Knowledge Management: Current Scenario in Context of IT Students

Preeti .S. Agrawal^{*1}

*1M.C.M- II (Sem –II) MCM Department, GHRIIT, Nagpur. preetiagarwal1024@yahoo.co.in

Abstract: The purpose of this paper is to provide the information on impact of various technologies available based on the application of knowledge management on IT students to enhance their study and career. Educational organizations are the main element of society for the constant source of knowledge. The role of knowledge management (KM) in the educational institutions is critical and important. KM is the application of systematic thinking. KM in educational group can be separately recognized and studied at administrative, research, education (teaching and learning processes). Knowledge assets are very important to all students as they play a major role in their study time.

Keywords: knowledge management, IT

I. Introduction

Knowledge Management (KM) is a discipline originating from management studies, which goes hand in hand with information technologies both as a reason for its essential and as a technical solution for the execution. KM is the organized management of an organization's knowledge assets for creating valuable information, which meet strategic & tactical requirements. It consists of the ingenuities, procedures, policies, and arrangements that help to enhance the storage, valuation, allotment, alteration, and creation of knowledge to students.

The main task of educational organization is the KM. KM in college can be conceptualised as planned management events that support student to collect information or to make use of the knowledge resource that is required for the study to carry out their problem and tasks effectively. These knowledge management practices can help capture, understand and distribute knowledge to students through the application of information and communication technologies or human interaction so that all students can share it.

knowledge management is combined, targeted and continuous technical function which develops activities to capture, catch, gain, produce, organize, store, regain, share, transfer, use, reuse the knowledge assets for creating competitive advantage and added value by improving the quality of decisions and actions and changes in plans aimed at improving the technical, administrative, human resources of any organization".

II. Knowledge Management Model With 3 Pillar's



Figure 1: Knowledge Management Model

III. The Various Applications Of Km Are Mentioned Below

- Knowledge Management for 'Engaging Students'
- Knowledge Management in 'Education System'
- Knowledge Management in 'small scale software firms'
- Knowledge Management in 'Literature Review'
- Knowledge Management in 'Research'

2nd National Conference of Recent Trends in Computer Science and Information Technology G. H. Raisoni Institute of Information Technology, Nagpur-440023, India • Knowledge Management in 'Innovative process'

A. Knowledge Management for 'Engaging Students'

Knowledge management used for educating the students with the use of electronic medium. Through the use of internet, it is possible to educate people online. There are several ways to provide the online information almost about everything. All the information such as books, paper presentations, lectures notes, etc. is delivered on internet. This information is in large amount and having huge size. As it is large in amount, we need a database to manage this data.

B. Knowledge Management for'small scale software firms'

In software service companies, knowledgemanagement can be a highly active practice as it helps capture knowledge through different skill sets. For instance, information regarding common queries about specific technologies (if captured on the Intranet) can help solve common problems. This, in turn, improves productivity. As Indian software service organizations employ software professionals in thousands, employee inputs can be extremely useful for organizational growth. A KM practice should let an organization provide relevant information to each user.

For Example: - Wipro Computer Systems has created a knowledge centre, which allows its employees to learn about new technologies knowledge, have conferences, get technical questions answered and even draft quick sales proposals. This system has led to a decrease in training time and improves in productivity due to better sharing of knowledge between organizations.

C. Knowledge Management in 'Education system'

Knowledge starts as data—raw facts and numbers. Information is data put into environment. Information is freely captured in documents or in databases; even large amounts are easy to retrieve with modern information technology systems. Only when data is joint with experience and decision does it become knowledge. Knowledge management is the process of transforming information and Knowledgeable assets into durable value. It attaches people with the knowledge that they need to take action, when they need it. The concept of Knowledge Management has been around for decades, but most organizations perform it only as theory and not as practically. Knowledge transfer data from one place other place according to requirement of user. Examples include on-the-job discussions, formal apprenticeship, Libraries, professional training, and mentoring programs.



Figure 1: Educational Model

D. Knowledge Management in 'Literature Review'

Knowledge is viewed as an object, or is equated with information access, and then KM should focus on building and managing knowledge stocks. If knowledge is a process, then KM focus is on knowledge flow and the procedures of knowledge creation, allocation, and distribution. A third view of knowledge is an organizational capability, then KM centres on building core capabilities, understanding the strategic advantage of know-how, and creating intellectual assets .

KM practices have taken two approaches or strategies

It relies on the transformation of knowledge from employee's heads into in documents and subsequent management of these documents.

IV. Impact Of Knowledge Management On Students

A. The study of knowledge management in EIs:

In general, knowledge management is the combination of system's elements, processes and relationships between human resources, technology, infrastructure, knowledge and knowledge staffs. The dominant approach of KM is an analytical and evidence-based approach and it emphases on information and technology. At The same time the Systemic approach scan and study the techno- structural, socio – humanistic, climate - cultural factors and knowledge-content within the organization and knowledge management system. Thus, tasks and challenges of knowledge management should be reflected in the sub-systems of education. These sub-systems include administrative, research, human resources, teaching learning, technology, structure and students.

B. The pros and cons of Knowledge management in educational settings:

Educational institutions have a long past in multiple aspects of knowledge to the extent that we can say the main task of educational organizations is knowledge management. Therefore, their performance will be improved. The Wisconsin centred for education research examined how educational institutions could improve the efficiency and effectiveness of their operations through KM and demonstrated how KM objectives could be applied in an educational setting. The educational examples included creating program aids, creating knowledge sources, transforming information into knowledge to improve admittance to the created knowledge, and enhancing the knowledge environment by providing innovative technical solutions for the use and reuse of resources. For example any institute are involved in knowledge creation and dissemination and learning, we examines the applicability of the concepts of knowledge management to higher education institutions in the United Kingdom and identifies a number of existing facilities, systems or projects which contribute to knowledge management in higher education, such as libraries, and electronic collections of learning materials, networks for e-mail communication, and management information systems which provide data on the student profile.

- KM can create innovative relationship and link between work and education.
- It can help students more closely match their talents with current workplace demands.
- It can contribute to the adaptation and integration of new knowledge with the existing one.
- It can contribute to the re-connection of learning with experience, so that a curriculum reflects the "real time", real place" and real problems"

C. KM Opportunities and functions in educational systems (ES):

KM supports Management Processes (administrative subsystem) in education. Educational institution's administration and managerial responsibilities include: attracting prospective students, supplying information about ES resources and programs and providing a rich information-filled environment for decision-making.

- Implement internal processes demonstrating clear policies, simple procedures and efficient work processes of the KM program, and
- Encourage a KM processing for a learning organization that ensures continued vitality of KM processes within the institution, which reflects understanding and involvement from the faculty and staff, in turn enhancing the learning and growth of the institution. KM activities influence internal Processes (teaching and learning) in ES.
- Recommending, implementing and developing policies and procedures within KM models.
- · Ensuring compliance and making recommendations regarding KM initiatives.
- Ensuring implementation and compliance of internal policies through operational procedures.
- Helping to do basic and applied research.
- Creating a plan for regular assessment of student learning outcomes evaluating current programs for relevancy and currency.
- Determining needs for predictable course scheduling or alternative course delivery systems.

Incorporating effective strategies partnerships among resource centers, faculty and staff. More precisely, KM is most effective in learning communities, where participants with a shared vision practice learning by discovering and transferring knowledge. Faculty, students and others transform and transfer knowledge resources naturally through the collegial functions of teaching, research, publication, service and assessment. Effective KM can help academia to realize its goals of preserving resources, understanding the knowledge it possesses, sharing the knowledge among its community and understanding its internal processes to increase the institution's administrative and scholarly activities-specifically targeting knowledge production and increased discovery. In this environment, the knowledge is continuously codified and recorded supporting a

perpetual state of teaching and learning while academic administrators manage the processes of course production and delivery by ensuring that the faculty has the proper environment of transferring knowledge through the curriculum. The following table (table 1) shows the functions and effects of knowledge management on activities of educational subsystems.

Based on this table knowledge management will have positive outcomes for the various elements of educational activities.

Table1: Function	ns and influence	e of knowledge	management	activities in	educational	systems

Research Activities	 Increase ability and effectiveness of researches. 		
(Technical	• Reduce in research time and cost.		
subsystem)	Facilitate interdisciplinary Research.		
	Link industry and market research with universities opportunities.		
	• Improve the quantity and quality of the studies trough linking researchers into Electronic		
	resources, researchers, data banks, databases etc.		
	• Facilitate the implementation of multicultural research in universities and to assist data		
	collection and information gathering with email, web and etc.		
Educational	• Provide quality of educational programs (by identifying and applying monitoring outputs		
planning and	and best practices).		
curriculum	• Improve and update educational planning speedily.		
development	 Improve administrative services related to educational processes. 		
(Technical	• Improve accountability to students and faculty by using previous experiences.		
subsystem)	• Design, plan and coordinate interdisciplinary education.		
Administrative	 Improve services to students and faculties. 		
Services	Improves service to internal and external stakeholders.		
(Administrative	Increase efficiency and effectiveness of services provided		
subsystem)	• Support management Processes Enhance capabilities in the identifying activities.		
	Attempt to remove the centralization in providing services and connect all		
	• Sections into knowledge resources.		
Students Activities	• Improve student cooperative activities and learning by providing the socio technological		
	 Factors for sharing of Knowledge and experiences. 		
	• Create an attractive and flexible environment for continuous and overlapped learning.		
	• Create a context of social growth for student from various cultures and communities by		
	providing cyber climate for their discourses		
Structure	 Use KM to improve their organizations' (education system) mission. 		
subsystem	Preserve organizational assets by optimizing the knowledge within the		
Use	 organization, encouraging a knowledge-creation process and utilizing that 		
	Knowledge for teaching and learning.		
	• Combine both explicit and tacit information .and shared by staff and faculty through KM.		
	• Lead to integration of KM concepts in the academic sphere to enhance the effectiveness of		
	external alliance partnerships and to increase the productivity of organizational operations		

V. Conclusion

For successful implementation of KM in educational sector the research & analysis should be carried out which should be link to the educational value of the study. KM provide friendly & flexible knowledge structure, to the students to enhance their abilities for study at higher level. Using knowledge management techniques and technologies in higher education is as dynamic as it is in the corporate sector. If done successfully, it can lead to better decision-making capabilities, reduced "study" development cycle time (for example, curriculum development and research, gathering study material), improved academic and administrative services, and reduced costs and time.

References

- Alavi, M., Leidner, D.E.: Review: knowledge management and knowledge management systems: conceptual foundations and research issues. MIS Quarterly, 25, 1 (2001), 107-136.
- [2]. Dennis, A.R., Vessey, I.: Three knowledge management strategies: knowledge hierarchies, knowledge markets and knowledge communities. MIS Quarterly Executive, 4, 4, (2005).
- [3]. Schultze, U., Leidner, D.E.: Studying knowledge management in information systems research: discourses and theoretical assumptions. MIS Quarterly, 26, 3, (2002), 213-242.
- [4]. Jennez, M.E., Olfman, L.: A knowledge management success model: an extension of DeLone and McLean's IS success model. In Proceedings of Ninth Americas Conference on Information Systems, (August 2003).
- [5]. Zerega, Blaise. Art of knowledge management. InfoWorld, July 27, 1998, Vol. 20, No. 30, p. 61.

2nd National Conference of Recent Trends in Computer Science and Information Technology G. H. Raisoni Institute of Information Technology, Nagpur-440023, India