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Knowledge Management Application in Technical Educational Institutions for Effective Decision Making

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The rapidly expanding use of technology in teaching and learning, and the transformed economic basis upon which universities are instituted, have caused universities to transform the ways in which knowledge is produced, stored, disseminated, and authorized. Knowledge is at the heart of much of today's global economy and managing knowledge has become vital to companies success. Knowledge is intangible, dynamic, and difficult to measure, but without it no organization can survive. The move from an industrially-based economy to knowledge or information-based one in the 21st Century demands a top-notch knowledge management system to secure a competitive edge. The new source of wealth is knowledge, and not labor, land, or financial capital. It is the intangible, intellectual assets that must be managed. The key challenge of the knowledge-based economy is to foster innovation. The essence of knowledge

management is understanding and valuing intangible assets over tangible that human and intellectual capital are the greatest resources managing the skills and competencies that lie within an organization, and allowing them to blossom allowing people to be the best that they can be; optimizing performance knowledge originates and resides in the heads of people and the two types of Knowledge.

1. Explicit : knowledge that is codified, recorded, or actualized into some form outside of the head.

2. Tacit : Knowledge from experience and insight, not in a recorded form, but in our heads, intuition.

Knowledge management has sparked a plethora of definitions, and a variety of explanations, and encompasses diverse disciplines, which hence gives rise to the different perspectives. An extensive literature review yielded many different models, thoughts, perspectives, frameworks and definitions for KM. This particular research aimed to investigate the application of KM within the TEI context; however this is an under-researched area and a relatively new area for this context. For the purposes of this research, a particular view of KM was taken as a lens through which to view KM in TEIs. KM presents knowledge as deriving from information as information derives from data. Further information to be transformed into Knowledge it requires human intervention hence humans apply their skills, ability, experience, know-how, values and culture via some transformation (comparison, communication, connections, and consequences) to change the information into knowledge Once the knowledge is shared among different group of people that knowledge should be apply for better return and create new knowledge and add new innovation to the knowledge database. If the gathered, stored, created and shared knowledge will not be applied properly the whole process will be in vain. So for proper application knowledge and Knowledge management process should be communicated to user's .The Knowledge Management Process is given as follows.

KNOWLEDGE ACQUISITION OR GATHERING

It comprises discovering existing knowledge to know what we know, gaining knowledge from outside resources and creating new knowledge before gathering and acquisition of knowledge there is process called knowledge identification. In this process one needs to identify the information about knowledge that the organization has and what knowledge needs in order to become more competitive. Only the organization which identifies itself as a learning organization is capable of managing its knowledge.

KNOWLEDGE STORAGE AND ORGANIZATION

The knowledge acquired, gathered and created needs to be organized and store in the form of database which enable to access it at anytime and utilize it. For that application of technology and indexing skills requires along with adequate infrastructure.

KNOWLEDGE SHARING OR DISTRIBUTION

The created knowledge on individual level or gained must be shared and distributed in on organization or society in order to become usable. The main reason of sharing the individual knowledge to entire organization is that knowledge should not be disappear if that employee leaves the organization

WHY KNOWLEDGE MANAGEMENT IS NEEDED IN TECHNICAL INSTITUTIONS

Applying KM in technical education using knowledge management techniques and technologies in higher education is as vital as it is in the corporate sector. If done effectively, it can lead to better decision-making capabilities, reduced "product" development cycle time (for example: curriculum development and research), improved academic and administrative services, and reduced costs. Relying on the institutional knowledge of unique individuals can hamper the flexibility and responsiveness of any organization. The challenge is to convert the information that currently resides in those

individuals and make it widely and easily available to any faculty member, staff person, or other constituent. An institution wide approach to knowledge management can lead to exponential improvements in sharing knowledge—both explicit and tacit—and the subsequent surge benefits. If it is easy for goods, capital, labor and ideas to move around, what do TEIs need to do to stay competitive to ensure the quality of their products and to ensure that a good academic experience is achieved by their students? Globalization and marketisation have therefore forced technical education institutions to think about the way in which they teach, conduct research and manage the institution and its various stakeholders

Till now researchers attempt to study the impact of KM in higher education in secondary education but no attempt is being made to study the application and its possible outcomes in technical education sector so this study is an attempt to fill that Gap.

OBJECTIVES OF THE STUDY

Following are the objectives of the study:

1. To study the impact of KM on institution and its various departments performance.
2. To analyze the role of different departments of the intuition in application of KM.
3. To find out biggest hurdles in implementing KM in educational institutes.

RESEARCH METHODOLOGY

Cluster sampling technique is used for research in this paper cluster of Govt. established and promoted technical institutions are being chosen of Punjab state for meeting the objectives. The names are:

1. Malout institute of Management & Information Technology, Malout
2. Saheed Bhagat Singh State technical Campus, Ferozepur
3. Beant College of Engineering & Technology, Gurdaspur

4. Baba Hira Singh Bhattal Institute of Engineering & Technology, Lehragaga

Unstructured interviews were conducted which include personals of targeted institutions. All technical education institution in India is a sample population of our study

DATA ANALYSIS AND DISCUSSIONS

KM Application in Strategic Planning

After our research it is very clear that today every technical institution wants to place them in education sector in a way to secure a competitive edge over other institutions by news paper rating or through business magazines. There is an increased demand for new strategies that help management institutions meet external and internal demands. This is not possible till institution is not using the information as a strategic tool to cover the whole market of their customers. So, for implementation of the strategic planning it is mandatory that an institution gather all the information from each and every department and spread in outside world that what they are delivering.

KM Application in Curriculum Development Process

After interviewing the faculty of the selected institutions, faculty says that by introducing a web based intranet application that can share knowledge regarding courses, programs, research, all academic related information between faculty, students and administration will definitely develop a high class curriculum development process, this can introduce the following things in the technical institutions:

- Students query for the marks subject wise or program wise in a term.
- Students submit faculty feedback; select the elective courses for various terms or take online quiz/tests.
- Students submit assignments online to their faculty directly or submit to academic program office.
- Students verify attendance records for any course or program.

- Students access timetables term to term. Student handbook, time table and course outlines are available through this interface in the intranet server.
- Faculties assign marks and award grades to students.
- Grades are visualized by line, pie and bar charts.
- Faculty build questions bank to design and conduct on line quizzes.
- Quiz is evaluated automatically and marks are submitted. Notices regarding schedule of quizzes are mentioned.
- Faculties check the feedback for their respective courses. Students and faculty can view complete reports pertaining to subject marks, term marks, program marks year wise, course wise, term/semester wise.

KM Application in Library

Many libraries nowadays using online learning applications for the better flow of information to the end user from resources like e-books, e-portals. KM is used in library in such a way that the gap between user and the information source will be minimum. Proper utilization of information that is available in the library is available to its users so that no unused information is there in the library is the main propose

KM Application in Administrative Services

The claim, that management institutes possess a state of the art modern information infrastructure may be true locally. Following are the possible uses of KM in administrative services:

- The recording of computer usages by students at labs
- Security control systems at main entrance for incoming/ outgoing of vehicles registration forms for various courses
- Salary slips generation for faculty and staff and intra and inters department circulars and notices are based on paper document with very little Information Technology (IT) support.

MAJOR FINDINGS AND SUGGESTIONS

- Prior to KM implementation, unused information in technical institutions leads to wastage of institutional and human efforts.
- KM leads to timely, facts based and speedy decision making.
- Due to technological development in outside world need for speedy information sharing is felt in all technical institutions in Punjab.
- There are no as such difficulties being faced by technical institutions while implementing the KM as they are already technical professionals.
- After implementing knowledge management in administrative services are being more effective and time saving.
- Students in technical institutions demands for these kinds of services as they are more inclined towards technological development due to their subject area.
- KM act as a torch bearer for every department in the institution as all information is there to use on sharing basis nothing is hidden as far as knowledge is concern.
- Government established technical institutes in Punjab facing a cut throat competition from private institutes so KM helps them to face the competition by developing competitive edge through better working.

CONCLUSION

It is become necessary to adopt KM technique in TEI. KM will improve image of institutions and with use of IT tools it will become more efficient and hence reduce turnaround time in every aspect of institutions. The sharing information always give better performance to institute because it clears all the hidden facts and this provide smooth running of the organization and this van happened only with the help of KM. use of technology in today's era further eased the

implementation of KM as it provide impetus in flow of information.

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