

**KNOWLEDGE MANAGEMENT AS A COMPETITIVE STRATEGY AMONG
AVIATION TRAINING INSTITUTIONS IN NAIROBI, KENYA**

BY

TIYAN JOSEPH

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DECLARATION

This Research Project is my original work and has not been presented in any other University.

Signed..... Date

TIYAN JOSEPH

D61/64741/2011

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

Signed..... Date

Supervisor: Dr. Justus Munyoki

Lecturer, Department of Business

School of Business, University of Nairobi

DEDICATION

I dedicate this work to my family and those who supported me throughout the completion of this project.

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ABSTRACT

Knowledge management uses systematic strategies for it to create value, discover and understand knowledge. This study sought to determine the extent of application of knowledge management as a competitive strategy among aviation training institutions in Nairobi.

The study adopted a descriptive survey research design because of its ability to create a profile about a phenomenon. The target population comprised aviation training institutions in Nairobi. Primary data was collected using a questionnaire. The information was presented using bar charts, graphs and pie charts and in prose-form.

The study results show that knowledge management had improved competitiveness of employees on their duties in the aviation training institutes. Knowledge management not only created the value of intellectual assets but also enhance an employee's productivity and competitiveness the employees. Knowledge management practices enabled employees and customers to get the information they need on time. Open and flexible organization system promoted knowledge management in an organization.

The study concludes that Knowledge is a fundamental factor in the creation of competitive advantages. The study also recommends that knowledge management systems should be provided to ensure greater access to knowledge and equally important is that users' need to be enabled to use the knowledge once it is accessed and to subsequently share it with others. Finally this study recommends that a similar study should be done on the relationship between knowledge management and competitive strategy in all the aviation training institutions in Kenya.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Knowledge management uses systematic strategies for it to create value, discover and understand knowledge (Harry, 2006). Knowledge management is the access to expertise, knowledge and expertise that provide new capabilities, enables better performance, encourages developed and innovation, and boosting customer value (Gloet & Terziovski, 2004). Knowledge Management practitioners argue that knowledge is a modern organization's most important resource, the only resource not readily replicated by rivals, and therefore the source of its uniqueness or competitive advantage. Modern Knowledge management practice emphasizes the creation of new knowledge and the timely application of organizational knowledge to maintain strategic advantage. It assumes that systems exist within an organization to support knowledge creation, and that relevant knowledge from internal and external sources has been recorded or indexed in such a way that it can be retrieved and used. Organizations have to be prepared to abandon knowledge that has become obsolete. Different aspects of these processes and their relevance to information professionals have been discussed in some detail by Broadbent (1997), Davenport and Prusak (1998) and Klobas (1997).

In the ever changing market place, where only certainty is uncertainty, corporate success come from consistently creating, disseminating and using new knowledge. Globalisation, transformation of the enterprise, emergence of digital firm, and transformation of industrial economies are four powerful worldwide changes which have altered the

business environment (Laudon, 2002). Effective management of intellectual capital is a critical issue facing organizations in today's global and information-driven economy.

Aviation training institutions are institutions which involve a lot of knowledge management following the sensitive nature of the quality of their graduates. The Kenya Civil Aviation Authority is very strict on the quality of graduates to be granted with licenses. This has forced aviation training institutions to invest heavily in knowledge management to ensure that they train the future pilots well on all areas necessary (KCAA, 2013).

1.1.1 The Concept of Knowledge Management

Knowledge management is the explicit and systematic management of vital knowledge and its associated processes of creating, gathering, organizing, diffusion, use and exploitation. It requires turning personal knowledge into corporate knowledge that can be widely shared throughout an organisation and appropriately applied (Jennex and Zyngier, 2007). It caters to the critical issues of organizational adaptation, survival and competence in the face of increasingly discontinuous environmental change. Essentially; it embodies organizational processes that seek synergistic combination of data and information processing capacity of information technologies, and the creative and innovative capacity of human beings (Masaki, 2012).

Knowledge management is about managing and creating a corporate culture that facilitates and encourages the sharing, appropriate utilization, and creation of knowledge that enables a corporate strategic competitive advantage. Achieving a "knowledge culture" requires managerial focus in three areas: preparing the organization, managing

knowledge assets, and leveraging knowledge for competitive advantage (Abell and Oxbrow, 1997).

KM is a discipline that promotes an integrated approach to identifying, managing and sharing all of an enterprise's information assets. These information assets may include databases, documents, policies and procedures, as well as previously unarticulated expertise and experience resident in individual worker. Modern KM practice emphasizes the creation of new knowledge and the timely application of organizational knowledge to maintain strategic advantage. It assumes that systems exist within an organization to support knowledge creation, and that relevant knowledge from internal and external sources has been recorded or indexed in such a way that it can be retrieved and used. Organizations have to be prepared to abandon knowledge that has become obsolete. Different aspects of these processes and their relevance to information professionals have been discussed in some detail by Broadbent (1997), Davenport and Prusak (1998) and Klobas (1997).

The organization for Economic Cooperation and Development (OECD) defines knowledge management process as : involving the production, mediation and use of knowledge” (OECD, 2000:70). Alavi & Tiwana (2003) identified that there are four knowledge management processes: knowledge creation, knowledge storage and retrieval, knowledge transfer and application. Franco and Mariano (2007) defined knowledge management process as knowledge storage and retrieval.

1.1.2 The Concept of Competitive Strategy

Porter (1996) defines competitive strategy as deliberately choosing different set of activities to deliver a unique mix of value. These activities form the basis of competitive advantage. Strategy in itself can be defined as a game plan management has for positioning the company in its chosen market arena, competing successfully, pleasing customers and achieving good business performance (Thompson & Strickland, 2002).

Competitive strategy comprises all those moves that a firm has and is taking to attract buyers, withstand competitive pressure and improve its market position (Thompson & Strickland, 2002). It concerns what a firm is doing in order to gain a sustainable competitive advantage. Porter (1980) asserts that there are three Approaches to competitive strategy. The first is striving to be the overall low cost producer, therefore being a cost leader, while the second is seeking to differentiate one's product offering from that of one's competitors, which is a differentiation strategy while a third involves focus on a narrow portion of the market, which is focus or niche strategy. Porter (1985) argues that strategy is about seeking a competitive edge over rivals while slowing the erosion of present advantages. Few advantages can be sustained indefinitely, for time eventually renders them obsolete. Strategy serves as a guide to the organization on what it is the organization is trying to do and achieve (Johnson and Scholes, 1999).

According to Johnson and Scholes (1999), strategy helps to position a firm in the wider external environment. It also defines the obligation of the firm to its stakeholders. Strategy therefore helps to define the specific business of the firm in terms of products, market and geographical scope. Pearce and Robinson (2000), on the other hand, define

strategy as a firm's game plan that enables the firm to create competitive advantage. The firm needs to look at itself in terms of what the competitors are doing. Ansoff and Mcdonnell (1990) define strategy as a set of decision making rules for guidance of organizational behavior. Thus strategy is used as a yardstick to measure a firm's performance and to define its relationship with the external environment.

1.1.3 Aviation training institutions in Nairobi

The aviation training institutions has been categorized as for the rich but this is due to the fact that career management specialized has not highlighted on the depth of the requirement for the course. Most aviation training schools in Nairobi do stages from Private Pilot License to Commercial Pilots License, Multi-Engine and Instrument Rating which as a student pilot one needs to pass all this before you become a pilot. Kenya Airways even advertises intakes for Private Pilots License, Commercial Pilots License and for those with full pilot license and luckily you might complete your private Pilot License and they put an advert and you are recruited. <http://www.nac.ac.ke> (accessed/29/04/2013)

The Aviation institutions are expected to have curriculum and syllabus accepted at international level for safety and training. There should be progressive reports and weekly tests to check on the students' performance and also they should ensure their grounds and Aviation institutions are balanced so that the students do not spend more time and money. Some institutions do not care about the students performance as we have students who are good in ground and others in flying and so what happens they do not attend lessons for what they dislike and these results into in-balance and thus the

course taking longer and becoming costly. This also contributed to the national carrier taking their pilot cadets abroad and if the local Aviation institutions had the required standards then all this billions on pilot training could have remained in Kenya. Standards should be set and complied by the Aviation Institutions and be regulated and any investor in Aviation Institution should be audited before being licensed. But if some of the regulations are compromised then there is no way that the international standards will be met and people will still go aboard for their training. The success for any business is efficiency, reliability and commitment to your objectives and sometime cost doesn't count (<http://nairobiflighttraining.com> accessed/22/04/2013).

According to the Kenya Civil Aviation Authority, there are 22 aviation training institutes in Nairobi at the time of the study. The oldest school is the East African School of Aviation (EASA) which was established in 1954 and has trained thousands of aviation personnel in Kenya, Africa and the world. The institutions are both owned by the Government and private investors. They offer varied courses including: Aeronautical Engineering and Aircraft Maintenance Engineer Licence (AMEL) training; Air Traffic Services; Aeronautical Information Services; Communication, Navigation and Surveillance Equipment Maintenance; Aeronautical Communication Operations; International Air Transport Association (IATA) courses; Aviation Security, and Aviation Safety. Diploma in Travel and Tourism, Diploma in Travel Agent marketing course, Diploma in Airlines Cabin Crew/air Hostess, Diploma in Tourism & Business studies ICM (UK), Advanced Diploma in Tourism & Business studies among other courses. The institutions are mainly concentrated in Nairobi although some have opened branches in major towns around the Country.

1.2 The Research Problem

Knowledge management creates shared understanding through the alignment of people, processes, and tools within the organizational structure and culture in order to increase collaboration and interaction between leaders and subordinates. This results in better decisions and enables improved flexibility, adaptability, integration, and synchronization to achieve a position of relative advantage.

Several researchers have looked at the concept of knowledge management among organizations for instance Nyawade (2005) studied on employee perception of knowledge management practices using a case study of BAT Kenya and established that employees perceived knowledge management practices to be restrictive and prohibitive of employee creativity and innovation; while Osano (2007) studied knowledge management within publicly quoted firms in Kenya and established the above, it is clear that a few issues remain unstudied.

Maseki (2012) studies knowledge management and performance of commercial banks in Kenya. Maseki found out that knowledge management affects employee performance in the bank. Knowledge management improves performance of employees on their duties in the bank; enhances employee competence in the bank; knowledge management practices actively encourages and engages people at many organizational levels in sharing with others what they know, and what they are learning; managing knowledge involves managers developing a set of practices to capture, collect and transfer of relevant knowledge within the organization of people to improve services, outcomes and performances; and knowledge management not only creates the value of intellectual

assets but also enhances an employee's productivity and performance. The Aviation training institutes have faced a number of challenges in their operations in Kenya and in order to remain competitive, these institutions have been obligated to apply knowledge management to gain competitive advantage over their competitors.

This study therefore sought to determine the extent of application of knowledge management as a competitive strategy at among aviation training institutions. To achieve this, the study sought to answer one question: To what extent is knowledge management applied among aviation training institutions as a competitive strategy?

1.3 Research Objective

This study sought to determine the extent of application of knowledge management as a competitive strategy among aviation training institutions in Nairobi.

1.4 Value of the Study

This study would be valuable to the stakeholders of aviation training institutes in Nairobi in that it would bring to the front the challenges in the industry and ways of dealing with them to ensure successful implementation of knowledge management programmes.

The study would also be valuable to future academicians as it will form the basis for further research as well as acting as a source of reference.

The study would also be important to policy makers because it will guide the policy formulation and implementation framework on the management of knowledge in organizations. This may take different forms including patenting and copyrights.

CHAPTER TWO

LITREATURE REVIEW

2.1 Introduction

This chapter summarizes the information from other researchers who have carried out studies in the same field of knowledge management and its application as a competitive strategy. Materials have been drawn from several sources which are closely related to the theme and the objectives of the study which was to determine the extent of application of knowledge management as a competitive strategy at among aviation training institutions in Nairobi. Specifically the chapter will cover theoretical orientations, knowledge management concept, knowledge management as a competitive strategy and knowledge management activity.

2.2 Theoretical Orientation of the Study

Varied theories based on knowledge management as a competitive strategy. The KM theories are based on the extent of application of knowledge management as a competitive strategy. These includes: Resource based View, Dynamic theory of organizational knowledge creation, the theory of Re-use and the knowledge workers theory. The resource based view has emerged in recent years as a popular theory for competitive advantage. It was originally coined by Wernerfelt in 1984. The RBV stipulates that the fundamental sources and drivers to a firms CA and superior performance are mainly associated with the attributes of their resources and capabilities which are rare, valuable, inimitable, costly and un-substitutable (Barney, 1991). Through this view Knowledge is thus seen as a strategic asset with the potential to be a source for

competitive advantage, (Halawi, Aronson & Mccarthy, 2005). Penrose and Spender (1996) contended that a firms knowledge and its ability to create exclusive knowledge are at the centre of this view, Grant (1996) suggested that knowledge is the significant competitive asset that a firm posses. This knowledge when well leveraged would create value both for the customers and stakeholders.

The Dynamic theory of organizational knowledge creation which was developed by Nonaka Ikujiro in 1994 as he sought to propose paradigm for, managing the dynamic aspects of organizational knowledge creating processes. The central theme exemplified is that organizational knowledge is created through constant interaction/dialogue between tacit and explicit knowledge. Nonaka argues that while new knowledge is developed by individuals, organizations play a huge role in articulating and amplifying that knowledge. This theory informs the general process model on varied dimensions of knowledge creation, the effective participation and commitment of knowledge agents during knowledge transfer and sharing; appropriate path for knowledge conversion that would enable a firm develop quality knowledge that could be leveraged and explored to its benefit (Nonaka, 1994).

The theory of Knowledge Re-use proposed by Markus in 2001 who expressed his views on varied knowledge re use situations and the factors in reuse success on the backdrop that knowledge processes are often categorized to involve either knowledge creation or knowledge reuse. As organizations reuse knowledge they also need to access experts as well. This theory informs the process model when the organizations need to preserve, access and reuse knowledge. This theory proposes the knowledge re use process that

comprises of several stages namely capturing and documenting, packaging, dissemination and reusing knowledge. Through knowledge reuse organizations could be able to solve new problems, improve quality of old products and even set new strategic direction (Markus, 2001).

Finally, the Knowledge workers theory is generally concerned with professionals such as teachers, lawyers, architects, physicians, nurses, engineers, and scientists. As businesses increase their dependence on information technology, the number of fields in which knowledge workers must operate has expanded dramatically (Drucker, 2001). Some tasks that are performed by the acquisition community do not fall within the definition of knowledge work; however, those aspects that involve making judgments and trade-off decisions clearly do. Most Knowledge Workers have no need to worry about their physiological, security, and safety needs, so these basic, low-level needs no longer motivate their actions, although the needs are always present. Many people are today motivated primarily by social, esteem, and self-actualizing needs. According to Drucker (2001), the key determinants of knowledge worker productivity are management and organisational practices, information technology and workplace design. Technology can always be purchased, but it is not the determinant factor in productivity. The values that people have such as honesty, hard work, integrity, teamwork, and resilience affect productivity.

2.3 Knowledge Management as a competitive strategy

Knowledge Management (KM) consists of a range of practices used in an organization to create, capture, collect, transfer and apply of what people in the organization know, and

how they know what people in the organization know. It has been an established discipline since 1995 with a body of university courses and both professional and academic journals dedicated to it (Stankosky, 2005). Knowledge Management began in the corporate sector and many large companies are adopting it. Knowledge Management practices are typically tied to organizational objectives such as improved performance, competitive advantage, innovation, developmental processes, lessons learnt transfer and the general development of collaborative practices. Knowledge Management focuses on the management of knowledge as an asset and the development and cultivation of the channels through which knowledge and information flow. Within an organization, such as a commercial company, a hospital or an educational institution, knowledge management can be understood as the management of its intellectual capital, of knowledge as a form of capital that, like physical or financial capital, has to be managed to achieve the aims of the organization. The aims could be in the enhancement of organizational learning and performance.

There are two aspects of knowledge, namely, the explicit and tacit aspects. Knowledge management (KM) in organizations is for supporting creation, capture, storage and dissemination of information. The idea of a KM system is to enable employees to have ready access to the organization's documented facts, sources of information, and solutions. Some of the advantages claimed for KM systems are the sharing of valuable organizational knowledge, the avoidance of re-inventing the wheel, reduction of training time for new employees, and the retention of Intellectual Property after the employee leaves the organization (provided such knowledge can be codified) (Alavi & Tiwana, 2003). Knowledge management systems provide users with great access to knowledge.

However, equally important is the users' ability to use the knowledge once it is accessed and to subsequently share it with others.

There are basically two categories of knowledge management enablers, namely, the technological and organizational enablers. These enablers are systems and infrastructures which ensure knowledge is created, captured, transferred and shared. Technological enablers include expert systems, knowledge bases; various types of Information Management, software help desk tools, document management systems and other Information Technology (IT) systems supporting organizational knowledge flows (Franco & Mariano, 2007). The advent of the Internet brought further enabling technologies, including e-learning, web conferencing, collaborative software, content management systems, corporate 'Yellow pages' directories, email lists, wikis, blogs, etc. Organizational enablers for knowledge management programs include Communities of Practice, Networks of Practice, before-, after- and during- action reviews, peer assists, information taxonomies, coaching and mentoring, among others.

Jennex et al. (2008) define typical measures of knowledge management outcomes in terms of organizational performance as enhancement of: product and service quality, productivity, innovative ability and activity, competitive capacity and position in the market, proximity to customers and customer satisfaction, employee satisfaction, communication and knowledge sharing, and knowledge transparency and retention), measuring financial performance of an organization (typically used are ROS, ROA, ROE (return on equity), profitability and Tobin's q) or combining measures of general

organizational performance (market, employee, intellectual capital and business performance).

The objective of competitive strategy is to create competitive advantages in the industry in which a firm operates with a strategy which represents a technique by which a firm arrives at a decision (Porter, 1985). Generic competitive strategies, that is, differentiation, focus and cost, have been actively addressed in strategic management studies (Spanos & Lioukas, 2001; Rivard, Raymond & Verreault, 2006). For the difference between the businesses of the corporation itself,

Competitive strategy is due to the difference in relation with knowledge management activity. Grant (1996) believes that corporation is the convergence of individual and organizational knowledge. Knowledge is a fundamental factor in the creation of competitive advantages. Zack (1999) mentions that in order for the sole knowledge performance of an organization to be increased, the application of information technology in knowledge management and corporate competitive strategy should be used imperceptibly. Competitive strategy should effectively be used as a unique knowledge resource so that the relationship between knowledge and strategy can be mutually connected. Davenport and Prusak (1998) believe that knowledge management should combine internal corporate administrative strategy and competitive advantages. As a result, the competitive strategy will enable knowledge management activity to be the definition of knowledge management strategy in order to support corporate goals and the missions to secure the status of competition (Gronhaug & Nordhaug, 1992).

2.4 Knowledge Management Activity

Knowledge management can simultaneously increase creativeness of knowledge in both quality and in quantity. It can also boost the value of validation in knowledge. Spek and Spijkervet (1997) consider that major knowledge management lies in the flow of the organization, including the development of innovative knowledge, the distribution of knowledge when needed, the storage of knowledge for the future and the field of application and the integration of knowledge within the entire organization. Beckman (1997) considers that there are eight steps within knowledge management activities including the definition, the access to knowledge, the selection of knowledge, the storage of knowledge, the sharing of knowledge, the application of knowledge, the creation of knowledge and the selling of knowledge.

Acquisition-oriented KM processes are those oriented toward obtaining knowledge which can be described by many other terms such as acquire, seek, generate, create, capture, and collaborate, all with a common. The ability to acquire knowledge is, however, partly based on an organization's absorptive capacity (Gold, Malhotra, and Segars, 2001) and the full value creating potential of new knowledge can only be realized through other key KM processes manipulating the created/acquired knowledge (Gold, Malhotra, and Segars, 2001).

Knowledge transfer can be distinguished between an individual, an intra-organizational, and an inter-organizational level. Intra-organizational knowledge transfer manifests itself through changes in knowledge or performance of the recipient unit. Inter-organizational knowledge transfer describes transfer between organizations. Even though if knowledge

transfer takes place on the intra- or inter-organizational level, individuals in terms of organizational members have to transfer knowledge, (Wilkesmann, Fischer & Wilkesmann, 2009). Application-oriented KM processes are those oriented toward the actual use of the knowledge (Gold, Malhotra, and Segars, 2001), making knowledge more active and relevant for the firm in creating value. Process characteristics that have been associated with the application of knowledge in the literature include storage, retrieval, application, contribution, and sharing (Almeida, 1996; Appleyard, 1996). Effective application of knowledge has helped organizations improve their efficiency and reduce costs (Davenport and Klahr, 1998).

Finally, security-oriented KM processes are those oriented toward the protection of knowledge within an organization from illegal or inappropriate use or theft (Gold, Malhotra, and Segars, 2001, p.192). When knowledge is applied to existing ends, the size and durability of a firm's CA will be defined by how well protected its knowledge is (Chakravarthy *et al.*, 2005). It is because knowledge as an asset is the source of a CA only when it is rare and inimitable (Barney, 1991). Therefore, protection processes are very important for an organization at this point.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methods that were used in collection or gathering of data pertinent in answering the research questions. The chapter comprises the following sub-topics; research design, target population, research instruments, the sample and sampling procedures, data collection procedures and data analysis procedures.

3.2 Research Paradigm

The study adopted a descriptive survey research design. Mugenda and Mugenda (2003) describes descriptive research design as a systematic, empirical inquiring into which the researcher does not have a direct control of independent variable as their manifestation has already occurred or because the inherently cannot be manipulated. The research design was chosen because of its ability to create a profile about a phenomenon. Descriptive research design is concerned with finding out about the how, who, when and where of a phenomenon so as to build a profile (Mugenda and Mugenda, 2003).

This study adopted the survey approach, which is suitable for collecting information in breadth and not width. According to Malhotra & Birks (2007) a survey is a method of collecting data from people about who they are, how they think (motivations and beliefs) and what they do (behavior).

3.3 Population of the Study

The target population comprised aviation training institutions in Nairobi. According to Kenya Civil Aviations Authority, there were 22 aviation training institutions in Nairobi by December 2012. Due to the small number of aviation training institutions in Nairobi, the study conducted a census where all members of the population were included in the study.

3.4 Data Collection

Primary data was collected using a questionnaire. The questionnaire comprised of open and closed ended questions. The close-ended questions provided more structured responses to facilitate tangible recommendations. The open-ended questions provided additional information that was not be captured in the close-ended questions. The questionnaire was carefully designed and tested with a few members of the population for further improvements. This was done in order to enhance its validity and accuracy of data to be collected for the study. The researchers administered a questionnaire to knowledge management/human resource departments in each aviation training institution. The questionnaire was administered using a drop and pick later method. Secondary data was also collected for this study.

3.5 Data Validity and Reliability

Validity refers to the extent to which an instrument measures what is supposed to measure data need not only to be reliable but also true and accurate. If a measurement is valid, it is also reliable (Joppe, 2000). A pilot study was conducted to test the reliability and validity of the research. According to Orodho (2003), a pilot test helps to test the

reliability and validity of data collection instruments. The pilot test comprised of three knowledge management/human resource managers in five airline companies because of their reliance on the aviation training institutions and their interdependence.

The content of validity of the data collection instruments was determined through discussing the stated questions in the interview guide with the managers for the pilot. Validity was determined by the use of Content validity Index (C.V.I). C.V.I of between 0.7 and 1 shows the instruments to be valid for the study (Orodho, 2003).

Reliability refers to the consistence, stability, or dependability of the data. Whenever an investigator measures a variable, he or she wants to be sure that the measurement provides dependable and consistent results (Cooper & Schindler, 2003). To measure the reliability of the data collection instruments an internal consistency technique using Cronbach's alpha was applied to the gathered data (Mugenda & Mugenda, 2003). Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalizability and an alpha coefficient of 0.60 or higher indicates that the gathered data is reliable as it has a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population (Zinbarg, 2005).

3.6 Data Analysis

The completed questionnaire was first edited for completeness and consistency. Quantitative data collected was analyzed by the use of descriptive statistics using SPSS and presented through percentages, means, standard deviations and frequencies. The data was split down into different aspects of human resources practices and organizational competitiveness. This offered a systematic and qualitative of the study objectives.

The information was presented using bar charts, graphs and pie charts and in prose-form. Descriptive data was presented using measures of central tendency like mean and standard deviation. The researcher conducted a correlation analysis in order to establish the relationship between knowledge management and competitiveness of Aviation training institutions.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents data collected from the field, its analysis, and finally the interpretation of the findings on the extent of application of knowledge management as a competitive strategy among aviation training institutions in Nairobi. The study targeted 22 participants in the aviation training institutions situated in Nairobi. Out of the targeted respondents, 18 institutions filled and returned the questionnaires giving a response rate of 81.82%. This excellent response was attained after the researcher made efforts to call and remind the respondents to fill and return the questionnaires. The response rate is excellent and agrees with Mugenda and Mugenda (2003) prescribed significant response rate for statistical analysis, which they established at a minimal value of 50%.

4.2 General information

The study sought to establish the courses offered and ownership structure of the organization. As of years that the aviation institutions had been in existence the respondents were asked to indicate as shown in the Table 4.1.

Table 4.1: Number of years the Institution has been in existence

Period	Frequency	Percent
5-6 years	7	39
3-4 years	5	28
More than 6 years	4	22
Below 2 years	2	11
Totals	18	100

Source: Research Data (2013).

From the findings, the study established that a majority 39% of the institutions had been in operations for between 5-6 years, followed by 28% of the institutions that had been in operations for between 3-4 years. 22% of the institutions had been in operation for more than 6 years while 11% had been in operations for less than 2 years. These findings show that the institutions included in the study had been in operation for long enough to be able to understand the importance of knowledge management in building competitive advantage. They were thus appropriate in providing data relevant for the study.

Secondly the study sought to establish the courses offered by the different aviation institutions that participated in the study. From the study findings, the institutions offered diversified courses including: air travel operations courses, airport operations courses, air cargo services courses among others. These findings show that the respondents had several courses related to aviation.

Finally the study sought to establish the ownership structure of the aviation institutions.

The findings were as shown in the table 4.2:

Table 4.2: Ownership of the Institutions

Ownership status	Frequency	Percent
Private	14	78
Public	2	11
Partially owned by the Public	2	12
Total	18	100

Source: Research Data (2013).

From the findings of the study, 78% of the aviation institutions were privately owned, 11% were public while 12% each were partially owned by the public and Government.

These findings show that the respondent institutions were drawn from both sides of Government owned and private owned hence more representative of the aviation institutions in Kenya.

4.3 Knowledge Management as a Competitive Strategy

4.3.1 Extent of Knowledge management effect on competitiveness of Institutions

The study sought to establish the extent to which knowledge management affected competitiveness of aviation training institutes. The findings were as shown in the Table 4.3:

Table 4.3: Extent of Knowledge management effect on competitiveness of Institutions

Extent	Frequency	Percent
Very great extent	5	28
Great extent	9	50
Moderate extent	3	17
Little extent	1	6
Totals	18	100

Source: Research Data (2013).

As indicated in Table 4.3 , 28% of the respondents indicated that knowledge management affected competitiveness of aviation institutions to a very great extent, 50% to great extent, 17% to a moderate extent while 6% to a little extent. These findings show that knowledge management had varying degrees of effects on the competitiveness of the aviation training institutes in Nairobi.

4.3.2 Measures of Knowledge Management Outcomes

The respondents were requested to indicate their agreement with the various statements on measures of knowledge management outcomes in terms of organizational competitiveness in aviation training institutes. The findings are shown in the Table 4.4:

Table 4.4: Measures of Knowledge Management Outcomes

	Mean	Std. Deviation
Enhancement of service quality	2.8043	0.90969
Increased productivity, innovative ability and activity	2.2826	1.00362
Competitive capacity and position in the market	2.7609	1.03676
increased customer satisfaction	1.8478	.72930
High employee satisfaction	2.2826	1.10881
Enhanced communication and knowledge sharing	2.3043	0.93973
Improved knowledge transparency and retention	1.7000	1.02740

Source: Research Data (2013).

As indicated in Table 4.7, it was found out that the respondents agreed to a moderate extent that enhancement of service quality is a measure of knowledge management as shown by a mean of 2.8043 and on the improved knowledge transparency and retention the respondents agreed to a little extent as shown by a mean of 1.7000. Further the study sought to find out the importance of knowledge management to the aviation training institutes some of the importance highlighted by the respondents included that knowledge management is important in managing and creating a corporate culture that facilitates and encourages the sharing, appropriate utilization, and creation of knowledge that enables a corporate strategic competitive advantage.

4.3.3 Knowledge management on employee competitiveness

The study sought find out the extent to which knowledge management affected employee competitiveness in the aviation training institutes. The findings are presented on the Table 4.5:

Table 4. 5: Extent of Knowledge management effect on employee competitiveness

Extent	Frequency	Percent
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Very great extent	11	61%
Great extent	2	11%
Moderate extent	4	22%
Little extent	1	6%
Totals	18	100%

Source: Research Data (2013).

From the data findings, 61% of the respondents indicated that knowledge management affected competitiveness of aviation institutions to a very great extent, while as 6% of the respondents indicated that knowledge management affected competitiveness of aviation institutions to a little extent.

4.3.4 Knowledge management on Employee performance

The study sought to rate the respondents level of agreement with the following statements on employee performance. The findings are presented on the Table 4.9 below.

Table 4. 6: Knowledge management on Employee performance

	Mean	Std. Deviation
Knowledge management has improved competitiveness of employees on their duties in the aviation training institutes	3.0652	1.00025
Knowledge management has enhanced employee competence in the aviation training institutes	3.5261	.09005
knowledge management practices have encourage and engaged employees in sharing what they know, and what they are learning	2.4565	.83550
Managing knowledge involves managers developing a set of practices to capture, collect and transfer of relevant knowledge within the organization of people to improve services, outcomes and competitiveness	2.6957	1.38033
Knowledge management not only can create the value of intellectual assets but also enhance an employee's productivity and competitiveness	2.8478	.94204

Source: Research Data (2013).

To rate the respondents level of agreement with the following statements on employee performance the researcher computed the mean and standard deviation. On whether knowledge management has improved competitiveness of employees on their duties in the aviation training institutes, the respondents agreed as shown by a mean of 3.0652. Asked if knowledge management has enhanced employee competence in the aviation training institutes the respondents strongly agreed as shown by a mean of 3.5261 and finally on if the knowledge management not only can create the value of intellectual assets but also enhance an employee's productivity and competitiveness the respondents agreed as shown by a mean of 2.8478.

4.3.5 Knowledge management on business competitiveness

The respondents were requested to indicate their agreement levels with the various statements on the effect of knowledge management on business competitiveness in the aviation training institutes. The findings are presented in the below Table 4.7:

Table 4. 7: Knowledge management on business competitiveness

	Mean	Std Deviation
Ability of the aviation training institutes to develop new innovative financial products for its customers	2.0000	.98883
Process flow in the aviation training institutes	1.4435	1.04789
Turnaround time of employees	1.3534	1.11555
Employee accuracy	2.9565	1.11468
Customer satisfaction in the aviation training institutes	2.6739	1.19358
Communication process in the aviation training institutes	1.3739	.99564
Customer orientation	2.7826	1.09368
Market competitiveness	1.1304	.90942
Profitability of the aviation training institutes	1.3478	1.03209

Source: Research Data (2013).

On the ability of the aviation training institutes to develop new innovative financial products for its customers, the respondents agreed as shown by a mean of 2.0000 while as on profitability of the aviation training institutes the respondents agreed as shown by a mean of 1.3478. The researcher further sought to establish the general ways in which knowledge management affected business competitiveness of the aviation training institutes. The respondents indicated that knowledge transfer either at an intra-organizational, and an inter-organizational level as some of the general ways in which knowledge management affected business competitiveness of the aviation training institutes.

4.3.6 Knowledge management

The study sought to establish the extent to which the respondents agree with the statements below relating to knowledge management. The findings are presented on the Table 4.10 below.

Table 4. 8 : Knowledge management

	Mean	Std. Deviation
Knowledge management practices enable employees and customers to get the information they need on time	1.2174	.83435
open and flexible organization system promote knowledge management in an organization	2.4348	.88574
Rules and directives help sequencing problem solving and decision making in our organization	1.4957	1.15219
Effective knowledge management leads to enhanced organizational business competitiveness	2.7609	1.03676
effectively analysis of knowledge help salespersons to intensify their ability to service quality	2.0435	1.03186
More interaction between customers and employees promotes knowledge management	2.5870	1.02363
Knowledge management promotes aviation companies competitiveness	2.3478	.99370

Source: Research Data (2013).

As shown in table 4.11 above knowledge management practices enable employees and customers to get the information they need on time the respondents agreed as shown by a mean of 1.2174 and on the knowledge management promotes aviation companies competitiveness the respondents agreed as shown by a mean of 2.3478.

4.3.7 Knowledge management affects on the business competitiveness

The study sought to establish ways in which knowledge management affected the business competitiveness of your organization. The data findings are presented in Table 4.9.

Table 4. 9: Knowledge management affects on the business competitiveness

	Frequency	Percent
Reduced customer complains	6	33
Improved service delivery	8	44
Reduced employee turnover	4	22
Totals	18	100

Source: Research Data (2013).

From the study findings, majority 44 % of the respondents indicated that improved service delivery affected the business competitiveness of the organization while on reduced employee turnover 22 % of the respondents indicated that affected the business competitiveness of the organization.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of the findings from chapter four, and also the conclusions and recommendations of the study based on the objectives of the study. The objective of this study was to determine the extent of application of knowledge management as a competitive strategy among aviation training institutions in Nairobi.

5.2 Summary

The study findings established that a majority of the institutions had been in operations for between 5-6 years and that the institutions included in the study had been in operation for long enough to be able to understand the importance of knowledge management in building competitive advantage. The findings shows that the respondents in the study were drawn from different departments hence more comprehensively covered the application of knowledge management in building organizational competitive advantage where 33% of the respondents held the position of human resource managers. Majority of the aviation institutions were privately owned, while others were partially owned by the public and Government.

On whether knowledge management has improved competitiveness of employees on their duties in the aviation training institutes, the respondents strongly agreed. Concerning if knowledge management practices have encourage and engaged employees in sharing what they know, and what they are learning the respondents were neutral and finally on if the knowledge management not only can create the value of intellectual assets but also

enhance an employee's productivity and competitiveness the respondents agreed to a moderate extent.

The respondents agreed that knowledge management practices enable employees and customers to get the information they need on time and on how effectively analysis of knowledge help salespersons to intensify their ability to service quality. Majority of the respondents indicated that improved service delivery was another ways in which knowledge management affected the business competitiveness of the organization.

5.3 Conclusions

From the findings the study concludes that Knowledge is a fundamental factor in the creation of competitive advantages among the aviation institutes in Nairobi. Through knowledge management, the Aviation training institutes were able to acquire and sustain competitive advantage over their competitors.

The study also concludes that knowledge management if used as a competitive strategy can leverage the operations of the institutions by leveraging their operations. Proper knowledge management enhances strategy implementation among the institutions hence attainment of the set goals.

Proper use of knowledge management improves the performance of aviation training institutions as it offers them a competitive advantage over their competitors. In addition, the study concludes that knowledge management can simultaneously increase creativeness of knowledge in both quality and in quantity. It can also boost the value of validation in knowledge

5.4 Limitations of the Study

The respondents were reluctant in giving information fearing that the information asked would be used to intimidate them or paint a negative image about them or the company. The researcher handled this problem by carrying an introduction letter from the University and assured the respondents that the information they gave would be treated with confidentiality and was used purely for academic purposes.

The study faced both time and financial limitations. The duration that the study was to be conducted was limited hence exhaustive and extremely comprehensive research could not be carried out. However, the researcher countered this limitation by carrying out the research across the department and management level in the organization to enable a generalization of the study findings.

5.5 Implications of Findings

The study established that through knowledge management, the Aviation training institutes were able to acquire and sustain competitive advantage over their competitors. These findings therefore imply that knowledge management is an important element in organizational management especially in the creation of sustainable competitive advantage.

The study further established that proper knowledge management enhances strategy implementation among the institutions hence attainment of the set goals. These findings therefore imply that application of knowledge management helps organizations in smooth implementation of set organizational goals because it reduces employee resistance to change.

The study further established that proper use of knowledge management improves the performance of aviation training institutions as it offers them a competitive advantage over their competitors. Through knowledge management, it is implied that organizations will improve their performance because it enable them to efficiently deliver on their set objectives.

5.6 Recommendations

5.6.1 Recommendations for Policy and Practice

The study found out that internal corporate administrative strategy and competitive advantages were incorporate to a very little extent it therefore recommends that knowledge management should combine internal corporate administrative strategy and competitive advantages. As a result, the competitive strategy will enable knowledge management activity to be the definition of knowledge management strategy in order to support corporate goals and the missions to secure the status of competition

The study also found out that knowledge management systems was not adequately provided it therefore recommends that knowledge management systems should be provided to ensure great access to knowledge and equally important is the users' should be enabled to use the knowledge once it is accessed and to subsequently share it with others.

5.6 Area for Further Research

This study focused on the extent of application of knowledge management as a competitive strategy among aviation training institutions in Nairobi it therefore

recommends that a similar study should be done on the relationship between knowledge management and competitive strategy in all the aviation training institutions in Kenya.

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APPENDICES

Appendix 1: Questionnaire

Kindly answer the questionnaire by ticking in the appropriate box

SECTION A: GENERAL INFORMATION

1. Number of years the Institution has been in existence?

Below 2 years ()

3-4 years ()

5-6 years ()

More than 6 years ()

2. Please indicate your Job Titles _____

3. What courses do you offer in your institution?

4. What is the ownership of your Institution?

Private ()

Public ()

Partially owned by the Public ()

Partly owned by the Government ()

SECTION B: KNOWLEDGE MANAGEMENT AS A COMPETITIVE STRATEGY

5. What extent does knowledge management affect competitiveness of the aviation training institutes?

Very great extent () Great extent ()

Moderate extent () Little extent ()

No extent ()

6. To what extent do you agree with the following measures of knowledge management outcomes in terms of organizational competitiveness in the aviation training institutes? Use a scale of 1-5 where 1=no extent, 2= little extent, 3=moderate extent, 4=great extent and 5=very great extent.

	1	2	3	4	5
Enhancement of service quality					
Increased productivity, innovative ability and activity					
Competitive capacity and position in the market					
increased customer satisfaction					
High employee satisfaction					
Enhanced communication and knowledge sharing					
Improved knowledge transparency and retention					

7. Highlight the importance of knowledge management to the aviation training institutes

8. To what extent has knowledge management affected employee competitiveness in the aviation training institutes?

Very great extent () Great extent ()
 Moderate extent () Little extent ()
 No extent ()

9. Please rate your level agreement with the following statements on employee performance. Use a scale where 5 strongly agrees, 4 agree, 3 neutral, 2 disagree, 1 strongly disagree

	1	2	3	4	5
Knowledge management has improved competitiveness of employees on their duties in the aviation training institutes					
Knowledge management has enhanced employee competence in the aviation training institutes					
knowledge management practices have encourage and					

engaged employees in sharing what they know, and what they are learning					
Managing knowledge involves managers developing a set of practices to capture, collect and transfer of relevant knowledge within the organization of people to improve services, outcomes and competitiveness					
Knowledge management not only can create the value of intellectual assets but also enhance an employee's productivity and competitiveness					

10. Please indicate your level of agreement with each statement on the effect of knowledge management on business competitiveness in the aviation training institutes. Use a scale where 5 strongly agrees, 4 agree, 3 neutral, 2 disagree, 1 strongly disagree

	1	2	3	4	5
Ability of the aviation training institutes to develop new innovative financial products for its customers					
Process flow in the aviation training institutes					
Turnaround time of employees					
Employee accuracy					
Customer satisfaction in the aviation training institutes					
Communication process in the aviation training institutes					
Customer orientation					
Market competitiveness					
Profitability of the aviation training institutes					

11. In general, in what ways has knowledge management affected business competitiveness of the aviation training institutes?

12. Please indicate the extent to which you agree with the statements relating to knowledge management. Use a scale where 5 strongly agrees, 4 agree, 3 neutral, 2 disagree, 1 strongly disagree

	1	2	3	4	5
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Knowledge management practices enable employees and customers to get the information they need on time					
open and flexible organization system promote knowledge management in an organization					
Rules and directives help sequencing problem solving and decision making in our organization					
Effective knowledge management leads to enhanced organizational business competitiveness					
effectively analysis of knowledge help salespersons to intensify their ability to service quality					
More interaction between customers and employees promotes knowledge management					
Knowledge management promotes aviation companies competitiveness					

13. In what ways does knowledge management affect the business competitiveness of your organization?

- Reduced customer complains ()
- Improved service delivery ()
- Reduced employee turnover ()
- Other (Please explain) ()

14. What areas would you recommend that the aviation training institutes improves in order to realize maximum benefits from the knowledge management?

THANKS FOR YOUR PARTICIPATION!!

