Importance of Implementing Knowledge Management in Nigeria Universities

[1]Hilary Joseph Watsilla & [2]Hammajam Ahmed Adamu
*[1&2]School of Management and Information Technology,
Department 0f Information Technology, ModibboAdama
University of Technology, Yola, Adamawa State Nigeria.*

Abstract

The University is place where knowledge creation, processing and sharing are the main objective of the organization. Modern universities are adopting new technologies to improve the productive of the institution and help in the growth of the economy. Nigeria as a developing nation with vast amount of resources can benefit greatly from the intellectual capabilities available in its universities. There is a need to improve on the level on knowledge been created in the universities in Nigeria so as to encourage more spin out entrepreneurs from the universities and also for the universities to contribute in the local developing of their sounding communities and the business. The objective of this research was to conduct a study on how knowledge management, looking at how it will help better the University system by improve learning pattern, create an environment for creating and sharing knowledge within the institutions and in the management of the organization as a whole. A literature review was done on the subject matter to identify area were KM has been used in universities around the world to increase innovation and problem solving. Some of the gaps found in Nigeria University from the research include; lack of government policies on knowledge sharing in University, little interaction between business and the universities and universities not focusing on their local environment. Based on the research if the knowledge in the University is fully exploited, it will help in the economic development of the nation, increase innovation and reduce redundancy in knowledge creation.

Keywords: *Knowledge Management (KM), Effective Learning and Innovation*

Background to the Study
The University environment by default is most suitable for the implementation of knowledge management principles and methods with the vast human capabilities and resources in it.The University is one institution where the main focus is producing and leveraging knowledge. A University system is made up of different faculties which can be related to all aspect of the society (Ohiorenoya and Eboreime, 2014). If this resource (knowledge) is being used adequately it will help in the suitable development of the society and economy. According toMikulecká and Mikulecký, (2000)an interesting type of organizations, which are highly suitable for introducing knowledge management (KM) approaches, seems to be universities. Knowledge Management is the discipline of enabling individuals, teams and entire organizations to collectively and systematically create, share and apply knowledge, to better achieve their objectives (Vernadat, 2003). Since the University core function is the creation and distribution of knowledge, it can therefore be argued that for the full optimization of these functions it is important to management the process of knowledge creation and distribution.

Presently universities function in a business like way with a lot of business activities in the educational market, hence any means of increasing their competitive advantage can be very useful and interesting for them. Knowledge management seems to be one of recent leading technologies in this direction. However some University in Nigeria may not have embraced knowledge sharing, due to improper ICT facility in the University. Mikulecká*et al* (2000) also suggested that the nature of global economic growth has been changed by the speed of innovation, which has been made possible by quickly evolving technology, shorter product lifecycles and a higher rate of new product development.For a nation to compete in this ever changing environment it has to be innovative, and new knowledge creation drives innovation. The universities in Nigeria need to invest more on knowledge creation and sharing as this will help drive innovation in the society. University education is regarded as the determinant of success of a nation among its colleagues in the committee of nations (Abubakar 2014). Hence Through the use of KM, universities will be able to perform more effectively by spreading knowledge among cultures, and expanding the process of learning and teaching(Anvari, Alipourian, Moghimi, &Baktash. 2011). Due to the advent of new knowledge producers in the education sector, more and more universities are looking into the possibility of applying corporate KM systems to be able to meet up with the demand of the cooperate world.

Statement of the Problem
The intellectual capabilities in Nigerian universities are not fully utilized by the institution and the society at large. Tippins(2003) emphasize that managing knowledge in higher education is often very difficult because of several bureaucratic and cultural factors which present obstacles.There is need for the universities to be involved in the economic growth of the nation. The universities need to be involved in innovation and creating new ideas in the development communities around it. There is a need to improve the product of knowledge in society to move with the changing economic. For a society to compete in the modern world it has to be innovative and creative with new ideas. The University, business and communities need to interact to identify the need of the society.

The lack of proper channel to encourage knowledge sharing among researchers. Most scholars in Nigeria get to meet and exchange information through conferences and seminar; this sometimes is not too convenient for individual who may not be able to afford it.

Objectives of the Study
The objective of this paper is to look at ways in which KM can be used in universities to improve learning pattern and also create an innovative environment for economic growth

Literature Review
Knowledge management was initially defined as the process of applying a systematic approach to the capture, structuring, management, and dissemination of knowledge throughout an organization to work faster, reuse best practices, and reduce costly rework from project to project (Nonaka and Takeuchi, 1995; Pasternack and Viscio 1998; Pfeffer and Sutton, 1999; Ruggles and Holts house, 1999).KM is about getting the right knowledge to the right people at the right time to maximize an enterprise's knowledge relationship effectively. This can be viewed to be useful to both by the academic staffs and non-academic staffs. In the University settings KM practice can be viewed in two aspects, one is in the business activities of the University while the other is in the academic process. The University can adopt the use of knowledge management best practice to improve the management of the institution, and also in the academic aspect of the institution where it can be used to management the intellect in the University and taught as a course of study. Petrides and Nodine (2003) consider broadly that knowledge management in education can be thought of as a framework or an approach that enables people within an organization to develop a set of practices to collect information and knowledge, and share what they know, leading to action that improves services and outcomes. With the vast intellectual (which is made up of both the staffs and the students) knowledge in the University, is it right to say the University should be a home for innovation. Knowledge sharing can facilitate a better learning process, increase productive and innovation.Zack (1999) stated that a typical KM process includes five stages:

i.   Acquisition. Information and knowledge is either created within the organization or can be acquired from many different internal and external sources.
ii.   Refining. Captured knowledge, before being added to the repository, is subjected to value-adding processes (refining) such as cleansing, labeling, indexing, sorting, abstracting, standardizing, integrating, and re-categorizing.
iii.   Storage and Retrieval. This stage bridges upstream repository creation to downstream knowledge distribution.
iv.   Distribution. This stage represents the mechanisms used to make repository content accessible.
i.   Presentation. The value of knowledge is pervasively influenced by the context of its use. Capabilities should be provided for flexibly arranging, selecting, and integrating the knowledge content.

The introduction of the Internet and the World Wide Web has made unlimited sources of knowledge available. An organization only gains sustainable development from what it collectively knows, how efficiently it uses what it knows, and how quickly it acquires and uses new knowledge (Davenport and Prusak 1998). An organization in the Knowledge age is one that learns, remembers, and acts based on the best available information, knowledge, and know-how. Knowledge management ensure the full utilization of an organization's knowledge base, coupled with the potential of individual skills, competencies, thoughts, innovations, and ideas to create a more efficient and effective organization (Dalkir, 2013).For an organization to be success in this era, it has to be able to harvest the knowledge available among its members. This new era requires continual review of the routine entrenched in the organizational decision making process to ensure that underlying assumptions are aligned with the changing environment (Malhaotra, 2000).

Basically knowledge can be classified as Explicit knowledge: Knowledge that can be written down, transferred, and shared. It is definable and can be protected by the legal system. It can be articulated, captured, presented and codified in various forms like words, numbers, specifications, facts, rules, reports, blog post, email or other sort of printed (books and journals) and digital asset, policies and shared without need for discussion (Dhamdhere, 2015).AndTacit knowledge - know-how, and is by nature difficult to describe. It can be demonstrated but rarely codified, and resides with its holder. It gets transferred through demonstration and on-the-job training. It covers insights, perceptions, expertise views, techniques and skills, which is unique to the person.

Analyses on Knowledge Management Culture
Some study on organizational ethics and KM proposes that organizational ethics are vitalin facilitating effective knowledge sharing practices among members, in this case we are looking at the University as an organization and the members includes academic and nonacademic staff, as well as the students of the institutions. The University culture should be one that promoted knowledge sharing and development. As an institute where lecturers and students interact on daily bases knowledge creation and sharing is key in the development of the organization. Organizations with more open and supportive value orientations are prone toward productive knowledge behaviors (Chen, 2009) such as sharing insights with others members of the organization. If there is better relationship among staffs of the University and a less rigid hierarchy, members of the University will be more willing to share their ideas if given the right incentives and encouragement. These values may impact organizational capacities to innovate, to respond quickly to change, and to be responsive to new market demands. Additional research, by Delong and Fahey (2000)finds that particular value orientations believed to facilitate or hinder knowledge sharing, they claim that value orientations such as trust and collaboration will lead to better inclination amongst organization members to share understandings and know-how with each other. But in a rigid system whereby individual power and competition exist amongst member of staffs, it will be difficult for knowledge to be

shared. Therefore, it is suggested that organizations should pursue to underpin and rot those cultural values most dependable with knowledge sharing behaviors into their members. Also, Jarvenpaa and Staples (2000) research on University personnel indicates that shared organizational values encouragement individual's opinion of ownership of knowledge and following affinities to share knowledge with others. If an organization encourages knowledge share then its members will adopt such value. Knowledge management processes if used with the right organizational culture will improve the organizations competitive advantage.

What are main objectives Universities in Nigeria?
Going with the missions of various universities in Nigeria it can be said that the institutions aim to provide its student with the best knowledge needed to improve the life style of the individuals and the nation at large. Below are some of the mission statements of these universities;

I. By Modibbo Adama University of Technology Yola - To Promote Technological innovations for sustainable development through excellence in teaching, learning and research.

II. The American Univeristy Nigeria stated that its mission is to provide quality education to Nigeria and Africa's future leaders in order to equip them with the skills needed to solve development issues on the continent, and give them the knowledge needed to create solutions that will benefit their community, their country and, ultimately, the world.

III. Amadu Bello University has it mission as to advance the frontiers of learning and break new grounds, through teaching, research and the dissemination of knowledge of the highest quality; to establish and foster national and international integration, development and the promotion of African traditions and cultures; to produce high-level human power and enhance capacity-building through retaining, in order to meet the needs and challenges of the catchment area, Nigeria and the rest of the world.

IV. Federal University of Technology Akure is to promote technological advancement by providing conducive environment for research, teaching and learning which engenders development of products that are technologically oriented, self-reliant and relevant to society.

This shows that the major objective of the universities in Nigeria is to leverage the best knowledge to its members. Drawing from the above mission statements it could be said that any tool that will aid the institutions in achieving its objective will be of benefit to the organization. Numerous researches have revealed that businesses are applying KM into their processes to get competitive advantage and increase innovation. Mikulecká*et al* (2000) also suggested three basic possibilities how universities can exploit the knowledge management ideas and principles:

I.   To teach them in a suitable study program;
II.   To use it for its management decision support, to improve the internal document management and exploitation, to   increase the level of information and knowledge dissemination, etc.
III.   To make use of it for a qualitative change in the educational process.

The knowledge contributors in the University can be view on the role assigned to an individual. Academic staff is directly involved with academic programming and research for the University. Represented in units across campus, academic staff also contributes to the development of institutional policies. Positions include researchers, scientists, instructors, information technologists, and coaches. The non-academic staff provides secretarial, custodial, financial, library, and other non-academic services for the Faculty. Student is used for anyone who is learning, including mid-career adults who are taking vocational education or returning to University. Other contributor of knowledge in this environment may include business, surrounding communities and the government. Aligned with Mikulecka et al (2000) suggestion it can be seen that KM will impact all section of the University.

Innovation and KM

One of the main roles that knowledge management plays in innovation is allowing the sharing and codification of tacit knowledge. Tacit knowledge is knowledge that cannot easily be documented, as these are knowledge gained through experience in an area of expertise. The sharing of tacit knowledge as revenue for innovation is particularly significant in emergent fields where not a lot of explicit knowledge exists, such as biotechnology (Du Plessis, 2007). Innovators in these fields combine to some extent codified knowledge with complimentary resources such as cross-functional teams or learning-by doing capabilities, which leads to new product and process innovations (Cardinal, Pennicott, Lakmali, Robbins, & Everitt, 2001). Because tacit knowledge cannot be easily transferred it is important for researchers to collaborate with each other to come up with a new innovation. Tacit knowledge takes years of experiences to master a particular field and during that period individuals may come up with different methods working. KM helps in transferring this unique method between individuals for best practices and promotes innovation

Another Key role that KM plays in the innovation process is associated to explicit knowledge, even though explicit knowledge does not contribute so much as tacit knowledge in the innovation process. This is because explicit knowledge on innovations can simply accessed by competitors, yet its still an important part of innovation. In advanced areas which are quite strong in research and development processes and a rich exchange of tacit knowledge taking place, a reasonable amount of explicit knowledge will be required. This process requires the capability to convert tacit and explicit product and process knowledge into explicit models.

The European Perspective on Knowledge Management

According to a report by Clive Winters in the URBACT Tribune it is important to take a broader opinion of the role and capabilities the University plays in the period of economic transformation and downturn. The report stated this is the right time for economic development organizations and business to study what capabilities are existing in their local University and for universities to promote what they can do to help. Knowledge management if rightfully used in the universities can help the institutions contribute meaningfully in providing solutions to some of the challenges been faced in the economy by engaging like minds in problem solving.

Winters report suggested a range of ways that could be of help in the economic downturn and support long term recovery, these including:
a.   Training, skills and Employee Development;
b.   Innovation Knowledge Transfer and Supporting Business
c.   University Spin-Outs and Graduate Entrepreneurship
d.   Access to funding support

Looking into the recommendation made above, Nigeria University can help business and government in its region with solutions and ideas on how to survive in this harsh economy, by collaborating to study the surrounding community need and providing appropriate solutions to them. To get an effective result relevant department in the University system can come together to solve a particular problem instead of conducting separate research on an issue, a collaborating study will yield better result as different view will be brought together by the contributors. With research been done on a regular bases the University can help the developing new skills for different business to suit the current economic situation and provide training on such skills. This will give the University access to some funds from the business. It's important that the universities are involved the creation and transfer of new innovative knowledge to the business world. If the knowledge in the University is utilized efficiently the can promote entrepreneurship among student and staff, by engaging them in various programs.

Regions in Europe have seen the need for innovation in contributing to sustainable and inclusive growth of the economy. The EU Guide "Connecting Universities to Regional Growth" highlighted universities and other higher education institutions have a key role to play in knowledge creation and its translation into innovative products and public and private services. Universities are central generators and repositories of knowledge in our society and how that knowledge is developed, disseminated and applied affect not only the cultural richness of our society, but also our global competitiveness (Greenwich, Hughes, Kitson & Ternouth 2008). The UK government has been encouraging interaction between universities and business. In 1998 a white paper *Our Competitive Future* committed the Government to support business in developing knowledge based competition and made specific reference to the important role of universities (Greenwich et al, 2008). The need for universities to participate in knowledge creation, sharing and storing cannot be over emphasized as innovation is the key development of a society. Knowledge management will provide the universities with adequate tools and processes

in ensuring the resources available in the organization are been used. This will in return increase the growth of the economy and business.

KM Gaps in Nigeria Universities
Some of the gaps which can be attributed the universities in Nigeria are:

I. Inadequate ICT facilities in the universities in relation to knowledge sharing and storage.
II. There is little interaction between researcher and the business. Researchers should engage more on studies that are of interest to the surrounding business and society at large.
III. Funding of research is mainly from government, which is not readily available to researchers.
IV. There is no University policy on knowledge management
V. Courses taught in the University rarely have practical case study on the economy of region.

If proper consideration is made to these gaps in the University, one can argue that it will not only make the institution stronger in terms of the relevance of knowledge been disseminated but also create an environment where researcher will committed in their work. Communities and business will also benefit from the poll of knowledge and the University will be the center for community development.

Conclusion
Nigeria is a developing country and will need all the resources at its disposal to improve the lives of its citizens, and one of the most readily available resources is the intellectual capabilities of individuals in the society. The University is a home to most of these individuals and if IT can help bring together these knowledge persons to better the communities around, it will be of get importance to the country at large, as solutions to problems within the communities will be addressed among like mind, and knowledge gained will be documented for further use. According to Dhamdhere (2015) KM helps educational institutes to improve their capacity of gathering and sharing information and knowledge, and it support the research and continual improvement of their work. The EU Guide also identified some key contributions the universities can make in regional growth, these includes

I. Business innovation
II. Community development
III. Human capital development
IV. Institutional capacity

In conclusion the University can be more than just a learning institution. To have sustainable growth in the society, ideas and innovation are key drivers. The University platform should encourage the growth for the society by interacting with business and communities around it, identifying problems and proofing solutions with the aid of the government. KM will not only improve learning in the University by bringing in new idea and creating new solution, it will assist in the development of the communities

around the University and reduce redundancy among researchers in the universities. Knowledge management platform proves an organization the means to collectively create, share, distribute and store knowledge to be used for growth of the organization.

Reference

Anvari, A., Alipourian, G., Moghimi, R., & Baktash, L. (2011), "Analysis of Knowledge Management within Five Key Areas". Journal of Knowledge Management, Economics and Information Technology, 6(6).

Cardinal, R. N., Pennicott, D. R., Lakmali, C., Robbins, T. W., & Everitt, B. J. (2001), "Impulsive Choice Induced in rats by Lesions of the Nucleus Accumbens Core". Science, 292(5526), 2499-2501.

Chen, E. T. (2009), "Managing Knowledge Workers in the e-World.Southwest Region Decision Sciences Institue".

Clive, W. "How Cities can Harness the Capabilities of Universities in a Period of Economic Uncertainty". The URBACT Tribune

Dalkir, K. (2013), "Knowledge Management in theory and Practice". Routledge.

Davenport, T. H., & Prusak, L. (1998), "Working knowledge: How Organizations Manage what they know". Harvard Business Press.

DeLong, D. W., & Fahey, L. (2000), "Diagnosing Culture Barriers to Knowledgement Management".The Academy of Management Executive, 14(4).

Dhamdhere, S. N. (2015), "Importance of Knowledge Management in the Higher Educational Institutes".Turkish Online Journal of Distance Education, 16(1).

Du Plessis, M. (2007), "The Role of knowledge Management in Innovation". Journal of knowledge management, 11(4), 20-29.

Grinevich, V., Hughes, A., Kitson, M., &Ternouth, P. (2008), "Universities, Business and Knowledge Exchange". London: Council for Industry and Higher Education.

Jarvenpaa, S. L., & Staples, D. S. (2000). "The Use of Collaborative Electronic Media for Information Sharing: an Exploratory Study of Determinants". The Journal of Strategic Information Systems, 9(2), 129-154.

Malhaotra, Y. (2000). Information Management to knowledge Management: Beyond the Hi-Tech Hidebound Systems. Knowledge management for the Information Professional". Medford, N.J: Information Today Inc., 37-61

Mikulecká, J., Mikulecký, P., & Nejedlého, V. (2000, September), "University knowledge Management-issues and Prospects". Principles of Data Mining and Knowledge Discovery 4th European Conference Proceedings, PKDD (pp. 157-165).

Petrides, L. A., & Nodine, T. R. (2003), "Knowledge Management in Education: Defining the Landscape".

Tippins, M. J. (2003), "Implementing knowledge Management in Academia: Teaching the Teachers". International Journal of Educational Management, 17(7), 339-345.

Vernadat, F. B. (2003), "Enterprise Modelling and Integration". Springer: US. (pp. 25-33).

Zack, M. H. (1999). "Managing Codified knowledge". Sloan Management Review, 40(4), 45-58.