Knowledge Management in Higher Education Institutions

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Type of Review: Peer Reviewed.
DOI: http://dx.doi.org/10.21013/jmss.v4.n3.p4

How to cite this paper:

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ABSTRACT

Knowledge management is the process of retrieving, protecting, using and managing the available knowledge. It has gained huge importance in the Business world especially in the corporate sector. It is recognized tool for the effective decision making and attaining competitive advantage. As the educational institutions hold the prime responsibility of effective creation and successful dissemination of the knowledge, it is viewed that the knowledge management practices have greater application to the educational institutions. The objective of the paper is to understand the process, application and role of knowledge management in educational institutions. The paper tries to explore the review of literature on the knowledge management in general and its application to institutes of higher education in particular.

Introduction

Knowledge is an intangible asset and is the part of intellectual capital invested in the business. It is the most valuable asset for an organization and provides a sound base for driving innovation, promoting research and development. It helps an organization to experience growth driven by the excellence. Despite the great value associated with this asset, only few organizations are able to recognize it and fewer are able to capitalize on it. Knowledge is much more than the data and information. The various data & information pieces are transformed into knowledge. The process of transformation into knowledge involves the intellect, expertise, understanding, experience and judgment of the organization and the individuals handling it along with its effective application and utilization. Knowledge may be explicit or tacit. Explicit knowledge is one stored in documents and other storage systems. It can be shared and expressed. Tacit knowledge on the other hand is one stored in the human minds and includes the intellect, experience, thoughts, intuitions, etc. It enhances with experience and efforts. It is hard to formalize, communicate, record and share such knowledge. The tacit knowledge helps an organization to capitalize and attain advantage over the others. The explicit and the tacit knowledge complement each other and add value to the organization’s performance.

Conceptual Progression from data to knowledge

Source: Uriarty Jr., Introduction to Knowledge Management (2008).

Knowledge management occupies an important place in the business world. Various practices are adopted by the businesses to manage this valuable asset for better decision making and ensuring the
Knowledge Management and Higher Education

Primarily the Higher Educational Institutions have the responsibility to create and disseminate the in depth knowledge of various fields. Being the significant source of enormous information, knowledge and insights, these institutions have the great opportunities to implement the Knowledge management tools and techniques. Knowledge management practices have great relevance and application to the educational institutions. Application of knowledge management practices in Higher education can lead to better decision-making capabilities, reduced “product” development cycle time- curriculum development and research, improved academic and administrative services and reduced costs (Kidwell et al., 2000). Many institutions of Higher education worldwide observe Knowledge Management as their core activity which helps them to gather huge information and process it into knowledge, making it useful for students, academicians, industry, society and nation. Moreover, the advancement in the field of information technology has opened up the significant opportunities for these institutions to create, manage, protect and disseminate the knowledge effectively.

Education in India has witnessed a tremendous growth in the last two decades with the growing number of providers as well as takers of higher education. The number of students has increased with the increasing awareness and rising importance of education. Also, there has been massive increase in the number of educational institutions with the upcoming of private providers. The present situation is such that the educational institutions are facing a lot of competition from each other. The institutions are striving to improve their standards, quality and adding more and more value to the services in order to attract quality students and faculty. Here arises the need to implement the knowledge management practices in the educational institutions to accomplish their mission, be competitive, remain innovative, and ensuring the satisfaction of stakeholder’s expectations. Researchers believe that the implementation of knowledge management practices in Higher education will be highly beneficial resulting in improved academic indicators- student learning, curriculum development; effective administrative & strategic tasks, better research quality, enhanced faculty development, etc.

Implementation of Knowledge Management in Higher Education

Knowledge Management in higher education institutions involves the creation, improvement, maintenance and safety of the knowledge. Being the pioneers for the generation and dissemination of knowledge, these institutions have the huge potential and scope for establishing their own knowledge management system. The provision of high quality education and related services is the key driver for enhancing the excellence, competitiveness, importance and popularity of any higher education institution.

Framework for studying Knowledge Management in Higher Education Institutions

Lee and Choi (2003) provided the following framework for the study of knowledge management in the business. This broad framework has been adopted for the purpose of study to investigate its relevance and applicability in the higher education institutions.
Enablers

These are the facilitators which support the process of knowledge management. Gold et.al (2003) described these preconditions for effective knowledge management as infrastructure capabilities namely: Technology, Structure and Cultural. Lee and Choi (2003) classified the enablers into Social perspectives—Culture, Structure, People and Technical perspectives—IT support. The researchers emphasized the importance of the enablers in knowledge acquisition, creation, protection, sharing and application. The organizational structure is one of the key enabler in knowledge management in an organization. The structure defines the relationship of various segments, divisions and the people of the organization. Lee and Choi (2003) identified two key structural factors affecting knowledge management i.e. centralization and formalization. The organizational structures are expected to provide knowledge infrastructure support, structural flexibility, freedom, scope and team work for effective knowledge sharing, co-ordination and across the organization.

Organizational culture guides the as to what knowledge to be acquired, valued, shared and protected. The appropriate organizational culture guides and encourages the people to be part in effective knowledge management in the organization. The culture of both formal and informal interaction, dialogues, and discussions among the internal and external stakeholders should be encouraged. Lee and Choi (2003) provided three concepts of culture—collaboration, trust and learning.

The human resource or the staff skills as enabler is also an important factor of knowledge management process. The people are the most valued assets for any organization. Their skills, attitude, behavior affects the operation of the organization. It is imperative to encourage and develop the relevant skills in the people of the organization to enable the effective knowledge management processes. In higher education institutions both implicit and explicit knowledge of the faculty, students and employees are relevant to the knowledge management process. The sharing of knowledge on teaching pedagogy, research and teaching experience, best practices, technology, changing environment and its developments help in enhancing the knowledge of human resource of the organization and effectiveness of its services.

From the technological perspective, the IT support in the knowledge management is the very important enabler. The technological support not only facilitates the linkages to acquire, create, and share the knowledge but also the softwares and systems to protect the knowledge. The technological capabilities of the organization include use of computers, internet, web portals, intranet, information protectors and the repositories. These days the institutes of higher education are making use of information technology and forming portals and repositories of various kind of internal and external information including research areas, research results, curriculum revision areas, publications, student records and evaluation, teaching pedagogies, industry-academia interactions, alumni records, placement records, portals for finances, procurement and human resource.
Application of Knowledge Management in Higher Education Institutions

Knowledge Management Enablers
- Organizational Culture
- Organizational Structure
- Human Resource
- Technological Support

Knowledge Management Processes
- Knowledge Acquisition
- Knowledge Conversion and Sharing
- Knowledge Application and Storage
- Knowledge Protection and safety

Organizational Performance and Effectiveness
- Student Enrolment
- Student Placement
- Student Development and services
- Curriculum Development and quality
- Faculty Growth
- Faculty Development
- Research and Development
- Administrative Effectiveness and compliance
- Alumni Services
- Industry- academia interface

Knowledge Management Processes

Lee and Choi (2003) classified the knowledge creation process into Socialization, Externalization, Combination and Internationalization (as adopted from Nonaka and Takeuchi, 1995). Gold et.al (2001) grouped the various dimension of knowledge management process into acquisition process, conversion process, application process and protection process.

Knowledge Acquisition

First of all is the process that is involved in obtaining the knowledge i.e. Knowledge Acquisition process. It involves the capture, creation, generation and accumulation of the relevant knowledge from all the possible internal and external sources. The process requires the identification of the relevant knowledge, sources and purpose of knowledge. It enables the use of existing knowledge and guidance on the new knowledge that is required. In the higher education institutions, explicit knowledge can be internal or external to the organization. The information internal to the organization pertains to faculty, students, alumni, administration, admissions, placements, assessments, evaluations, research, training and development, curriculum development, reports, rules and regulations. The others may include the sources outside to the organization government, research and development, legislation, industry, other institutions, etc.

Knowledge Conversion and Sharing

After the acquisition of knowledge, it must be organized, structured, integrated, coordinated and standardized. This process ensures that the information is consistent, useful, representative and adequate. It also ensures that the information is not obsolete and redundant. Nonaka and Takeuchi (1995) provided the SECI Model of the Knowledge creation and conversion. They proposed a model based on the two types of knowledge as discussed above- explicit and tacit knowledge and developed a four ways by which knowledge can be combined, converted, shared and created in the organization. In this model, knowledge is continuously converted and created as users practice and learn. The process should be seen as a continuous, dynamic, swirl of knowledge.

SECI Model

<table>
<thead>
<tr>
<th>SECI Model</th>
<th>Knowledge type conversion</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>Tacit to tacit.</td>
<td>Knowledge is shared on through dialogue, practice, guidance, imitation and observation.</td>
</tr>
<tr>
<td>Externalization</td>
<td>Tacit to explicit</td>
<td>Tacit knowledge is codified into documents, manuals, etc. so that it can spread more easily through the organization.</td>
</tr>
<tr>
<td>Combination</td>
<td>Explicit to explicit</td>
<td>Codified knowledge sources (e.g. documents) are combined to create new knowledge and improve existing knowledge.</td>
</tr>
<tr>
<td>Internalization</td>
<td>Explicit to tacit</td>
<td>The successful transfer of knowledge to a person to enable its use and application.</td>
</tr>
</tbody>
</table>

Source: Nonaka and Takeuchi, 1995
Knowledge Application

The purpose of the Knowledge Management is the effective application of the knowledge created and converted. The process involves the actual use of the knowledge in the operations, working of the organization. The effective storage and retrieval systems enables the organization to quickly access the knowledge (Gold et.al, 2003). The knowledge must be available in the right form, in the right time to the right people while making the strategic and non-strategic decision and thereby improving the quality, efficiency and performance of the organization. The higher education institutions can have the knowledge information systems, repositories where the knowledge is stored and is accessible to the various users for the actual application.

Knowledge Protection and Safety

It is very important to protect the knowledge from the wrong, inappropriate and illegal use. Also certain information is vital to the organization and therefore is to be kept safe and private. So the organization needs to understand and decide what knowledge can be shared and what cannot be. The required efforts are needed to safeguard the knowledge from the misuse and theft. The rules for the use of information and knowledge should be clearly explained to the users. The technological advancements should be directed towards the safety of knowledge and prevention of inappropriate use. The access of the vital and private knowledge should be restricted to the defined and authorized users only. Knowledge is very important resource for the organization and therefore it needs to be valued and protected.

Organizational Performance and Effectiveness

The effective application of the knowledge management strategy and practices in the higher education institutions can result significant improvement in the functioning and operations of the institutions. The knowledge management practices ensure the effectiveness in the services provided by these institutions to its various clients- students, alumni, faculty, employees, industry, society, government and nation. The institute is expected to enhance the students knowledge, learning experience and broadening their thinking and practical abilities. The good reputation of the institute will help it in attracting big, popular and successful companies. The students will be benefitted with opportunity to have better placements and better packages. The effective application of knowledge management will also help the institute to redesign, refine and update the curriculum according to the industry needs considering the national and international demands. The knowledge management practices will help in faculty growth and development, enhancing their knowledge, exposure and contribution to research and development. The good knowledge management practices will increase the Industry- Academia interface and can lead to have the better solutions to the actual industrial problems and greater learning and practical knowledge to the students and faculty.

Conclusion

The application of knowledge management has great relevance to the institutions of higher education. The paper provides the framework for the application of knowledge management in higher education institutions. Being the important source of knowledge creation and dissemination, the higher education institutions have huge potential to apply knowledge management practices to improve their operational effectiveness, competitiveness and quality. In the era of privatization of higher education, the institutions have to raise their standards, quality and add value to the services to ensure the satisfaction of the different motives of various stakeholders of higher education institutions.
References


