less than 5 years [ ] between 6 and 10 years
   Between 11 and 15 years [ ] between 16 and 20 years [ ] 21 years and above [ ]

5. Which of the following best describes your role at the firm?
   Associate [ ] Senior [ ] Director [ ] Partner [ ] Manager [ ] Other [ ]

PART B: DIMENSIONS OF KNOWLEDGE MANAGEMENT SYSTEM

6. Below are several statements on various elements of knowledge management with regard to the performance of audit firms in Nairobi County. Kindly indicate the extent to which you agree with each of these statements in as far as Grant Thornton Company is concerned. Please rate using a 1-5 scale where: Strongly agree (5) Agree (4) Neutral (3) Disagree (2) Strongly disagree (1).
<table>
<thead>
<tr>
<th>Statements</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>Grant Thornton has clearly defined systems for knowledge management</td>
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<tr>
<td>Grant Thornton has a budget dedicated to knowledge management program</td>
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<td>In our organization senior managers look at the knowledge gaps from the overall organizational level to identify competent staff</td>
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<tr>
<td>Grant Thornton has a Chief Knowledge Officer (CKO) or an equivalent.</td>
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<tr>
<td>I am aware of the knowledge management policies of my firm.</td>
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<tr>
<td>In our organization the inability to apply the right skills and knowledge, in the right form, at the right time is failure to identify internal knowledge</td>
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<td></td>
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<tr>
<td>In Grant Thornton, knowledge is acquired through on-job training, mentoring, seminars and conferences</td>
<td></td>
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<tr>
<td>Knowledge management has helped my organization in delivering better services.</td>
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<tr>
<td>My firm Encourages employees to seek new ideas from all sources.</td>
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<tr>
<td>My organization make use of apprentices and mentors to transfer knowledge</td>
<td></td>
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<tr>
<td>The use of knowledge management tools and practices by other competitors has motivated the acquisition of KM in my firm.</td>
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<tr>
<td>Increase in mobility of auditors has motivated the acquisition of KM in my firm</td>
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<tr>
<td>Grant Thornton develops strategies to align its operations to the changing knowledge management systems.</td>
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</tbody>
</table>
Employees don’t face difficulty in applying work methods they have been trained on

Grant Thornton Shares information with other players in the audit industry for better knowledge management.

7. In your opinion, what other knowledge management approaches has Grant Thornton applied with the motive to gain competitive advantage?

________________________

________________________

________________________

PART C: INFORMATION TECHNOLOGY INFRASTRUCTURE AND KM

Below are several statements on various elements of information technology systems used by organizations to gain competitive advantage through knowledge management. Kindly indicate the extent to which you agree with each of these statements in as far as Grant Thornton Company is concerned. Please rate using a 1-5 scale where: Strongly agree (5) Agree (4) Neutral (3) Disagree (2) Strongly disagree (1).

<table>
<thead>
<tr>
<th>Statements</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>My firm has a comprehensive, adequate database which is available for all personnel</td>
<td></td>
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</tr>
<tr>
<td>Employees use e-mail to share and exchange knowledge with others.</td>
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<td></td>
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</tr>
<tr>
<td>IT has encouraged personnel to join training programs outside the organization to gain knowledge in their fields</td>
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</tr>
<tr>
<td>IT has aided availability of Information when needed and can be trusted to make decisions</td>
<td></td>
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<tr>
<td>My organization’s document management system on the Portal is assisting in the transfer of knowledge</td>
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</table>
Electronic files storing knowledge in my organisation can easily be retrieved.

My firm has intranet that enables sharing and exchange of knowledge with others.

IT has enabled free sharing of knowledge within my section/department

IT has facilitated effective communication in my firm

7. In your opinion, what other information system approaches has Grant Thornton applied with the motive to gain competitive advantage?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

PART D: LEADERSHIP STYLE AND KNOWLEDGE MANAGEMENT

8. To what extent do you agree with the following statements concerning the impact of leadership style to the implementation of knowledge management? (Place a check mark in the appropriate square bracket). Please rate using a 1-5 scale where:

Strongly agree (5) Agree (4) Neutral (3) Disagree (2) Strongly disagree (1).

<table>
<thead>
<tr>
<th>Statements</th>
<th>5</th>
<th>4</th>
<th>3</th>
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<tbody>
<tr>
<td>In this organization managers and supervisors operate an open door open mind policy</td>
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<td>Management has improved the level of knowledge efficiency in the Company</td>
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<tr>
<td>Managers and supervisors conduct knowledge review very well</td>
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</tbody>
</table>
In this organization supervisors and managers develop team objectives

Knowledge is shared freely within my section/department

In this organization there is continuous dialogue and feedback between supervisors and employees in addressing knowledge management issues

The communication from senior management in my company is effective

There is monetary and non-monetary rewards for knowledge sharing

At Grant Thornton, supervisors and managers participate and provide guidance in the development of knowledge

There is special recognition of staff for the time spent in knowledge creation

Promotions are based on the ability to create knowledge

Management encourages team work and cooperation instead of competition

Management promotes Mutual respect, trust, care and concern amongst auditors.

9. In your opinion, what other leadership approaches has Grant Thornton applied towards enhancing knowledge management?

PART E: THE EXTENT TO WHICH ADOPTION OF KNOWLEDGE MANAGEMENT PRACTICES AFFECT THE COMPETITIVE ADVANTAGE OF GRANT THORNTON KENYA AUDIT COMPANY.
Below are several measures of Competitive Advantage among organizations. Kindly indicate the way Grant Thornton Kenya has performed on these measures due to the above-identified strategies. Use a 1-5 scale where: Very great extent (5) Great extent (4) Moderate extent (3) Least extent (2) Not at all (1)

<table>
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<tr>
<th>Variable</th>
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<th>4</th>
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<tr>
<td>Quality service delivery.</td>
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<td>Alignment of knowledge to the business strategy.</td>
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<td>Increased profitability and performance.</td>
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<td>Competitive advantage sustenance.</td>
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<td>Client retention and acquisition.</td>
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<tr>
<td>Effective collaboration and communication between employees and departments.</td>
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<tr>
<td>Business impact due to lack of KM and loss of skills.</td>
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</table>

THANK YOU
APPENDIX III: INTERVIEW GUIDE

EFFECT OF KNOWLEDGE MANAGEMENT ON COMPETITIVE ADVANTAGE OF AUDIT FIRMS IN KENYA: CASE OF GRANT THORNTON KENYA.

Section A: Demographics Information

1. Name of the respondent (Optional)

2. What is your position within the organization (optional)

3. How long have you worked at Grant Thornton?
   a) Less than one year [ ]
   b) 1 to 3 years [ ]
   c) 4 to 5 years [ ]
   d) 6 years and above [ ]

Section B: Dimensions of Knowledge Management

4. Are you personally involved in the creating of the Knowledge System in the company?

5. Which are the Knowledge Management dimensions adopted by your company towards attaining competitive advantage?

6. In your answer above, how does Grant Thornton use the following in its response to attaining competitive advantage:
   a) Is there a clearly defined knowledge management system?
   b) Is there any individual component generating effective knowledge in the organization?
   c) What communicational channels are utilized in sharing knowledge within/outside the organization?

7. How does Grant Thornton cooperate with the community in its response to knowledge management and ensure welfare of the community is upheld.

8. Are there other strategies that Grant Thornton adopts in response to strengthening knowledge management
Section C: Information Technology

9. What IT systems are in place to enhance knowledge management in your company?
10. In your response to the above question, how has Grant Thornton adopted new Information Systems with changing technological trends?
11. Does Grant Thornton have an information technology unit adopted in the company?
12. In your opinion, what other technology based mechanisms has Grant Thornton applied towards enhancing knowledge acquisition, storage, and sharing?

Section D: Leadership Style

13. What are the leadership styles adopted by your company with the purpose of strengthening the efficiency of knowledge management?
14. What leadership approaches has Grant Thornton adopted to ensure that its employees are capable of accessing, sharing, storing and applying knowledge when necessary?
15. What are the benefits derived from adoption of effective leadership styles towards promoting knowledge management?
16. To sum it all up, in a scale of 1-5 please elaborate on Grant Thornton performances in the following parameters in lieu of the above strategies:
   a) Growth in profitability
   b) Decline in information processing time
   c) Number of customers increased
   d) Reduced Operating expenses
   e) Growth in team productivity and job satisfaction

Thank You for your Participation