

INFLUENCE OF KNOWLEDGE MANAGEMENT ENABLERS ON KENGEN PERFORMANCE: A CASE STUDY OF GEOTHERMAL DEVELOPMENT, NAIVASHA

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©2017

**International Academic Journal of Human Resource and Business Administration
(IAJHRBA) | ISSN 2518-2374**

Received: 4th October 2017

Accepted: 12th October 2017

Full Length Research

Available Online at:

http://www.iajournals.org/articles/iajhrba_v2_i3_702_733.pdf

Citation: Karanja, P. M. & Mwaura, P. (2017). Influence of knowledge management enablers on KenGen performance: A case study of geothermal development, Naivasha. *International Academic Journal of Human Resource and Business Administration*, 2(3), 702-733

ABSTRACT

For effective knowledge management implementation in organizations which may have profound influence on the organizational performance, it is crucial for an organization to identify and understand some of the major factors that will influence the success of knowledge management. These factors are the driving force in carrying out knowledge management, they do not just generate knowledge in the organization by stimulating the creation of knowledge, but they also motivate the group members to share their knowledge and experiences with one another, allowing organizational knowledge to grow concurrently and systematically. Unfortunately, most organizations especially in the energy sector are not clear about such factors and their influence on knowledge management hence the need for this study. The general objective of this study was to determine the influence of knowledge management enablers on organization performance with a particular emphasis on electricity sector. Specifically, the study sought to evaluate the influence of leadership, organizational culture, and employee involvement and information technology on the performance of KenGen using Geothermal Development Project, Naivasha as a case study. The social exchange theory, the resource-based view theory and the organizational learning theory were used as underlying theories for this research. The study was carried out in Olkaria Geothermal Development Project in Naivasha using descriptive research design. The target population was 102 employees. A sample size of 81 was picked using Yamane's simplified formula. Questionnaires

were used to collect the primary data while secondary data was collected from KenGen documents and company website documentary. A pilot test was conducted to pretest the reliability of the research instrument where the instrument had a computed Cronbach's coefficient alpha of 0.942 which was considered reliable as it was more than 0.7. The primary data was carried out using a structured questionnaire that was administered directly to the respondents. A total of 57 questionnaires were received from the respondents which represented a response rate of 71%. The data was analyzed through descriptive statistics in the form of frequency counts, percentages, mean, standard deviation and variance. Pearson's Correlation, Chi square tests as well as regression analysis were used to gather as much information as possible regarding influence of knowledge management enablers in the performance of KenGen. The study established that 43.7% of the variations in performance of KenGen is explained by leadership, organizational culture, Information Technology and employee involvement leaving 56.3% percent unexplained. Therefore, further studies should be done to establish the other factors (56.3%) affecting the performance of KenGen. Additionally, very little has been undertaken to explore knowledge management enablers on organizational performance of the electricity sector thus the researcher call for similar studies to be undertaken in Kenya for generalization of the findings of the study.

Key Words: *knowledge management enablers, KenGen performance, geothermal development, Naivasha*

INTRODUCTION

Constant and rapid advancements in information technology have pushed the business world in a new economical era. Knowledge Management (KM) has been a natural evolution over the first years of the twenty-first century, and a hot topic in several business communities. The ability to manage knowledge is becoming increasingly more crucial in today's knowledge economy. The task of effective and competitive management of organizations becomes necessary, and knowledge management, if understood and applied properly, may be a useful tool for business transformation as well as the key of competitive advantage Jennex (2007). Jennex (2007), defined knowledge management as the practice of selectively applying knowledge from previous experiences of decision making to current and future decision-making activities with the express purpose of improving the organization's effectiveness. According to Holsapple (2004) knowledge management is an entity's systematic and deliberate efforts to expend, cultivate, and apply available knowledge in ways that add value to the entity in the sense of positive results in accomplishing its objectives or fulfilling its purpose.

Effective Knowledge Management will help an organization to gain insight and understanding from its own experience and procedures. As a result of globalization of the world economy, it is imperative for business organizations to improve their performance through knowledge management, in order to survive, sustain and compete in the global competitive environment. Knowledge management is the process for acquiring, storing, diffusing and implementing both tacit and explicit knowledge inside and outside the organization's boundaries with the purpose of achieving corporate objectives in the most efficient manner (Magnier-Watanabe & Senoo, 2008). Knowledge Management can be used to create business value, generate competitive advantage, achieve business goals, and develop greater value from the core competencies of the business Tiwana (2001). One of the key concerns that have emerged related to knowledge management is how to accomplish it successfully. Thus, it is considered crucial to identify the factors that influence the success of knowledge management initiatives. Knowledge management enablers are the mechanism for the organization to develop its knowledge and also stimulate the creation of knowledge within the organization as well as the sharing and protection of it. They are also the necessary building blocks in the improvement of the effectiveness of activities for knowledge management (Ichijo et al., 1998; Stonehouse and Pemberton, 1999). Enabler factors should be clear in an organization, because not only they create knowledge but they also prompt people to share their knowledge and experiences with others (Yeh, Lai, & Ho, 2006).

Leaders are responsible on how the companies should approach and deal with knowledge management processes as well as practices. The introduction of a knowledge management program can be a major organization change and for this reason the involvement of leadership is considered imperious (Davenport et al., 1998). Leadership should create a climate that encourages the distribution of knowledge, so that people feel safe to contribute in every way, and the contributions are recognized by them. In addition, they should have the will to share and offer their knowledge to others in the organization, to learn constantly, and to seek new ideas and

knowledge (Storey and Barnett, 2000). Greengard (1998) believed that top managers have to understand the importance of knowledge management so as to support and play an aggressive role in decision making. Beckman (1999) argued that top managers should motivate employees, provide them with equal opportunities and development, measuring and rewarding the performance, behaviors, and attitude that is considered necessary for effective knowledge management. Many times employees get into conflicts of interest with knowledge management practices, for that reason leaders should facilitate employees to overcome those conflicts when they appear. Knowledge management executives in every level are primarily responsible for ensuring that knowledge management objectives are in line with organizational strategies and objectives (Berlade & Harman, 2000).

Culture is important for facilitating sharing, learning, and knowledge creation. Culture is values, beliefs, norms, and symbols (Price Waterhouse Change Integration Team, 1996). According to Long (1997), culture highly values knowledge, encourages its creation, sharing, application, and promotes open climate for free flow of ideas. The development of such culture is the major challenge for knowledge management efforts. A survey conducted by Chase (1997) indicated that culture was the main obstacle that organizations deal with in order to create a successful knowledge-based business (Wong, 2005). Organizational cultures change over time as organizations adjust to environmental contingencies. An effective culture for knowledge management consists of norms and practices that promote the transfer of information between employees and across department lines (Yeh, Lai and Ho, 2006). Building an effective culture where people operate in an organization is a critical requirement for effective knowledge management (Gupta & Govindarahan, 2000).

Technology is a powerful enabler of knowledge management success. It is widely accepted that databases, intranets, knowledge platforms and networks are some of the key blocks that support knowledge management. Information Technology facilitates quick search, access of information, cooperation and communication between organizational members (Yeh, Lai, & Ho, 2006). It is indisputable that Information Technology is one of the key factors that influence knowledge management implementation (McCampbell, Clare and Gitters, 1999). There is an extensive collection of information technologies such as data warehousing, intranet, internet, which can be implemented and integrated in an organization's technological platform and work together as knowledge management system. The implementation of knowledge management technologies without ensuring that the organizations employees are well informed about the organization's overall goals and objectives, and how this technology can facilitate the success of these goals, will lead to disappointing returns on the technology investment (Curley and Kivowitz, 2001).

The role of people in knowledge management success is major. According to Leavitt (1965) people are actors and the persons that carry out work within an organization. People create and share knowledge, and for this reason managing the persons who have the intension to create and share their knowledge is considered very important. Since, people are the exclusive creators of knowledge, managing knowledge is managing people, and managing people is managing

knowledge (Davenport and Volpel, 2001). Knowledge is held by individuals and the process of transferring this hidden knowledge to other members within an organization is very important. In other words, to share, use, and convert individual knowledge into organizational knowledge is a crucial procedure of utmost importance. Thus, a key factor for an organization to meet success is to support people communicate and share knowledge with others (Nonaka and Takeuchi, 1995). Szulanski (1996) stated that organizations should perceive employees as a vital knowledge resource and adjust knowledge management into their employee's management policy. It is critical for an employee to be motivated to take part in the obtaining and sharing of knowledge (Wong, 2005).

An effective knowledge management implementation will add more value to the overall performance of the organization (Toften and Olsen, 2003). Gold et al. (2001) state that the successful application of knowledge management enables a firm to become innovative, harmonize its efforts better, commercialize new products quickly, foresee surprises, and become more responsive to market change. Organizations nowadays have realized that in order to succeed they have to view knowledge as an asset and manage it effectively. The effective knowledge management is a valuable activity due to its consequences to firm performance (Lim et al. 1999). Knowledge management is of great importance to an organizations' performance due to its contribution on innovation improvement, enhancement of coordination of efforts, better decision making, and ultimately better financial results (Holsapple and Wu, 2008).

The history of Kenya's electricity sector can be traced back to 1922 when the East African Power and Lighting Company (EAP&L) was established through a merger of two companies. These were; the Mombasa Electric Power and Lighting Company established in 1908 by a Mombasa merchant Harrali Esmailjee Jeevanjee and Nairobi Power and Lighting Syndicate also formed in 1908 by engineer Clement Hertzell. The Kenya Power Company (KPC) was later formed in 1954 as a subsidiary of the EAP&L with the sole mandate of constructing electricity transmission lines between Nairobi and Tororo in Uganda. This infrastructure was mainly to enable Kenya import electricity from the Owen Falls Dam in Uganda. With many operations of EAP&L largely confined to Kenya, the company finally changed its name to Kenya Power and Lighting Company Limited (KPLC) in 1983.

KPC was 100% government owned. Following the structural adjustments program in the 1990s, the Government of Kenya officially liberalized power generation as part of the power sector reforms in 1996. Among the first reforms to take place was the unbundling of the state utility in 1997. Kenya Electricity Generating Company Limited (KenGen) became responsible for the generation assets while KPLC assumed responsibility for all distribution and transmission. The Electricity Regulatory Board was also established under the 1997 electric power Act as the sub sector regulator. Reforms in the power sector have continued to take place especially with energy policy development of 2004 and the subsequent enactment of the energy Act of 2006 which established the Energy Regulatory Commission and the Rural Electrification Authority. The sessional paper No 4 of 2004 on energy also provided for the creation of the Geothermal

Development Company (GDC) and Kenya Electricity Transmission Company (KETRACO). GDC is a special purpose vehicle for geothermal resource development and KETRACO is a state owned transmission company.

The reforms in the electricity sector have seen a complete reorganization of functions hitherto concentrated in the ministry of energy and the Kenya Power and Lighting Company Limited. This was a result of the need to place responsibilities to specific institutions that would specialize in the mandates vested in them under the Energy Act to enhance efficiency. Accordingly the institutions were unbundled into generation, transmission, distribution, oversight and policy functions. The institutional structure in the electricity sub sector in Kenya comprise the Ministry of Energy and Petroleum (MoEP), Energy Regulatory Commission (ERC), Kenya Electricity Generating Company (KenGen), Kenya Power (KP), the Rural Electrification Authority (REA), Kenya Electricity Transmission Company (KETRACO), Geothermal Development Company (GDC) and Independent Power Producers (IPPs).

The Kenya Electricity Generating Company (KenGen) is the main player in electricity generation, with installed capacity growing from 972MW by end of 2008 to 1,632MW currently. It is listed at the Nairobi Stock Exchange with the shareholding being 70% by the Government of Kenya and 30% by private shareholders. The Company accounts for about 75% of the installed capacity from various power generation sources that include hydropower, thermal, geothermal and wind. Independent Power Producers (IPPs) are private investors in the electricity sector who have come in to fill the growing gap between available and required power under the Feed-in - Tariff Policy. Current players comprise IberAfrica (EA) Ltd, Tsavo Power, Or-power Geothermal, Rabai Power, Gulf Power, Triumph Power, Thika Power, ImentiFiT Hydro, Biojule Kenya Ltd and Mumias Cogeneration. Collectively, they account for about 25% of the country's installed capacity from thermal, geothermal and bagasse, as follows: IberAfrica (109 MW - thermal power plant), OrPower (139 MW - geothermal power plant), Gulf Power (80MW-thermal power), Triumph Power (83 MW- thermal power), Thika Power (87 MW- thermal power) Tsavo (74 MW-thermal power plant), Mumias (26MW -Cogeneration), Imenti (900kW - Mini-Hydro), and Rabai (90MW-Thermal power plant) and Biojule Kenya Ltd (2MW- bagass).

Kenya is among the top geothermal power producers in the world which is associated with high upfront costs thus need for operational excellence. Kenya vision 2030 is a vehicle for accelerating growth in the country into a rapidly industrializing middle income economy where energy is a key enabler of the economic pillar. The flagship development projects identified under Vision 2030 will increase demand on Kenya's energy supply and as a result, KenGen which is the leading electric power generation company in Kenya, producing about 75% of electricity consumed in the country set a target of developing 3000MW of power by 2020. The company developed an expansion plan to create a robust renewable energy portfolio to establish reserve margin, mitigate the risks of thermal and hydro plants as well as to guarantee supply to African government initiatives with least cost using geothermal. To enhance effective performance, the top management focused on performance management with the aim of

leveraging on knowledge to achieve one of its goals of operational excellence as it sought to meet the energy demands in the country.

STATEMENT OF THE PROBLEM

Knowledge management is a key source of competitive advantage for organizations (Choy, 2006). Knowledge management is important as it enables organizations to gain insight and understanding from its own experience and procedures. However for effective implementation of knowledge management which may have profound effects on the organizational performance, it is crucial for an organization to identify and understand the key factors that will influence the success of knowledge management initiative. These factors are the driving force in carrying out knowledge management, they do not just generate knowledge in the organization by stimulating the creation of knowledge, but they also motivate the group members to share their knowledge and experiences with one another, allowing organizational knowledge to grow concurrently and systematically (Ichijo, 1998). Unfortunately, most organizations are not clear about such factors and their influence on KM (Choy, 2006) hence the need for this study.

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. This contradicts Polland, (2003), finding that KM practices drives creativity and innovation. Ondari (2006) studied on the role of knowledge management in enhancing government service delivery. The study established that KM effectiveness was hindered by factors like bureaucracy, lack of incentives, cultural barriers and technology inadequacies. Maseki, (2012) studied knowledge management and the performance of commercial banks in Kenya. The study established that KM greatly influenced the performance of commercial banks in Kenya. The level of influence was determined by the effectiveness of the KM practices in a particular bank. All the above studies clearly show the need for organizations to be clear on the critical success factors so as to be able to leverage on KM to improve organizational performance. There was no study that had been done on the role of knowledge management enablers in the electricity sector in Kenya. In line with KenGen's expansion strategy, (with a focus on geothermal) the company's top management has put its focus on performance management with the aim of leveraging on knowledge to improve organizational performance. This study therefore sought to establish the influence of knowledge management enablers on the organizational performance of KenGen using a case study of Geothermal Development Project in Naivasha, Kenya.

GENERAL OBJECTIVE

The purpose of the study was to establish the influence of knowledge management enablers on the organizational performance of KenGen's Geothermal Development project in Naivasha, Kenya.

SPECIFIC OBJECTIVES

1. To establish the influence of leadership support on performance of KenGen's Geothermal Development Project in Naivasha, Kenya.
2. To determine the effect of organizational culture on performance of KenGen's Geothermal Development Project in Naivasha, Kenya.
3. To evaluate the influence of Information Technology tools on performance of KenGen's Geothermal Development Project in Naivasha, Kenya.
4. To examine the effect of employee involvement on performance of KenGen's Geothermal Development Project in Naivasha, Kenya.

THEORETICAL REVIEW OF LITERATURE

Social Exchange Theory

One way of analyzing social interaction among organizational team members is through the social exchange theory. This theory also called the communication theory of social exchange is a commonly used theoretical base for investigating individual's knowledge-sharing behavior. According to Blau (1964) and Molms (2001), this theory explains how individuals regulate their interactions with other individuals based on a self-interest analysis of the costs and benefits of such an interaction. That is, it suggests that human beings make social decisions based on perceived costs and benefits, such that they seek to maximize their benefits and minimize their costs when exchanging resources with others (Blau, 1964) and (Molms, 2001). These benefits need not be tangible since individuals may engage in an interaction with the expectation of reciprocity (Gouldner, 1960). In such exchanges, people help others with the general expectation of some future returns, such as gaining desired resources through social reciprocity. In order to maximize the resources gained, individuals may build social relationships with others by sharing their knowledge. The fundamental dimension in the social exchange theory is individual cognition, which may include perceived benefits and organizational commitment. The theory thus declares that individuals engage in social interaction based on the expectation that it will in some way lead to social rewards such as approval, status, and respect (Forsythe et al., 2006). For example, Kankanhalliet al., (2005) believes that an individual's perceived benefit is one of the major factors that encourage employees to contribute knowledge to electronic knowledge repositories. According to Ma and Agarwal (2007), the amount of knowledge that people contribute to a virtual community depends on the level of satisfaction that they too derive from being members of the community. This theory related well with the study as employee involvement is very critical to effective KM. The employees hold tacit knowledge which they can decide not to share if they feel that there is no benefit or recognition from the organization.

Resource Based View Theory

According to resource-based view theory, firms perform well and create value when they implement strategies that exploit their internal resources and capabilities. With the growth of strategic management theory, there has been considerable interest in focusing on intangible resources or Intellectual Capital and their deployment in the firm Wernerfelt (1995). Resource-based theorists consider Intellectual Capital to be a firm's strategic resource. This theory applied well to the study as knowledge and knowledgeable people were considered an internal resource which needed to be utilized effectively to give the organization a competitive advantage through innovation for improved organizational performance.

Organizational Learning Theory

Garvin (1993) defined organizational learning as reflecting the skills of creating, acquiring, and transferring knowledge and modifying behavior to reflect new knowledge and insights. This theory emphasizes that organizational learning depends on individual learning but is more than the cumulative result of each employee's learning. Organizations acquire knowledge, not only through their own employees, but also through consultants and through formal and informal environmental scanning. Learning has been acknowledged as a key process that contributes to successful innovation, which determines and supports an organization's success (Casey, 2005; Verdonschot, 2005). In the workplace learning literature, organizational learning, a kind of knowledge-based resource capability, has become more important in the rapidly changing technology and fiercely competitive business world (Carrillo & Gaimon, 2004). The theory related well to the study as employees have to continue learning new skills to be able to be creative and innovative. Employees with T-shaped skills are more likely to fit in the learning organization and use their skills to share and interact with other disciplines thereby empowering other employees.

EMPIRICAL REVIEW OF LITERATURE

KM enabler refers to the key factors that determine the effectiveness of executing knowledge management within the organization, which are the driving force that solidifies knowledge management (Yeh et al., 2006). Even though the attention of KM is becoming more popularized in the establishment of successful projects within organizations, Adenfelt & Lagerstrom (2006) reveal that its leverage still presents major challenges. This prompted them to explore enabling factors, which are approaches that would allow KM practice to take place. Ondari and Minishi-Majanja (2007) assert that Africa is termed as a "Knowledge Society". In Africa, knowledge management is making milestones in development. Rono (2011) from his study on KM practice in institutions of higher learning in Kenya affirms that this practice is still at the infancy level and is yet to be formally entrenched as part of corporate strategy in organizations. Mosoti and Masheka (1998) found out that despite the existence of so many literatures on KM, there has been little research on its practice among organizations here in Kenya, even though some of them

use the practice to some extent. This is evidenced by the scanty information on KM especially in the management of projects in Kenya, particularly in the energy sector. Probably this could be due to the fact that the concept is still new and growing within this sector. The study by Maingi (2007) on KM and his use of the Knowledge Management Readiness Score Matrix revealed a bleak picture of the level of readiness to implement KM among the universities, academic and banking institutions in Kenya. Similarly a study carried out by Ngéno and Odero (2009) on KM in public university libraries in Kenya only addressed the aspect of knowledge sharing and how it could be integrated in libraries core business activities. A broad range of success factors for a knowledge management implementation have been identified in the literature. Based on the works of Gold et al. (2001) and Lee and Choi (2003), four KM enablers were found worth exploring namely, organizational culture, organizational leadership, employee/ people involvement and information technology infrastructure.

Leadership is one with the most dynamic effects during individual and organizational interaction. In other words, ability of management to execute collaborated effort depends on leadership capability. Lee & Chuang (2009), explain that the excellent leader not only inspires subordinate's potential to enhance efficiency but also meets their requirements in the process of achieving organizational goals. Fry (2003) explains leadership as use of leading strategy to offer inspiring motive and to enhance the staff's potential for growth and development. Understanding the effects of leadership on performance is important because leadership is viewed by some researchers as one of the key driving forces for improving a firm's performance. Effective leadership is seen as a potent source of management development and sustained competitive advantage for organizational performance improvement (Rowe, 2001). Transactional leadership helps organizations achieve their current objectives more efficiently by linking job performance to valued rewards and by ensuring that employees have the resources needed to get the job done (Zhu, Chew and Splenger, 2005). Visionary leaders create a strategic vision of some future state, communicate that vision, model the vision by acting consistently, and build commitment towards the vision (Von, 2000). Zhu (2005) suggest that visionary leadership will result in high levels of cohesion, commitment, trust, motivation, and hence performance in the new organizational environments. When organizations seek efficient ways to enable them perform well, a longstanding approach is to focus on the effects of leadership. Team leaders are believed to play a pivotal role in shaping collective norms, helping teams cope with their environments, and coordinating collective action.

The culture of an organization can be defined as the embodiment of its collective systems, beliefs, norms, ideologies, myths and rituals. They can motivate people and can become valuable source of efficiency and effectiveness (Sudarsanam, 2010). The central issue associated with organizational culture is its linkage with organizational performance (Denison and Fey, 2003). Kotter and Heskett (1992) found that organizational culture has a significant positive impact on a firm's long-term economic performance. They found that firms with cultures that emphasized all the key managerial constituencies (customers, stakeholders and employees) and leadership from

managers at all levels, outperformed firms that did not have those cultural traits by a huge margin.

The importance of culture to KM is outlined by (Lee & Choi, 2000) who state that organizational culture should have several components with regard to knowledge: people have positive orientation to knowledge, people are not inhibited in sharing knowledge and knowledge management project fits with the existing culture. This view is held by other researchers who state that a culture, which achieves a best fit with an organization's KM practices, is one where the employees do not feel any inhibition about sharing knowledge and it is also vital for an organization to develop an open and trusting culture. According to King (2008) organizational culture can influence KM as culture shapes assumptions about which knowledge is important, mediates the relationships between organizational and individual knowledge, creates a context for social interaction and shapes processes for the creation and adoption of new knowledge. According to researchers findings, collaboration, learning and trust are three major dimensions of organizational culture (DeTienne, 2004). Slater (2004) believes that collaboration involves having common goals, joint work and interdependence, parity or equality in relationships and voluntary collaboration. A collaboration environment provides opportunities for knowledgeable people to share knowledge openly and have successful knowledge management programs. Lee and Choi (2003) define collaboration as the degree to which individuals support and help each other in-group works. Collaboration decreases fear, increases freedom, encourages novel ideas and consequently increases risk taking. Collaboration is a basic issue in knowledge sharing and truly creates and transfers knowledge. Effective knowledge exchange and openness between organizational members are positively affected by having trust in the environment. When connections between individuals are high in trust, individuals are more willing to participate in trading knowledge and social collaborations. Lack of trust can be one of the obstacles to limit knowledge exchange between organizational members. Learning is the process of acquiring new knowledge by individuals who are capable and ready to practice that knowledge, this must be integrated with decision making. It was discussed that the more time and effort exerted while learning, the more the knowledge that is acquired. People ought to be encouraged to make inquiries for effective knowledge exchange and sharing. Learning in organizations can be expanding through training, practicing and mentoring programs to share experiences, since the traditional techniques may not be sufficient. Another important note is that learning must be a continuous process.

All members of the organizations share some common fundamental ideas or guiding concepts around which the KM is built. These values and common goals keep the employees working towards a common destination as a coherent team and are important to keep the team spirit alive. The organizations with weak values and common goals often find their employees following their own personal goals that may be different or even in conflict with those of the organization or their fellow colleagues (Martins and Terblanche, 2003).

Scholars have argued that employee involvement contributes to organizational efficiency because it has the capacity to enhance the quality of decision making by increasing the inputs and promotes commitment to the outcomes of the decision making process in the workplace (Miller & Monge, 2006). According to Spreitzer et al. (2007), workers who have greater choice concerning how to do their own work have been found to have high job satisfaction and consequently high performance. A significant relationship between frequency of employee's consultation and organization commitment has also been established (Noah, 2008). A modern forward-looking business does not keep its employees in the dark about vital decisions affecting them. It trusts them and involves them in decision making at all levels. A more open and collaborative framework will exploit the talents of all employees (Hewitt, 2002). Employees must be involved if they are to understand the need for creativity and if they are to be committed to changing their behavior at work, in new and improved ways (Singh, 2009; Kingir and Mesci, 2010). In order to increase the workers commitment and humanize the workplace with the intention of improving work performance and good citizenship behavior, managers need to permit a high degree of employee involvement (Cohen et al., 2009). Adopting a proper HRM strategy and practices significantly affect organizational members' attitude, belief and value systems thus facilitating employees, absorption, transfer, sharing, and creation of knowledge (Shih & Chiang, 2005). It is important to ensure the staff members recognize the value of KM (Bishop et al., 2008).

Knowledge, skills and competence can be acquired by the organization through recruiting people with desirable skills in particular those with T-shaped skills (Leonard, 2000). T-shaped skills are both deep (the vertical part of the "T") and broad (the horizontal part of the "T"); that is, the possessors can explore particular knowledge domains and their various applications in particular products (Leonard, 2000). Employees that possess T-shaped skills not only have a deep knowledge of a particular discipline but also how their discipline interacts with other disciplines. Employees with T-shaped skills are extremely valuable for creating knowledge because they can integrate diverse knowledge assets Leonard (1995).

Organizations are made up of humans and it's the people who make the real difference to the success of the organization in the increasingly knowledge-based society. The importance of human resources has thus got the central position in the performance of the organization, away from the traditional model of capital and land. Leading organizations like Microsoft, put extraordinary emphasis on hiring the best staff, providing them with rigorous training and mentoring support, and pushing their staff to limits in achieving professional excellence, and this forms the basis of these organizations' strategy and competitive advantage over their competitors. It is also important for the organization to instill confidence among the employees about their future in the organization and future career growth as an incentive for hard work (Purcell and Boxal, 2003).

Investments in information technology have grown continuously over the years to a point that IT has become the largest item of capital expenditure in most organizations. According to Agarwal

and Lucas (2005), ICT is one of the most important business driving forces of the 21st century. A competitive business environment brings forth new technologies to be employed or improving organizational performance level of organizations resources; this leads to improved customer service hence customer satisfaction. Measuring the organizational performance causes organizations to evaluate the factors that effect on value added such as IT, innovation etc (NPC Organizational Performance Report, 2003). Current business activity is characterized by intense international, rapid product innovation, increased use of automation and significant organizational changes in response to new manufacturing and information technologies (Dirks & Wolfl, 2005).

According to Kodakanchiet al., (2006), IT has revolutionalized the global economy with changes in different economic activities. Increasingly, IT is becoming pivotal for economic growth. By enabling “virtual mobility”, IT provides the means to undertake many activities that have so far needed physical transport (Lake, 2004). According to RBV theory, firms hold heterogeneous resource portfolios and that this resource heterogeneity is responsible for observed variability in financial returns across firms. According to this perspective, organizations cannot expect IT alone to produce sustainable performance and / competitive advantage. Rather, it is how organizations use their IT resources to leverage and exploit pre- existing complementary resources that enables or inhibits superior performance and competitive advantage. Information Technology is a powerful enabler of KM success. It is generally accepted that databases, intranets, knowledge platforms and networks are the main blocks that support KM. IT facilitates quick search, access of information, cooperation and communication between organizational members (Yeh, Lai, & Ho, 2006) There is an extensive collection of information technologies such as data warehousing, intranet, internet which can be implemented and integrated in an organization’s technological platform and work together as knowledge management system.

RESEARCH METHODOLOGY

Research Design

The research design for this study was descriptive research design. Kothari (2004) asserts that the research design is applicable when used by researchers to discover causes even when they cannot control the variables. This was the case for the research. Wiersma (1985) also pointed out that the descriptive design allows researchers to establish the status quo as well as gather facts rather than manipulate variables. The research design was ideal in helping to establish an accurate profile of KM enablers in KenGen and report findings as they were without changing the environment. Saunders et al (2009) citing Robinsons (2002) holds the view that the object of descriptive research is to portray an accurate profile of persons, events or situations. The research design was therefore appropriate because the researcher was interested in establishing the facts as they were with regard to the influence of KM enablers on performance of KenGen’s Geothermal Development Project.

Target Population

The target population comprised of staffs in the seven departments that make up the Geothermal Development Division. These departments were drilling, civil, steam field, reservoir, geosciences, power stations and administration. According to GD Registry Office (2015) the total target population was 102 personnel drawn from all the departments.

Sample Size and Sampling Technique

A sample size of 81 personnel out of 102 personnel will be used to carry out the research. The sample size was determined using Yamane's simplified formula Israel (2012), which is as follows:

$$n = \frac{N}{(1 + N(e)^2)}$$

$$e^2 = 0.05^2$$

Where: **n**- Is the desired sample size; **e**- Is the confidence level; **N**- Is the total population under study

The sample size was allocated across the departments using sampling proportional to size. In the selection of category sample size, simple random sampling technique was applied. Simple random sampling helps avoid bias as units of the population are given an equal chance of being selected Kerlinger(2002).

Data Collection

The study used both primary and secondary data. The primary data collection was carried out using structured questionnaires that were administered directly to the respondents. (Best & Khan, 1991) notes that questionnaires enable the person administering them to explain the purpose of the study and give meaning of the items that may not be clear to the respondents. This method can reach large numbers of subjects who know how to read and write independently Pascale(1995). Items in the questionnaire comprised structured questions. Data was collected from primary sources for example age of respondents, gender, designation, experience and level of education of employee in the organization. Data on organization performance was obtained from secondary sources that are KenGen documents and Website documentary analysis. Examples of secondary data include KenGen market share, profitability and employee retention status. The study exercised care and control to ensure a high percentage of questionnaires issued to the respondents were received back and to achieve this, the researcher maintained a register for follow up of questionnaires which were issued and which were received back.

Reliability is defined as a measure of the degree to which a research instrument yields consistent results after repeated trials. Before actual data collection, piloting of the questionnaire was

carried out. Pilot testing is used to test design and instruments prior to carrying out research (Mitchell, 2006). It also helps to show the adequacy of whether research instruments and research protocol are realistic and workable (Mugenda&Mugenda, 2003). It helps to ascertain the validity (extent to which data produced truly measures what it purports to measure and reliability (consistency of data collected) according to Yin (2004). It also helps to establish if the sampling frame and techniques are effective and to identify logistical problems that might occur in the course of a study. According to Sekaran (2006), the size of the pilot sample varies according to time, cost and practicability.

The pilotquestionnaires were administered to 10 employees of Geothermal Development Company in Menengai, Nakuru who did not participate in the actual study. According to Connelly, (2008) 10% pilot sample size was sufficient to enable the researcher to test the reliability of the instrument. The data collected from the pilot study was used to compute the reliability of the instrument. Cronbach's coefficient alpha was computed to determine consistency of the research instrument. The instrument was considered to be reliable if it had a reliability coefficient of 0.80 and above. According to Fraenkel&Wallen, (2000) this figure is considered desirable for consistency levels. The Cronbach's coefficient alpha was 0.942 which indicated that the instrument was reliable.

Cozby (1993) defines validity as the degree to which a test measures what it purports to measure. According to Chave (1996) content validity of an instrument is improved through expert judgment. The researcher sought the advice of KM expert to help in validating the content of each item and what it was expected to measure. The researcher also sought the advice of the supervisor as well as undertaking concurrent validity with previously used and tested instruments related to KM.

Data Analysis and Presentation

Data collected was analyzed through qualitative and quantitative approaches so as to gather as much information as possible regarding knowledge management enablers in the company. Qualitative data was analyzed using thematic content analysis and presented as percentages and frequencies. Quantitative data was analyzed using descriptive statistics such as mean, standard deviation and variance. Coded data was fed into the statistical package for social sciences (SPSS) version 21. Results were presented in the form of pie charts, bar graphs and frequency tables from which inferences and conclusions were drawn. Multiple regression analysis was used to investigate on the relationship between the variables and organizational performance. Multiple regression analysis was used because it attempts to model the relationship between two or more explanatory variables and a response variable by fitting a linear equation to observed data. A multiple regression analysis model was used in determining the level of influence the independent variables have on dependent variable as shown;

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$$

Where: Y = Organizational Performance of KenGen(Dependent Variable); β_0 = Constant Term; $\beta_1, \beta_2, \beta_3, \beta_4$ = Beta coefficients; X_1 = Leadership; X_2 = Organizational culture; X_3 = Employee involvement; X_4 = Information Technology; e = Error Term

Karl Pearson Correlation and Chi- Square test were also used to determine the influence of the independent variables on the dependent variable. A correlation coefficient above -0.5 was used to indicate a strong negative correlation, while above 0.5 was used to indicate a strong positive correlation. A correlation coefficient above -0.3 but below -0.5 was used to indicate a moderate negative correlation, a correlation below -0.3 was used to indicate a weak negative correlation. A correlation below 0.3 indicates a weak positive correlation while a correlation above 0.3 but below 0.5 was used to indicate moderate positive correlation. The Chi- square test involves comparing the probability value (P-value) to the significance level and rejecting the null hypothesis when the P value is less than the significance level.

RESEARCH RESULTS

Correlation Analysis

To quantify the strength and direction of the relationship between the variables, the study used Karl Pearson's coefficient of correlation (Lewin, 2005). The Pearson correlation coefficient can measure the strength of a linear association between variables and is denoted by R. Pearson correlation was used to measure the degree of association between variables under consideration i.e. independent variables and the dependent variables. The Pearson correlation coefficient, R, can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association, that is, as the value of one variable increases so does the value of the other variable. A value less than 0 indicates a negative association, that is, as the value of one variable increases the value of the other variable decreases. Negative values indicates negative correlation and positive values indicates positive correlation where Pearson coefficient <0.3 indicates weak correlation, Pearson coefficient $>0.3 < 0.5$ indicates moderate correlation and Pearson coefficient >0.5 indicates strong correlation. According to Kumar (2005) P values of less than 0.05 (predetermined significance level) implies that the results are statistically meaningful.

The first objective of this research was to establish the influence of leadership support on performance of KenGen's Geothermal Development Project in Naivasha, Kenya. The correlation between KenGen performance and leadership commitment to the success of KenGen is 0.529 which is a strong positive correlation. The P value of 0.000 is less than 0.05 indicating that the correlation coefficient is significant. The coefficient of determination is 0.2798 or 27.98% which indicate that leadership causes 27.98% variation in performance as shown in Table 1.

Table 1: Correlation Coefficient between Leadership and KenGen Performance

Statements	Correlation Coefficient, R	P Value	Coefficient of Determination, R^2
Our leaders always support the knowledge creation and sharing initiatives in the company.	0.130	0.335	0.0169
Our leaders provide necessary support and resources for knowledge creation and sharing initiatives.	0.119	0.378	0.01416
Our leaders are keen to see employee involvement in knowledge creation and sharing initiatives.	0.149	0.270	0.0222
Our leaders share knowledge orally at meetings or informal gatherings.	0.187	0.163	0.0349
Our leaders share their knowledge through formal procedures (e.g. project reports, organizational procedures and instructions, reports and company publications).	0.144	0.284	0.0207
Our leaders have the right skills and competencies to guide employees in effective knowledge management	0.456	0.000	0.2079
Our leaders are committed to the success of our company and all their efforts are geared towards achieving that success.	0.529	0.000	0.2798

The Chi square value of 0.000 is less than 0.05 indicating that leadership has significant influence on KenGen performance. The correlation between KenGen performance and leadership having right skills and competence to guide employees in effective knowledge management is 0.456 which is a moderate positive correlation. The P value of 0.000 is less than 0.05 indicating that the correlation coefficient is significant. The coefficient of determination is 0.2079 or 20.79% which indicate that leadership competence causes 20.79% variation in performance as shown in Table 1. The Chi square value of 0.000 is less than 0.05 indicating that leadership has significant influence on KenGen performance as shown in Table 1. The other statements regarding leadership did not have significant correlation with performance of KenGen. This is an area which the management of KenGen should look into to ensure that its leaders are in the forefront with regard to encouraging knowledge sharing among employees and providing necessary support required to ensure employee involvement with regard to knowledge creation and sharing initiatives. The leaders should also share their knowledge with employees through formal and informal forums. The researcher was able to get information from secondary sources indicating that KenGen has come up with knowledge sharing forums called Communities of Practice and Innovation (COPI) which have been launched in all business areas of KenGen. Each area forum has a sponsoring director who is responsible of offering top

management support, ensuring active participation and escalating to the top management knowledge initiatives that require authority from management or budgetary allocation. In these forums employees across all cadres are given an opportunity to share with the rest his/ her knowledge initiative which can add value to the company through enhancing efficiency and effectiveness. The forums are held on quarterly basis so as to maximize and leverage on the knowledge that is in the minds of the employees. This is in line with the Resource Based View theory where organizations consider intangible resources as a strategic resource for competitive advantage. It is also in line with the organizational learning theory where learning is considered a key process that contributes to successful innovation. This learning can be through formal or informal forums.

Table 2: Correlation Coefficient between Organizational Culture and KenGen Performance

Statements	Correlation Coefficient,R	P Value	Coefficient of Determination, R^2
In our organization, there is a general inclination to cooperation and exchange of experience among employees.	0.255	0.055	0.0650
The general management/leadership of our organization promotes cooperation and exchange of experience among employees.	0.254	0.56	0.0645
Our employees generally trust each other; in their work they can easily rely on knowledge and skills of their co-workers.	0.252	0.058	0.0635
The general management/leadership motivates employees to engage in formal education systems to achieve a higher level of education.	0.298	0.024	0.0888
The general management/leadership motivates employees to engage in informal education systems (e.g. seminars, courses).	0.267	0.045	0.0713
I believe colleagues in my organization will act towards the best interest of the organizational goals.	0.367	0.005	0.1347
Colleagues in my organization are honest and reliable.	0.357	0.006	0.1274
I am satisfied by the degree of collaboration among colleagues in my organization.	0.337	0.010	0.1136
Colleagues in my organization are very supportive.	0.487	0.000	0.2372

The second objective of this research was to determine the effect of organizational culture on performance of KenGen’s Geothermal Development Project in Naivasha, Kenya. The correlation between KenGen performance and organizational culture (employee support) is 0.487 which is a

moderate positive correlation. The P value 0.000 is less than 0.05, indicating that the correlation coefficient is significant. The coefficient of determination is 0.2372 or 23.72% which indicates that employee support accounts for 23.72% of KenGen performance as shown in Table 2. The Chi square value of 0.000 is less than 0.05 indicating organizational culture has a significant influence on KenGen performance. The correlation between KenGen performance and organizational culture of acting towards best interest of the organization is 0.367 which is a moderate positive correlation. The P value of 0.005 is less than 0.05 indicating that the correlation coefficient is significant. The coefficient of determination is 0.1347 or 13.47% which indicates that the culture of acting in the best interest of the company accounts for 13.47% of KenGen performance as shown in Table 2. The correlation between KenGen performance and organizational culture of collaboration is 0.337 which is a moderate positive correlation. The P value of 0.010 is less than 0.05 indicating that the correlation coefficient is significant. The coefficient of determination is 0.1136 or 11.36% which indicates that the degree of collaboration among employees accounts for 11.36% of KenGen performance. The correlation between KenGen performance and organizational culture of honesty and being reliable is 0.357 which is a moderate positive correlation. The P value of 0.006 is less than 0.05 indicating that the correlation coefficient is significant. The coefficient of determination is 0.1274 or 12.74% which indicates that the culture of employee honesty and reliability causes 12.74% variation in performance. The correlation between KenGen performance and culture of formal learning is 0.298 which is a weak positive correlation. The P value of 0.024 is less than 0.05 thus indicating that the correlation coefficient is significant. The coefficient of determination is 0.0888 or 8.88%. This indicates that the culture of formal learning causes 8.88% variation in performance. Other statements on organizational culture do not have significant correlation as their P values are more than 0.05 as shown in Table 2.

The management of KenGen should encourage the culture of cooperation and sharing of knowledge among employees. This will enable the company to realize the full benefits of knowledge that is embedded in the minds of its employees. The researcher was able to find out from secondary data sources that the management has appointed COPI Forum champions in every business area. The role of the champions is to create awareness among employees on the need to embrace the culture of being innovative in the work place, sharing innovative ideas with others and following up on further action to be done on an innovative initiative with COPI Forum sponsoring director. This is aimed at ensuring that the company embraces the culture of knowledge sharing. The company has also gone ahead to integrate a week long “Good to Great” Innovation conference in its annual calendar of events. This is a culmination of COPI forum events in all areas where employees are requested to submit their papers touching on a particular theme as guided by the secretariat. During the conference, the participants share with their colleagues on what they think can be done to improve on an existing business process or a new business idea that the company can venture into for improved returns. The engagement during the conference involves questions and answers from participants aimed at enriching the end product. During the conference, a panel of judges listens and award marks so as to guide the

company when rewarding the participants. The company also invites distinguished guests who have excelled in various business fields and business leaders from other organizations to share their insight during plenary sessions on knowledge management and innovation.

Table 3: Correlation Coefficient between Information Technology and KenGen Performance

Statements	Correlation Coefficient,R	P Value	Coefficient of Determination, R^2
In our organization, IT tools are used to store data on implemented projects, tasks and activities.	0.383	0.003	0.1467
In our organization, IT tools are used to store information on suppliers and customers.	0.381	0.003	0.1452
In our organization, we use IT tools to support collaborative work (e.g. calendars, video conferencing systems, communication tools).	0.384	0.003	0.1475
IT tools in our organization are simple to use and have a user friendly interface.	0.394	0.002	0.1552
IT tools in our organization enable effective work processes through networking.	0.548	0.000	0.3003
In our organization we see the advantage of using IT tools due to the fact that it prevents the loss of knowledge.	0.503	0.000	0.2530
In our company, e-library services are available for effective knowledge storing and sharing.	0.448	0.000	0.2007
The materials in our IT tools are always updated and relevant to work processes	0.546	0.000	0.2981

The third objective of this research was to evaluate the influence of Information Technology tools on performance of KenGen’s Geothermal Development Project in Naivasha, Kenya. The correlation between KenGen performance and information technology tools for networking is 0.548 which is a strong positive correlation. The P value of 0.000 is less than 0.05 indicating that the correlation coefficient is significant. The coefficient of determination is 0.3003 or 30.03% which indicates that information technology tools cause’s 30.03% variation in performance as shown in Table 3. The Chi square value of 0.000 is less than 0.05 indicating that information technology has a significant influence on KenGen performance. The correlation between performance and updated materials in the IT tools is 0.546 which is a strong positive correlation. The P value of 0.000 is less than 0.05 indicating that correlation coefficient is significant. The coefficient of determination is 0.2981 or 29.81% which indicates that information technology

tools cause's 29.81% variation in the performance as shown in Table 3. The Chi square value of 0.004 is less than 0.05 indicating that information technology has a significant influence on KenGen performance. The use of IT tools to prevent loss of knowledge had a strong positive correlation of 0.503 and a P value of 0.000 which is less than 0.05 indicating that the correlation coefficient is significant. The coefficient of determination was 0.2530 or 25.30%. This indicates that use of IT tools to prevent loss of knowledge accounts for 25.30% variation in performance as shown in Table 3. The Chi square value of 0.000 is less than 0.05 indicating that information technology has a significant influence on KenGen performance.

The use of e-library services for knowledge sharing had a correlation of 0.448 which is a moderate positive correlation with a coefficient of determination of 0.2007 or 20.07%. The use of simple and user friendly IT tools had a correlation of 0.394 which is a moderate positive correlation with a coefficient of determination of 0.1552 or 15.52%. The P value of 0.002 is less than 0.05 indicating that the correlation coefficient is significant. The use of IT tools for collaborative works had a correlation of 0.384 which is a moderate positive correlation with a coefficient of determination of 0.1475 or 14.75%. The P value of 0.003 is less than 0.05 indicating that the correlation coefficient is significant. The Chi square value of 0.001 is less than 0.05 indicating that information technology has a significant influence on KenGen performance.

The use of IT tools to store information on suppliers and customers and use of IT tools to store data on implemented projects had correlation of 0.381 and 0.383 which are moderate positive correlations and coefficients of determination of 0.1452 or 14.52% and 0.1467 or 14.67% respectively. The P value for both cases was 0.003 which is less than 0.05 indicating that the correlation coefficient is significant as shown in Table 3.

Information from secondary data indicated that KenGen has invested heavily on IT tools to enhance networking and quick flow of information for timely decision making. The company has an effective workflow system and is in the process of installing Enterprise Content Management (ECM) module in its IT infrastructure. The company is also in the process of engaging the services of content specialists to enhance the quality of data stored in the system. This will ensure that the content is updated and can be accessed easily by all employees using simple mobile applications anywhere and at any time for timely decision. The content officers will be accommodated in the revised establishment structure of the Knowledge Harvesting and Transfer department. The company has also engaged the services of an online vendor who will be availing online books and other relevant materials on a 24/7 basis. The vendor will ensure employees are able to access books and other relevant materials easily using their mobiles. KenGen also has online portals for knowledge sharing between various groups who may be faced by similar challenges in the workplace like the maintenance engineers, drilling crews, electricians, geologists and power station operations crew. They use these forums to share experiences and solutions to challenges they meet in their day to day work so that when another team is faced by a similar challenge, they will not start reinventing the solution but can easily buy the solution that was applied by the other team that faced that challenge before.

Table 4: Correlation Coefficient between Employee Involvement and KenGen Performance

Statements	Correlation Coefficient,R	P Value	Coefficient of Determination, R^2
Our staffs possess T-shaped skills (skills that are both highly specific and yet broad enough to allow them to ‘see the whole picture’ of their actions)	0.513	0.000	0.2632
Our staffs understand not only their own tasks but also others’ tasks	0.297	0.025	0.0882
Colleagues in my organization are knowledgeable and competent in their area.	0.332	0.012	0.1102
In our organization good performance is rewarded accordingly.	0.220	0.101	0.0484
In our organization innovative practices are rewarded accordingly.	0.372	0.004	0.1384
In our organization employees take performance management seriously.	0.278	0.036	0.07728
Our organization has effective HR policies regarding career growth and development.	0.151	0.262	0.0228
Employees in our organization consider their knowledge as an organizational asset and not their own source of strength.	0.245	0.067	0.0600

The fourth objective of this research was to examine the effect of employee involvement on performance of KenGen’s Geothermal Development Project in Naivasha, Kenya. The correlation between KenGen performance and employee involvement (T- shaped skills) is 0.513 which is a strong positive correlation. The P value of 0.000 is less than 0.05 indicating that the correlation coefficient is significant. The coefficient of determination is 0.2632 or 26.32% which indicates that employee with T- shaped skills cause’s 26.32% variation in performance in terms of employee empowerment as shown in Table 4. The Chi square value of 0.007 is less than 0.05 indicating that employee involvement has a significant influence on KenGen performance.

The correlation between KenGen performance and employee involvement through rewarding innovation is 0.372 which is a moderate positive correlation. The P value of 0.004 is less than 0.05 indicating that the correlation coefficient is significant. The coefficient of determination is 0.1384 or 13.84% which indicates that employee involvement through rewarding innovative ideas cause’s 13.84% variation in performance as shown in Table 4. The Chi square value of 0.024 is less than 0.05 indicating that employee involvement has a significant influence on KenGen performance. The correlation between KenGen performance and involvement of knowledgeable and competent employees is 0.332 which is a moderate positive correlation. The

P value of 0.012 is less than 0.05 indicating that the correlation coefficient is significant. The coefficient of determination is 0.1102 or 11.02% which indicates that involvement of knowledgeable and competent employees causes 11.02% variation in performance as shown in Table 4. The Chi square value of 0.001 is less than 0.05 indicating that employee involvement has a significant influence on KenGen performance.

The correlation between KenGen performance and employee involvement through performance management is 0.278 which is a weak positive correlation. The P value of 0.036 is less than 0.05 indicating that the correlation coefficient is significant. The coefficient of determination is 0.07728 or 7.728% which indicates that performance management causes 7.728% variations in performance as shown in Table 4. The correlation between KenGen performance and involvement of employees who understands others tasks is 0.297 which is a weak positive correlation. The P value of 0.025 is less than 0.05 indicating that the correlation coefficient is significant. The coefficient of determination is 0.0882 or 8.82% which indicates that their involvement causes 8.82% variations in performance as shown in Table 4. The Chi square value of 0.000 is less than 0.05 indicating that employee involvement has a significant influence on KenGen performance.

Three statements that did not have significant correlation with performance were rewarding of good performance that had a correlation of 0.220 and a P value of 0.101 and Chi square value of 0.111 which is more than 0.05, effective human resource policies that had a correlation of 0.151 and a P value of 0.262 and Chi square value of 0.837 which is more than 0.05 and KenGen employee considering their knowledge as organizational asset that had a correlation of 0.245 and a P value of 0.067 and Chi square value of 0.152 which is more than 0.05. The management of KenGen should focus on its human resource policies relating to performance management, rewarding and the companies' intellectual property policy to enhance performance through employee empowerment.

To enhance employee involvement in knowledge management, KenGen established the position of Chief Knowledge Officer (CKO) in the Knowledge Harvesting and Transfer department. One of his major role is to ensure come up with strategies that will ensure employees are fully involved in KM initiatives like the COPI forums. The department has developed a policy on knowledge harvesting and innovation which will help in streamlining all the knowledge initiatives in the company as well as coming up with a reward mechanism for the innovators. The company has also developed a comprehensive Intellectual Property Policy. This is to help in the protection of copyrights and patents for all innovative ideas emanating from the Good to Great conferences and COPI forums. This is to enable employees to have confidence when sharing their knowledge. The IP Policy also helps in guiding the process to be followed in protecting the knowledge shared in the company so as to realize its benefits in the long run.

KenGen top management also reviewed the promotion policy and allowed employees to move across divisions whenever vacancies arise provided they have the necessary qualifications and

experience. This is in recognition of having employees with T shaped skills in the company. The deployment of such employees saves the company a lot of money that would go to training of newly engaged staffs. KenGen also has forums where old and experienced employees in the mechanical and electrical departments come together with the newly engaged employees and share their knowledge on past challenges and how they overcame them. This is very vital because any major breakdown in the power station usually have serious consequences to the economy of the country. This involvement of the older workforce helps in instilling confidence to the new staffs and creates a friendly working relationship where they are free to seek for help when in doubt. This form of involvement saves a lot of money that could have otherwise been used to seek the services of service providers yet the company has qualified manpower with the necessary experience and working knowledge of the equipments and machines in the company.

Multiple Regression Analysis

According to Green & Salkind (2003) regression analysis is a statistics process of estimating the relationship between variables. Regression analysis helps in generating equation that describes the statistical relationship between one or more predictor variables to the response variable.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691	.477	.437	.526

Table 5 is a model fit which establish how fit the model equation fits the data. The coefficient of determination (Adjusted R^2) explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (KenGen Performance) that is explained by all the independent variables (leadership support, organizational culture, Information Technology and employee involvement).The adjusted R^2 was used to establish the predictive power of the study model and it was found to be 0.437 implying that 43.7% of the variations in performance of KenGen is explained by leadership support, organizational culture, Information Technology and employee involvement leaving 56.3% percent unexplained. Therefore, further studies should be done to establish the other factors (56.3%) affecting the performance of KenGen. The findings are in harmony with Serban and Luan (2011) findings who noted that effective knowledge management helps in change management, influencing business strategy, and a host of other high-value added activities that impact organizational performance.

Table 6: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.123	4	3.281	11.859	.000
	Residual	14.386	52	.277		
	Total	27.509	56			

The level of significance (p-value) of 0.000 was less than 0.05 indicates that the regression relationship was highly significant in predicting how leadership support, organizational culture, Information Technology and employee involvement affected organizational performance of KenGen. The F calculated at 5 percent level of significance was 11.859. Since F calculated (11.859) is greater than the F critical (value = 2.779), it thus shows that the overall model was significant as shown in Table 6.

Table 7: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.758	.433		4.059	.000
Leadership	.275	.086	.355	3.189	.002
Organizational Culture	.219	.086	.288	2.547	.014
Information Technology	.207	.082	.285	2.526	.015
Employee Involvement	.020	.098	.025	.205	.838

The general form of the equation to predict organizational performance of KenGen from leadership, organizational culture, Information Technology and employee involvement is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where;

Y = Organizational Performance of KenGen (Dependent Variable)

β_0 = Constant Term

$\beta_1, \beta_2, \beta_3, \beta_4$ = Beta coefficients

X_1 = Leadership

X_2 = Organizational culture

X_3 = Employee involvement

X_4 = Information Technology

e = Error Term

The established model for the study as shown in Table 7 was:

$$Y = 1.758 + 0.275 X_1 + 0.219 X_2 + 0.207 X_3 + 0.020 X_4$$

The regression equation has established that when all independent variables (leadership, organizational culture, Information Technology and employee involvement) are kept constant at zero, performance of KenGen will be at 1.758. The findings presented also show that taking all other independent variables at zero, a unit increase in the leadership support would lead to a

0.275 increase in the scores of performance of KenGen and a unit increase in the scores of organizational culture would lead to a 0.219 increase in the scores of performance of KenGen. Further, the findings shows that a unit increases in the scores of Information Technology would lead to a 0.207 increase in the scores of performance of KenGen. The study also found that a unit increase in the scores of employee involvement would lead to a 0.020 increase in the scores of performance of KenGen.

Overall, leadership had the greatest effect on the organizational performance of KenGen, followed by organizational culture, then Information Technology while employee involvement had the least effect on the performance of KenGen. All the variables except employee involvement were significant ($p < 0.05$) with leadership support ($p = 0.002$) and organizational culture ($p = 0.014$) being the most significant followed by Information Technology ($p = 0.015$) while employee involvement was the least significant ($p = 0.838$). KenGen should focus more on its employees especially on effective human resource policies and performance reward.

Inference of Correlation

The research study found that all the independent variables had a positive correlation to the dependent variable. Leadership as an enabler is positively related to KenGen performance and has a statistical significant coefficient as shown by a t-ratio of 3.189. Leadership is one of the key driving forces for improving firm performance. Leaders, as the key decision-makers, determine the acquisition, development, and deployment of organizational resources, the conversion of these resources into valuable products and services, and the delivery of value to organizational stakeholders. Thus, they are potent sources of managerial rents and hence sustained competitive advantage (Avolio 1999 Lado 1992 and Rowe 2001). This finding is in harmony with findings by Avoli (2003) that transformational leadership has a positive impact on follower performance and firm outcomes.

Organizational culture as an enabler is positively related to KenGen performance and has a statistical significant coefficient as shown by a t-ratio of 2.547, which is also supported by a positive sign coefficient of 0.219. According to Adenfelt and Lagerstrom (2005) in their research on knowledge management enablers in transnational projects, they found that organizational culture is built on the establishment of an appropriate culture that encourages individuals to create and share knowledge. This means with a favorable cultural practice in place, it is possible to practice knowledge management which would in turn promote organizational performance.

Employee involvement in an organization as a knowledge management enabler is positively related to KenGen performance. This relationship has a statistical significant coefficient as indicated by a t-ratio of 0.205. Given that the success of knowledge management depends upon people, together with their willingness and ability to share and utilize knowledge (Cong & Pandya, 2003), it means that organizations should seek to hire employees with desirable skills (Leonard-Barton, 1995) as they are key in creating and sharing of knowledge which contributes

to the management and successful completion of projects in organizations (Adenfelt & Lagerstrom, 2006).

Finally, information technology is positively related to KenGen performance. This relationship has a statistically significant coefficient with a t-ratio of 2.526. This is because information technology can provide instant, integrated, and a smarter interface platform that can make knowledge management much easier to employ (Tiwana, 2000). As a result, information technology will enable rapid creation, gathering, storing, retrieving, and availing of the right information, in supporting collaboration and communication between organization's employees (Huysman & Wuft, 2006) such that management of business activities will be made effective and efficient due to timely decision making process resulting to their successful completion.

CONCLUSIONS

The study first concludes that leadership support, organizational culture, information technology and employee involvement are knowledge management enablers that have significant effect on the performance of organizations. Through the case study and the past-published papers the study found out that for the organizational culture enabler, the important part is the forming of a culture of sharing and trust but needs to be supplemented by information technology. For the employee involvement enabler, other than the training and empowerment programs, the human resource policies and the performance reward for the employees are also key factors that should be emphasized. As for the information technology enabler, other than networking, the speedy search of updated knowledge for its re-use is becoming more and more important thus user friendly tools should be emphasized. Secondly the study also concludes that all the knowledge management enablers examined in this study have a strong influence on the performance of KenGen. However leadership support remains as the most vital knowledge management enabler of organizational performance. Organizational culture is also a very critical knowledge management enabler in the performance of the organization. Thus, building and supporting an organizational culture which rewards and encourages employees for seeking, sharing and creating knowledge attributes will most probably lead to the success in achieving organization objectives. This study reaches the same conclusion as previous studies regarding leadership, organizational culture, employee involvement, and the information technology enablers. This verifies the academic theories with real practice. The study therefore confirms that a number of knowledge management enablers are instrumental in influencing the performance of an organization.

RECOMMENDATIONS

The study makes a number of recommendations. The study recommends that for organizations in the energy sector to improve their performance and have a competitive advantage over their competitors, knowledge management and its enablers are important factors to consider. Therefore, knowledge management enablers such as leadership, organizational culture, employee involvement and IT infrastructure need to be considered for improvements in

organizational performance to be achieved. The study recommends that KenGen should focus on ways of improving the conditions of these knowledge management enablers in the organization especially on employee involvement. Such endeavors will lead to better organizational performance in terms of employee productivity, timely decision making as well as meeting shareholders expectations of value creation. The study also recommends that policy makers in public management need to understand the knowledge management enablers that can enhance organizational performance and institute policies that will enhance better knowledge management practices in these organizations as the world is going to the knowledge based economy. This will give these organizations a competitive advantage in the competitive environment they are operating in.

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