Knowledge Management as Corporate Strategy in Higher Education: Exploring the Prospects for Higher Education Institutions

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SUMMARY

In the current era of intense competition, globalization, and rapid changes reference is often made to the relationship between knowledge management and organizational performance. Knowledge management processes are geared towards bettering the organization through harnessing and making use of knowledge that that generated internally. Globally, higher education institutions generate large amounts organizational knowledge which can be utilized to improve operations and services. This paper will explore first, contemporary perspectives in the theory and practice of knowledge management and secondly, benefits accrue and challenges universities in the sub-African region face in the application of KM as a corporate practice. Finally, it proposes a framework through KM can be applied as a strategy to establish a sustainable competitive advantage for higher education institutions

INTRODUCTION

Knowledge management (KM) has in the last 15 years become a core 21st management tool that many organizations have implemented in order to attain competitive advantage (Haslinda & Sarinah, 2009; Boahene, 2003; Pontzi, 2002). Many organizations are facing challenges by growing competition in a globalizing environment and have recognized the need to leverage knowledge to attain efficiency and effectiveness (Wedman & Wang, 2005; Petrides & Nodine, 2003). KM is strategy is based on the realization that unless there is systematic arrangement to acquire, organize, transform and apply knowledge, vital human and knowledge assets will go to waste and the organization will lose in the escalating competitive environment (Cranfield and Taylor, 2008). On the other hand, organizations can enhance productivity and innovation by locating, capture, dissemination and applying knowledge.

Several Higher Education Institutions (Universities) have launched KM initiatives in order to improve performance by creating programmes exploit intellectual assets that exists facets of institutional activity (Haslinda & Sarinah, 2009). This paper will explore first, contemporary understanding of knowledge management and secondly, outline the benefits that accrue from KM. Thirdly, it will outline some of strategies at the disposal of

Universities. Finally, it investigates challenges and success factors universities in the sub-African region have to deal with any KM is to be successfully applied to establish a sustainable competitive advantage for sub-African higher education institutions.

WHAT IS KNOWLEDGE MANAGEMENT?

A review of literature reveals that KM has been defined in a number of ways. Kidwell, Linde, and Johnson, (2000), have defined KM as "a process for fostering the transfer, development and utilization of the knowledge of the organization (individual, organizational, explicit, tacit) in the best possible way in order to be able to achieve the strategic aims of the organization" or the process of transforming and adding value to information and intellectual assets and connecting people with the knowledge that they need to take action. Leidner, (1990) views KM as "a systematic and organizationally specified process for acquiring, organizing, and communicating both tacit and explicit knowledge of employees so that other employees may make use of it to be more effective and productive in their work". It has also been defined as a conscious strategy of getting the right knowledge to the right people and helping people to share and put information into action in ways that strive to improve organizational performance" (O'Dell et al., 1998).

These definitions emphasize that at the core of KM, is the systematic effort use of knowledge that exists within the organization to achieve efficiency, ensure competitive advantage, and spur innovation (Serban and Luan, 2002). It consists of theories, models, processes, and information technologies that support the acquisition, processing, storage and exploitation of knowledge assets in the organization. It involves identifying, protecting and enhancing the value of knowledge and leveraging it in organization decision-making process and innovation. The overarching goal of KM is to make "the right knowledge available to the right people" in order to create value for the organization by improving the efficiency, effectiveness of its various functional processes and facilitating innovation.

Knowledge has variously been defined as cognitive, psycho-social, affective state of an individual, an object that can be stored in media, as a process of applying information, and as condition of having capability to perform some action (Haslinda & Sarinah, 2009). According to Davenport and Prusak, (2000), knowledge is a mix of practical experiences, acquired skills and competences, expert insight, and intuition that forms the basis for evaluating situations, new experiences and new knowledge.

It is common to think of knowledge as existing in two forms: explicit and tacit knowledge. Explicit knowledge refers to documented knowledge that is expressed in formal language, equations, rules and best practices (Davenport and Prusak, 2000; Haslinda & Sarinah, 2009). Examples of explicit knowledge are strategies, methodologies, products, patents, standards, procedures, and patents. Evidently, explicit knowledge is packaged, easily codified, communicable, and transferable (Kidwell, Linde and Johnson, 2000).

On the other hand, tacit knowledge is know-how and learning embedded within the minds of the people in an organization (Serban and Luan, 2002). It includes intellectual assets (skills and competences) relationships within and without the organization, values, ideas and convictions, perceptions, insights, experiences and craftsmanship. Tacit knowledge is therefore personal, context-specific, difficult to formalize, difficult to communicate and more difficult to transfer (Kidwell, Linde and Johnson, 2000).

From this discussion knowledge is embedded in all core processes of the organization, its systems and infrastructure, as well as brains, experiences, and values of the people in the organization (Shams, Rad, & Hooshmand, 2009). This means it is scattered and sometimes decision-makers may not recognize or even be aware that such knowledge exists within the organization. The challenge which KM tries to address is that of identifying, processing, organizing, and transforming the knowledge that exists within the organization and make it widely and easily available to any member of staff.

Although explicit knowledge is easier to work with, it is too portable and therefore if an organization has it, the competitors have it and therefore it does not provide a lasting competitive advantage. On the other hand, the tacit knowledge is personal, difficult to formalize, to capture, communicate, share therefore can be better protected, promises more returns over a longer period of time to the organizations that manage it effectively (Kidwell, Linde and Johnson, 2000).

THE CASE FOR KNOWLEDGE MANAGEMENT IN HEIs

KM affords a structure to discover, create, transmit, and apply knowledge within an organization. It is premised on the possibility for the organizations to harness knowledge they possess, including the explicit and tacit knowledge of its staff to achieve sustainable competitive advantage by enabling the creation, communication, and application of knowledge of all kinds to achieve business goals (Tiwana, 2000). A number of factors have contributed to the emergence and growth of KM as an organizational strategy discussed below.

i. Information overload

In the current situation of rapid changes and increased pressure for improvement, and accountability, the information needs of different groups involved in universities have grown bigger and bigger. Like other fields, higher education is facing information explosion as more and more information is being generated more than ever (Petrides and Nodine, 2003). Faculty, administrators, information professionals have to cope with new procedures of curriculum development and change, pedagogical methods changes (teaching strategies, assessment, use of ICTs), quality standards requirements, management tools and decision making, and educational delivery systems such as VLEs. Besides there are astronomical time and financial costs of acquiring, organizing, storage, disseminating and applying knowledge to address the above needs by holding training workshops (Serban and Luan, 2002).

ii. Limitations the technology and information cultures

Technology culture refers to institutions application and integration of technical systems that are implemented to collect, organize, disseminate and apply quantitative data in areas such as finance, enrollment, student records and other while information culture refers to the politics and processes of exchanging information in an organization (Petrides and Nodine, 2003). Currently Universities are engaged in the implementation of sophisticated and costly technological systems. However, distrust of the data generated, lack of leadership, and lack of system integration, unclear priorities and misuse of such systems has negated the would-be expected benefits of such investments (Petrides and Nodine, 2003). In short, technology acquisition does not always improve performance or decision-making.

Other hand, many Universities invest a lot of efforts of knowledge generation: think-tanks, brainstorming, committees, sub-committees, memos, regarding various internal teaching research, administrative processes. Sometimes these activities suffer from duplication of efforts, lack of feedback, lack of follow up, lack of access to the right information which is sometimes somewhere within the organization. This results in repeat, misguided, and inconsistent decisions, or delays in decision-making and execution of decisions. In most of the cases this is caused by poor management of the organizational memory and intellectual assets. KM provides the benefits of convergence between information culture and technology culture by creating a synergy between data and information, power of ICTs and the skills and competences of people (Malhotra, 2001).

iii. Skill segmentation and specialization

The world of training has seen increased segmentation of skills whereby an individual is only able to specialize in a limited domain of expertise. This implies that various projects require access to and combination of information from several disciplines (Serban and Luan, 2002). Therefore, for effective performance, by both the individual and the organization there is need for conscious effort to generate, organize, and provide access the right information by individuals and groups.

iv. Workforce mobility and turnover

Currently, the average years an individual stays in one job is now estimated to be 10 years. When employees retire or change jobs, the organization loses vast amounts of knowledge in terms of skills and experiences. Many organizations are under pressure to capture and share this knowledge in order to ensure continuity of processes and cope with changes in personnel (Serban and Luan, 2002).

v. Competitive market

Universities face the challenge of providing quality teaching and research activity, ensuring effective and efficient management and administration in a competitive market (Serban and Luan, 2002).

vi. The emergence of knowledge economy and globalization

Knowledge, creativity, and innovation are the key characteristics of a thriving society. Globalization has led to a situation where communities and nations have become more integrated, through movement of capital, ideas, goods and labour (Bloom; 2005). With increased flow of goods, capital, labour and ideas there is heightened challenge for Universities to stay competitive by ensuring the quality of their products and to ensure that a good academic experience is achieved by their students.

According to Birgeneau (2005), universities are in the centre of "knowledge business" since they are key generators, keepers and disseminators of knowledge in their core business of imparting sense of what is moral, skills and their capacity for research and innovation. In universities, KM addresses knowledge developed as part of scholarship, operational knowledge developed through support services and knowledge through academic assessment (Townley, 2003:9).

BENEFITS OF KM TO HEIs

A review of literature indicates a general consensus among authors that if universities identify and apply their knowledge capital effectively, they can improve the value of the products/services. Through KM, universities can teach, conduct research as well as manage administrative services in a manner that is superior to competitors through the so-called philosophy of "efficiency and effectiveness" by their ability to respond to rapidly changing needs and expectations (Cranfield and Taylor, 2008).

Surveys have revealed that that those companies that consciously adopt knowledge management and reward collaboration and knowledge sharing outperform those who discourage these practices (Thorn, 2001). Other studies have reported benefits of KM which includes increased customer satisfaction, improved revenues, profitability and surplus, efficient decision making and retention of expertise of staff (Milam, 2001)

IN the face of stiff competition, implementation of KM will enable the individual institution to increase enrollment and student retention, increase graduation rates, expansion of web-based courses, and effective use of ICTs (Delio, 200b; Microsoft, 2000, Ruber, 2000. Other key benefits of KM in higher education are improved academic and administration processes of the university, better decision making capabilities, reduced "product" development cycle time (speed to the market) e.g. curriculum and research, enhanced performance, and effective formulation and implementation of strategic goals plans. All these will give the institution a competitive edge over others in the same region (Kidwell, Linde, and Johnson, 2000).

ESEENTIAL KM STRATEGIES IN HIGHER EDUCATION

Over time several strategies to KM have evolved which can be broadly categorized into those that are non IT-based and those that are IT-based. The following are examples of strategies at the disposal of institutions in their KM initiatives.

(a). Non IT-based strategies

i. **Learning and idea capture**: Efforts to collectively and systematically capture the learning ideas continuously, appraise them and turn them into better applicable knowledge
ii. **Storytelling**: Involves conveying of events in words, images, and sound by improvisation and embellishment as a way of conveying or sharing knowledge especially experiential or tacit.
iii. **Collaborative workspace:** Creating workspaces in which people can share knowledge through face-face interaction
iv. **Knowledge Management Assessment Tool:** A survey carried out organizational readiness for KM by identifying what knowledge is available, knowledge gaps and opportunities for improvement
v. **Knowledge café:** A group discussion aimed at reflecting, developing and sharing thoughts and insights in a non-confrontational, non-judgmental way
vi. **Communities of practice:** Groups of people have a common base of expertise, concern or a passion for something they do, and learn how to do it better by interacting regularly. Employees share and create common skills, knowledge and expertise, ongoing issues
vii. Taxonomy: A strategy that provides the structure to organize information, documents, and libraries in a consistent way aimed at assisting people to efficiently navigate, store and retrieve data and information in a consistent way
viii. **Best practices:** Those strategies, activities, and/or approaches that have been proved to be effective in achieving targeted outcomes
ix. **Knowledge mapping:** Process by which organizations can identify and categorize knowledge assets within their organizations (people, processes, content, and technology)
x. **Mentoring schemes:** creating a work relationship between senior and junior organizational member to transfer experience and learning

(b). IT-based KM strategies

i. D**ocument management systems**: A way of by maintaining a document repository (especially administrative documents) with categorization, taxonomy and metadata to facilitate filing, searching and finding the right information effectively and efficiently
ii. **Knowledge repositories:** Structured collections of documents written by internal experts. These capture authors' expertise and insight on a subject. These are categorized into separate databases by function area, and indexed to permit searching and browse.
iii. **Social network services:** Online systems for supporting social networking used to find people who have similar interests and needs, creating subgroups and sharing content e.g. facebook,
iv. **Building knowledge clusters**: Coming virtually together to create, innovate and disseminate new knowledge on a research and development topic

xi. **Expert locator/who is who**: A tool to enable effective and efficient use and sharing knowledge by connecting people who need particular knowledge and those who own the knowledge by documenting peoples' skills, experience and knowledge areas

xii. Business intelligence systems e.g. executive management systems and digital dashboards. Systems for monitoring critical process and KPIs as well as accessing critical information

xiii. Creating web portals: use of web to facilitate across the entire organization to knowledge resources from a central pool

xiv. **Collaborative virtual spaces:** systems that facilitate that enables people to work together irrespective of their physical locations e.g. Adobe connect, Webex, Skype, etc

CHALLENGES AND SUCCESS FACTORS IN KM IN HEIs

i. Quality of KM strategy

KM involves clearly defined processes that have to be incorporated at different levels and sectors of the organization (Wiig, 1995). A sound KM strategy incorporates by identifying existing knowledge gaps by determining what is needed and the knowledge that exists within an organization among its members, and processes for closing the gap by capturing, creating and codifying storing, transferring, sharing, applying and evaluating knowledge (Singh and Shankar, 2006). To ensure success, there is need for an action plan for implementing KM initiative (Kidwell, Linde, and Johnson, 2000).

ii. Corporate culture

Corporate culture refers to the pattern of shared values, norms, beliefs, activities and behaviour that have developed within the organization over time and constitute the informally or unwritten rules on "how things really get done" (McManus and Loughridge, 2002). Generally, in organizational cultures where knowledge and information are valued there is better knowledge creation, sharing and utilization (Cranfield and Taylor, 2008).

In some cases, KM processes are not trusted because it seen as a form of knowledge brokerage by individuals for personal aggrandizement and involves "manipulating people and emptying their brains'. Such environment does not engender sharing of organizational, private, and privileged knowledge (Riege, 2005). There is need to create a culture of motivation, recognition and a reward system for behaviour that promotes collaboration and sharing both tacit and explicit knowledge between individuals and groups (Davenport and Prusak, 2000; Riege, 2005).

iii. Appropriate ICT infrastructure

Higher education is both scholarly and operationally knowledge rich environment which makes it difficult to identify knowledge assets are critical to manage (Townley, 2003; 2). Therefore, there is need to establish appropriate knowledge management platforms to facilitate collection, storage, organization, retrieval, dissemination of information and increase information accessibility within the institution and beyond (Singh and Kant, 2008). These

systems include business intelligence, document management systems, library management systems, academic management systems, ERPS. It is critical he various information systems are integrated to facilitate seamless access to the information and data mining (Chong & Choi, 2005).

iv. Nature of academics, and academic freedom

Faculty members are on fulltime-basis involved in managing knowledge. They often provide extended services during they accumulate extensive knowledge on academic, administrative and research processes of the university (Cranfield and Taylor, 2008). Therefore, once they decide to leave it could be detrimental to the institution. At the same time academics do not want to be managed in the strict business sense or having what they know to be managed. One way to deal with this challenge to allow them to exercise their academic freedom and encourage them to share, and cultivate innovation and creativity.

v. Leadership and management style

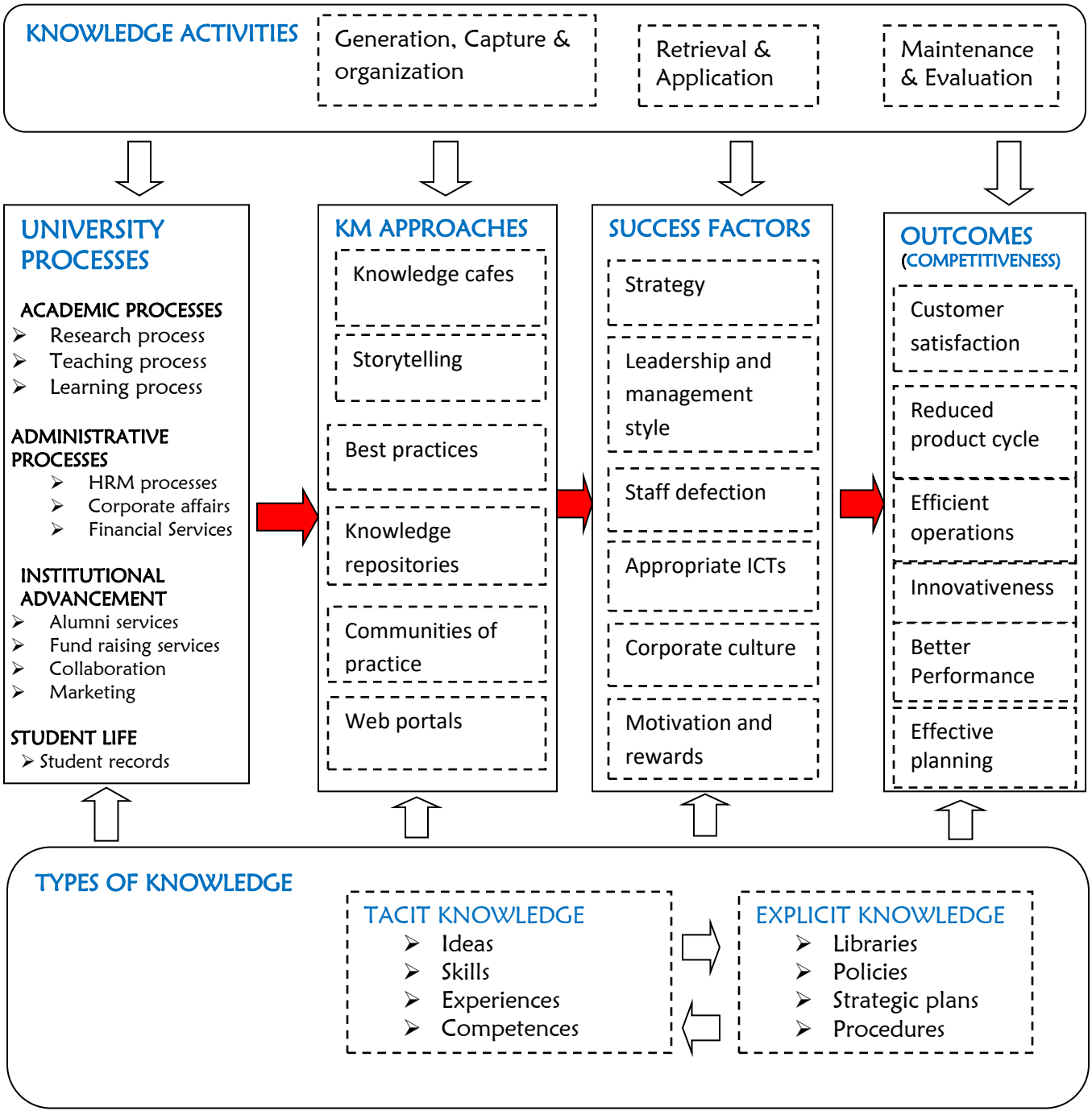
Top management is responsible for all decisions and projects within the organization including developing a corporate culture, structures, processes and deploying ICTs for effective creation, sharing and application of knowledge (Singh & Kant, 2008). Successful deployment of KM requires long term commitment and support from the top management. Key role of management are to recruit and retain staff with the right skills, competences, and values, creating well defined positions with a clear mandate and responsibility to spearhead and champion for champion KM activity in the university, and adopting a management style, that facilitates effective knowledge management (Townley, 2003).
Another role of university leadership is to transform the way business is done, create a vision of

KM implementation, culture and framework management and business practice that incorporates good knowledge sharing (McManus and Loughridge, 2002). A review of literature reveals that decentralization with devolved budgets and power potentially weakens the senior executive position and ability to drive changes across the institution. On the hand collegiate style slows decision-making while entrepreneurial approach tends to use a more central model which is more amenable to effecting institution-wide change such as KM adoption (Cranfield and Taylor, 2008).

vi. Staff defection and retirement

If an employee retires or resigns from organization, their experience and expertise is lost since it is very difficult to find a replacement at that level. Staff defection is caused by high demand for well trained and skilled personnel, poor working conditions and lack of motivation and reward systems (Wedman & Wang, 2005; Martin, 2000). KM and any effort to attain a competitive edge will not succeed in organizations that are not vigilant about protecting their human intellectual capital or formal processes for retaining expertise (Singh and Shankar, 2006; Parkin, 2007)

FRAMEWORK FOR KM IN UNIVERSITIES



CONCLUSIONS AND RECOMMENDATIONS

Knowledge is a key asset if any university is to function efficiently competes successfully. It is therefore important that they "know what they know" and apply it in their processes. Universities and by virtue of their missions, create, share and apply knowledge. There is need

to identify which areas can be improved through explicit use of KM, identify gaps in application and how best can adoption of KM be used to harness competitive advantage.

However, knowledge in universities is hard to manage because it includes the insight and wisdom of employees. Other challenges include unawareness of the benefits of KM, lack of proper organizational structures that support KM, lack of integration and convergence of ICTs, lack of commitment by senior management. Knowledge is created by individuals and therefore KM cannot be managed in a top-down mechanistic way as individuals themselves determine how to acquire, use and develop their knowledge and therefore the most important way is to fulfill certain success factors include implementing a carefully crafted strategy, creating a culture that facilitates knowledge sharing, and investing in appropriate technologies to efficiently capture, organize, disseminate and apply knowledge. In the case of sub-Saharan Africa, there is need for further research to provide evidence of the benefits of KM as a management tool in enhance the competitive advantage of universities across the region. Knowledge generated will be used to craft appropriate strategies for KM in the region.

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