

Knowledge Management Practices in the Institutions of Higher Learning in Kenya, Issues and Opportunities a Case Study of University of Eldoret

Lydia Lelon

Email: jebetlelon@gmail.com

Abstract

Today we live in a global world where technology is seen as the blood of every livelihood. Innovations are invented every day. Information or knowledge needs to be accessed and utilized. Effects of knowledge transfer and diffusion needs to be felt in every aspect of research and development in the institutions of higher learning in Kenya. Universities spend millions of money in creating Knowledge either out of their daily operations or academic programs. The knowledge produced is stored and disseminated in digital or printed format. Very few of this knowledge find their way to be published into journal articles or shared among peers. This has created challenge to the effective -utilization of this explicit knowledge to enhance performance of local universities and gain competitive advantage for better rankings. The objective of this study was to establish the level of practice among the academic staff at the University of Eldoret (UoE) and determine factors that affect knowledge management (KM) practices at individual, school and university level. All the eight schools and the library were sampled for the study and the response rate was 85 % which was a positive response. The study adopted a descriptive research design interview schedules were administered to some members of management, administrative staff and Information service providers, whereas postgraduate students, faculty staff and researchers were given questionnaires. The study found out that knowledge per se was not part of these universities core functions and neither had it been formally introduced and any understanding of KM as a term was from literacy sources. Despite this fact KM practices were rated as good (62.3%) and very good (10.7%) among researchers and faculty staff. The library staff agreed to have had means of identifying and capturing knowledge. These practices were however more for information management than KM. Lack of effective knowledge management practices influenced the state of KM at UoE. The study recommended development of effective knowledge management culture, systems and Info-culture for competitive advantage

Key Words: Knowledge Management Practices, Knowledge Management Systems, Innovation

Introduction

Knowledge has become a very valuable resource for competitive advantage and many organizations have positively impressed knowledge management practice for achieving success in the current information age (Mohayidin, Azirawani, Kamaruddin, & Margono, 2007). Although the concept of knowledge management sounds foreign in the academic environment, many conferences and seminars at national and International level are in one way or another involved in knowledge creation and dissemination. Many institutions of higher learning in Kenya are actively participating in KM related activities especially in doing research and this has made the concept popular in Education field. The popularity has arisen due to the need to disclose the intellectual power available in institutions for sharing experiences. This has great potential and should have equal and even greater significance for education sector than in the business environment. All knowledge generating organizations like industries, research institutions, colleges and universities are in search of new concepts in their subject of interest and also contribute to knowledge through various means. They are considered as “Knowledge Houses” where knowledge flows from teachers, lecturers to students and new knowledge is created (Arntzen Bechina, 2007). The information generated is covered in different forms and sources which includes; books, journal articles, thesis or dissertations, technical reports, patents, standards and different scholarly communications. Every academic institution contributes to knowledge, the generated information and knowledge has not been compiled, centralized and disseminated among the society for further growth. However, even with the new technologies the free flow and sharing of knowledge among academic staff and students has not been enabled. Many a times the generated information or knowledge is not known to any one and remains as grey literature, although it could have been useful if proper recoding is maintained in the institution.

In Kenya the gale of innovation and development is pegged in the role of institutions of higher learning as contributors to wealth creation and economic development in academic research. The research output is the key knowledge of public institutions in Kenya that has to be properly stored, organized, disseminated and shared to the public. However, without proper knowledge management structures and systems, the created knowledge will go to waste. This has denied most public institutions in Kenya like the University of Eldoret the opportunity to compete globally and gain competitive advantage and better rankings globally.

As universities today thrive to stay relevant in a knowledge society characterized by the emergence of new knowledge markets and the entrance of new market players, knowledge management has become a vital competitive weapon. Expertise exists in people, and much of this kind of knowledge is tacit rather than explicit, which makes it difficult to be shared. Most basic, knowledge sharing is simply about transferring the dispersed know-how of organizational members more effectively. However, a great deal of knowledge sharing is entirely uncoordinated in most institutions of higher learning in Kenya including the University of Eldoret. Any sharing of information and knowledge has been on an informal basis and usually based on conversation. Although knowledge has always been present in the organization, and to some extent shared, this

has been very much on an ad hoc basis. Hence limiting the competitive advantage of learning institutions resulting to failure in achieving synergy to integrate people, processes and technology.

In light of these challenges the paper was conceived with the aim of establishing issues and opportunities to effective knowledge management practices at the University of Eldoret with the main objective of recommending effective ways of sharing knowledge in public Universities in Kenya for gaining competitive advantage.

The objectives of the study were to establish the extent of knowledge management practices at the University of Eldoret guided by key questions such as: does the University have a knowledge management culture? policy guiding knowledge creation and management? How knowledge management practices are perceived and valued? and whether there are inhibitors to effective knowledge management practices at the University?

The study assumed that; Knowledge at the University of Eldoret is developed and disseminated widely throughout the institution as a source of value creation. While acknowledging that the culture of creativity must be nurtured and shared through teaching and learning for research to become much more “endogenised” and integrated into the economic cycle of innovation and growth.

Review of related literature to support the study focused on knowledge management as a concept and evaluated the definition of knowledge management (KM) from Chingosho, n.d)), that referred KM as the “identification, capture, organization, optimization, and leveraging of Knowledge and Knowledge Workers toward achieving the important ends of the organization”. Other definitions linked to business corporate was that of (Hicks, Dattero, & Galup (2006) who defined KM as way to achieve a breakthrough in business performance through the synergy of people, processes, and technology while focusing on change management, uncertainty, and complexity. Liew (2007) defined KM as the creation, sharing and application of knowledge to create and or sustain organizational value and competitive advantage and formed the basis of this research study. Although others McElroy (2003) have categorized KM according to generations; first and second generations, the first dwell on knowledge sharing while the later focus on knowledge creation and how to satisfy organization needs thus stimulating institutions of higher learning for competitive advantage.

In the areas of knowledge management practices, it is the creation, acquisition, storage and dissemination of knowledge, where generation involves the creation of new knowledge in an institution. Earl (2001) in a case study of Canada, he identified eighteen; Knowledge Management Practices (KMP) which were clustered into six categories; leadership, knowledge capture and acquisition, training and mentoring, policies and strategies, communications and incentives.

Earl’s definition gave the ground for establishing knowledge management practices in public universities in Kenya. Here leadership in Knowledge management practices directed the responsibility to managers and executives and was said to be the explicit criteria for assessing worker performance.

Ordinarily, Universities capture and use knowledge obtained from other sources such as competitors, clients and suppliers and from public research institutions including universities and government laboratories. It is through the external sources that the public institutions can allocate resources to detect and obtain external knowledge and communicate it in the institution and encourage workers to participate in project teams with external experts. This can be achieved by encouraging experienced workers to transfer their knowledge to new or less experienced workers and provide informal training related to knowledge management. They need also to encourage and support workers to continue their education and update their skills. Through partnerships or strategic alliances universities can acquire knowledge and policies or programs intended to improve worker retention. This includes value system or culture intended to promote knowledge sharing and written knowledge management policy or strategy

Other areas that support knowledge management practices in institutions of higher learning was said to be through their core functions, `` to create and disseminate knowledge through teaching and research activities and their outreach programs'' (Mohayidin et al 2007). Thus using knowledge management techniques and technologies in universities is as vital as it is in the corporate sector. Nonaka, I., von Krogh, G. and Voelpel, S. (2006) asserted that universities are major players in the knowledge business and stand to benefit from knowledge management practices and solutions. Studies by Franklin & Steward (1998) on the universities mission statements confirmed related aims and objectives which are consistent with knowledge management principles. Through research there is the discovery, acquisition or creation of knowledge. In teaching the transmission or dissemination of knowledge is achieved. Allen (1988) & (Loh,et al 2003) emphasized proper knowledge audit and well-established knowledge culture in public Universities for effective KM practices. Senge (1990); Franklin& Steward (1998) affirmed universities to be well suited to the adoption of knowledge management practices as its environment favor's the exchange of ideas and knowledge sharing through conferences and publishing in journal articles. This is a feature that gives universities an edge over business entities.

Besides these concepts, literature supports that there are certain benefits of knowledge management practices in institutions of higher learning. These included dependence on modern technology for effective management which emphasis on sharing information resources and focusing on integrating various information resources. Bhatt (2001) said knowledge management benefits occur in two levels; Individual and organizational. At the individual level, employees derive opportunities to enhance skills and experience by working together and sharing other people's knowledge and learn from each other to improve personal performance leading to better career development. At the organizational level, KM was said to provides two major benefits for an organization: improve the organization's performance, efficiency of service delivery. Thus organizations that manage knowledge were found; to realize high staff turnover, better access to staff knowledge, make informed decisions and have limited or no duplication of work and greater innovation. (Earl, 2001) recognizes knowledge transfer as source of value creation and KM practices as strategic facilitators of competitive advantages in public universities in Kenya.

Malone, (2002) emphasized the relationships between KM practices and ICTs to provide increased returns and sophistication. Thus the role of ICT infrastructure is necessary to enhance knowledge access, transfer and facilitates knowledge sharing

Finally, studies have also showed that there are several challenges to achieving effective knowledge management practices in institutions of higher learning. Rowley (2000) advised on four key objectives that need to address; ‘‘creating and maintaining knowledge repositories; improving knowledge access; enhancing the knowledge environment, and valuing knowledge’ which are the access points to the institutionally generated data. However, not all universities are able to integrate their collection of knowledge and embedded into one knowledge repository or series of linked repositories. Thus it becomes difficult for universities to access knowledge created from other related universities either locally or internationally, even with well-established network-access to published knowledge sources across and within the academic community. (Loh, et al (2003) found security issues on networked information and access rights for different categories of staff, students and limited monetary awards to motivate lecturers and professors to generously contribute to knowledge creation. Others were lack of diversity and focus in knowledge learning across various disciplines and lack of KM policies (Rowley,2000) which limit universities to be at the leading edge in all areas of knowledge.

Research methodology

The study used a descriptive survey research design. The research was guided by the Grounded theory expounded by Glaser and Strauss (1967). Grounded theory technique as applied in this study aimed at generating descriptive and explanatory theories of Knowledge management practices. The study was mainly qualitative with some aspects of quantitative research techniques in the design of data collection instruments, data analysis, and in the presentation of research findings. The study adopted a case study approach which was particularly suitable in establishing the in-depth explanations of Knowledge management practices at the University of Eldoret.

The study focused on the management staff of the University of Eldoret, post-graduate students who were involved in knowledge creation and use. Also targeted were the staff involved in knowledge creation, processing, management and dissemination who were; the records managers, librarians and staff of the directorate of research and innovation. These groups formed the sample frame for the study. Different sampling techniques were used, which were in line with the study’s concern for seeking information regarding knowledge management practices. These were stratified, random sampling, and purposive sampling methods. These methods gave knowledge management practitioners in the University of Eldoret an equal chance of inclusion in the sample. The study utilized stratified random sampling method to ensure that different groups of the population were adequately represented in the sample. The first stage involved stratifying the management staff according to their levels of administration; faculty staff according to the eight schools they represent, second and third level respectively.

Then purposive sampling was used to include one staff from office of director research, the records manager and librarian only.

Data was collected through semi-structured interview with the University management, officer in-charge of registry and the Librarian. The interviews also incorporated documentation review. Structured questionnaires were also administered to 20 faculty members and 17 randomly selected post-graduate students. A reason for employing this approach was to ensure reliability, time effectiveness and mutual inclusiveness. A total of 33 questionnaires were returned which formed a response rate of 70% which was considered adequate proceeds for data analysis.

Since the study didn't involve a large amount of data, data analysis was done by simple frequency count and cross tabulation, comparing responses across demographic variables. The qualitative (open-ended) questions were analyzed separately, by identifying and grouping key responses into themes, after which related/associated themes were further grouped into variables for frequency count.

Results and Findings

The study sought to examine whether the institutions have knowledge management culture and policy and when the respondents were asked whether they have a knowledge management policy and culture in the University. Majority (57.7%) of the respondents said they did not have a policy or culture while 42.3% said they are not even aware of what knowledge management policy entails. Hence, despite the managers appreciating the strategic need for knowledge management, at the organizational apex, this urge was yet to be scripted into the organizational policy framework at the University of Eldoret

The results pointed out that the University of Eldoret is yet to establish knowledge management culture and policy and therefore there are no available guidelines for knowledge creation and use. Thus limiting them the opportunity to create and share the institutional knowledge.

Knowledge Management Practices and sources of Knowledge available

University of Eldoret capture and use knowledge obtained from other University sources which they collaborate with through exchange programs and in resource sharing, competitors, students and suppliers and from public research institutions such as Kenya Agricultural and Livestock Research Organization(KALRO) government laboratories, government reporting agencies, International and professional organizations. The University executives and management have dedicated resources to detect and obtain external knowledge and communicate it in the system and encourage workers to participate in project teams with external experts. This was revealed through the interview schedule with the University 's top management and the librarian when the study needed to know how they acquire knowledge for competitive advantage. Other sources of knowledge in this University includes; academic programs, research, conferences, workshops and seminars, Policies and Strategies and Communications in written

documents of good work practices or seminar reports. also Cronin, B. (2000) cited information and communication technologies (ICTs) such as the internet and web-portals as sources of knowledge which can be exploited by the institution. However, sharing of their experiences globally was still a challenge; according to the analysis from the questionnaires administered to the lecturers and post-graduate students, 73% of respondents indicated that once a research is completed their reports are deposited in their departments for awarding marks and to the library for future reference by colleagues or by other researchers and students but not for external peer review or reporting. Twenty-seven percent of the respondents indicated that they publish their reports in international journals for purposes of peer review and sharing of research outputs. But when they were asked about what motivates them to write, 67% said that it was a requirement for completion of a degree program while 23% write as a condition to rise to the next promotion level while a marginal 7% were motivated to write in order to share knowledge and ideas.

Perception and Value of Knowledge Management Practices

The study asked this question in trying to find out whether the respondents were knowledgeable about the possible reasons of apply knowledge management practices in the University of Eldoret. Respondents (69.6%) said that the main reason for applying knowledge management was for promoting the sharing or transferring of knowledge with members of the University community such as Management, lecturers and students. In addition, 56.5% of the respondents were positive about the importance to identify and protecting strategic knowledge present in the University. This supports Lee & Choo (2000) view which pointed out that “the knowledge and experiences of the organization’s staff are the intellectual assets of any organization and should be valued and shared” to determine the success of any institution on their ability to utilize information and knowledge within. These sentiments were also supported by the findings of this study which suggested the University of Eldoret is optimistic to safeguard the knowledge of the institution for competitive advantage. However, they yet to do knowledge audit to spearhead the way for development of knowledge culture. The reason being respondents couldn’t identify a university culture as a source of knowledge when they were asked to rate their awareness of the university culture in knowledge capturing and sharing majority (78%) of them indicated that they are not aware and just 22% mentioned they are slightly aware. This gave an indication that knowledge culture is yet to be developed in the institution.

Skills Needed for Knowledge Management

The study was trying to find out the skills the university staff needed in order to effectively manage the valuable knowledge of the University. Most critical and important skills that were recommended according to 60.5% of the respondents were for organizing knowledge resources on Websites and Portals. Understanding of information and knowledge for competitive advantage in the university was represented by 40.5% of the respondents. Other skills scored highly 70% of the respondents suggested the skills to map internal and external knowledge and how to understand the universities information flow. The results showed that the University of

Eldoret is in need of skills and competencies that could help them engage in knowledge management practices. Bhatt, (2001) recommended that the success of any academic institution depends on the capabilities and skills of its staff to better serve the needs of the university community more efficiently and effectively. Thus staff and management need to constantly update their skills and competencies which the study found out to be still low in the institution.

Challenges Affecting Knowledge Management Practices in the University

The study found out that the University of Eldoret is struggling to realize effective knowledge management practices and they still need to combat some few challenges which is currently experiencing such as; Lack of Knowledge management policy, development of the institutional culture, knowledge management strategies, human resource skills and ICT infrastructure which is not fully developed.

Copyright and plagiarism also featured as an issue cited by 89% of lecturers and researchers That management of copyrighted information especially in institutions of higher learning in Kenya was said to be an issue of great concern to them especially protecting one's work against plagiarism when it is digitized was said to be a global concern that is currently experienced in institutional repositories and the management for particular repository object. These objects may radically change over time and those not exclusively in public domain could require sophisticated rights management systems to protect, manage and distribute. Current digital rights management systems focus largely on the proprietor software which are not available in most institutions of higher learning. The University of Eldoret, according to 65% of the lecturers' responses to their willingness to share their knowledge on open standards, they said that they don't mind sharing the ideas, innovations or their research output in open flat-forms but plagiarizing their work was their concern.

Lack of collaboration, management support and inadequate funding where identified by 65% of the respondents as out to cripple effective knowledge management practice in the University of Eldoret. Also lack of effective knowledge management system such as; relational database, collaboration tools, a search engine, a data mining tool, an Enterprise Content Management system(ECM was not identified by respondents when they were asked to identify the kind of knowledge management systems in their institution, 58% showed that they were not even aware of anything like knowledge management system while 42% were confused, they could not differentiate between a library management system and Knowledge management/information system.

Conclusion

Institutions of higher learning in Kenya especially the University of Eldoret are on the path of thriving knowledge business as their core activities that are associated with knowledge creation, dissemination and learning. (Rowley, 2000), cautioned them that they shall cease to exist in the future if they fail to reinvent themselves and catch up with more intelligent, knowledge-creating organizations such as professional consulting firms. The study concludes that public universities shall live up to the challenge and become 'smart(er)' organizations with

the help of effective knowledge management practices. With effective knowledge management policies, systems together with essential knowledge management practices, Knowledge culture, info-culture, collaboration and adequate funding, motivation of staff should yield value to the University of Eldoret in gaining competitive advantage.

Recommendations

This study recommends that for the University of Eldoret to foster sustainable competitive advantage, innovation and quality education, the university needs to embrace and institutionalize knowledge management practices. The leadership should develop an explicit policy on knowledge management; redress their organizational structure to include the position of Chief Knowledge Officer who will be responsible for managing and driving knowledge management agenda in the organizations. They should also put more emphasis on the organizational practices such as knowledge sharing culture, environment to share ideas, experiences, successes and failures, time for knowledge sharing and establish strategies for recognition, reward and measurement. This way the staff and students are not only motivated to do research for the sake of completing an academic program and for promotion as found out by the study but for others to share their intuitive knowledge and experience. Further recommendation as a matter of urgency to the Institution is to increase collaborations with other institutions for sharing ideas and experiences.

The current evolution of corporate research development (R&D) spending versus money available for innovative venturing, influences the way research and development is being structured in today's knowledge economies. Complementary to the well-known processes of industrial innovation are the knowledge-driven ventures which (Maingi, 2007) said to become the roots of a process of entrepreneurial innovation. Finally, the institution is recommended to create awareness on the importance of knowledge creation and value added to the organization to improve knowledge management practices. Also to develop an effective info-culture to enable the necessary platform for knowledge sharing and protection. This will enhance effective digital knowledge dissemination and sharing and many people shall be motivated to publish and improve the University's world ranking position to gain competitive advantage.

References

- Allen, P.M. (1998) *Evolving Complexity in Social Sciences*, in Altman, G., and Koch, W. A. (eds.) (1998) *Systems: New Paradigms for the Human Sciences*, New York: Walter de Gruyter.
- Arntzen Bechina, A. (2007) *Knowledge Management and the quest for a competitive advantage* Journal of executive Business, Thailand.
- Bhatt, G.D. (2001), "KM in organisations: Examining the Interaction between Technologies, Techniques, and People", *Journal of Knowledge Management*, Vol.5, No.1, pp. 68-75.
- Chingosho, E. (n.d)). *Knowledge Management*.

- Cronin, B. (2000). "Knowledge management organizational culture and Anglo-American higher education," *Journal of Information Science*. 27 (3) 2001, 129-137
- Earl, L. (2001). *Knowledge Management in Practice in Canada*; Science, Innovation and electronic Information Division. N0.7 (online) at, <http://www.statcan.ca>. 114
- Franklin, P., Hodgkinson, M. and Stewart, J. (1998), "Towards universities as learning organisations", *The Learning Organisation*, Vol.5, No.5.
- Glaser, B.G. and Strauss, A.L (1967). *The Discovery of Grounded Theory Strategies for Qualitative Research*. Aldinetransaction: TransactionPublishers; New Brunswick (U.S.A.) Accessed online 20/05/2013
- Lee, H. and Choi, B. (2003). Knowledge Management enablers, processes, and organizational performance: an integrative view and empirical examination. *Journal of Management Information Systems*, 20(1), 179-228.
- Liew, A. (2007). Understanding Data, Information, Knowledge and Their Inter Relationships, *Journal of Knowledge Management Practice*, VII, No. 2, 102-122
- Loh, Benjamin; Tang, Ai-Chee; Menkhoff, Thomas; and Evers, Hans-Dieter. Applying Knowledge Management in University Research. (2003). *Governing and Managing Knowledge in Asia*. 3, 199-227. Research Collection Lee Kong Chian School of Business.retrieved on 3/04/2013 at:<http://in.library.smu.edu.sg/lkcsb.research/1918>
- McElroy, M. W. (2003). *The New Knowledge Management: Complexity, Learning, and Sustainable Innovation*, Burlington, MA: KMC Press/Butterworth-Heinemann.
- Maingi, N, N. (2007). Knowledge management in a competitive economy: the knowledge management readiness score (KMS). Retrieved on 23/07/2016 from <http://www.strathmore.edu/news/knowledge-mngt.php>
- Malone, D. (2002). "Knowledge management: A model for organizational learning," *International Journal of Accounting, Information Systems*, 3, pp.111-123
- Mohayidin M G et al (2007) "The Application of Knowledge Management in Enhancing the Performance of Malaysian Universities" *The Electronic Journal of Knowledge Management* Volume 5 Issue 3, pp 301 - 312, available online at www.ejkm.com
- Nonaka, A. T. (1995). *The knowledge-creating company: how Japanese companies create the dynamics of innovation*. Newyork; Oxford University press.
- Nonaka, I., von Krogh, G. and Voelpel, S. (2006). Organisational knowledge creation theory: Evolutionary paths and future advances. *Organisation Studies*, 27(8), 1179 – 1208.
- Rowley, J. (2000). "Is Higher Education ready for Knowledge Management" *The International Journal of Educational Management*. Vol. 14, No.7. 325-333
- Senge, P. M. (1990). *The Fifth Discipline: The Art and practice of the learning organization*. Random House Business Books