ICT ADOPTION, KNOWLEDGE MANAGEMENT IN HIGHER EDUCATION

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ABSTRACT :

In an era of Knowledge based society, where all round socio-economic development of the country is aimed to be achieved by adoption of the most recent technological and informative tools, of which management and computerization are the prime components. With respect to Indian Higher Education system education at the pace of the learner and at the 'Space' of the learner (through internet etc.) is a vibrant example.

Even a literate person flabbergasted, due to his inability to cope with the abundance of information that is doled at his disposal, due to these modern interventions. Indian Institution of higher learning therefore need to bear in mind these impacts while attempting to accept the modern management and computerized interventions into their systems.

The investigator identified Organizational support, Leadership, Training & development, Resources are the predominant themes of ICT adoption process in higher education. To effectively integrate ICT tools into teaching and learning practices, faculty must not only learn how to use technology, but also fundamentally change the way they teach.

This paper also throws light on knowledge management and its role in higher education. For effective restructuring the existing Higher education, technology culture and information culture should go hand in hand.

Keywords : ICT adoption, Knowledge management, Higher education

Introduction :

In recent years, there has been considerable focus on faculty use of technology (Keengwe and Anyanwu 2007) and the impact of technology use in higher education on student learning (Waxman et al. 2003). Although technology is pervasive in education, it has not been heavily infused in the activities of teaching and learning (Grabe and Grabe 2008). McKenzie (2001) examined the standard practice of higher education institutions in buying new and complex technologies and simply making them available to faculty members without building appropriate infrastructure to support technology adoption and integration.

ICT adoption :

Adoption can be seen as a process of information diffusion, culminating in a rational choice to use (or not to use) the new technology this perspectives relies principally upon a view of learning as information acquisition (Mayer 1996) a prospective user engages in a process of inquiry concerning the technology (Hall and Hord 1987). After learning more about the pros and cons, the user (or group of users) commits to a testing, followed by a full scale adoption of technology. Further, technology adoption can be seen as the assimilation of new cultural tools and practices.

Organization support :

At the organizational level, higher education institutions should first complete an organizational pre-assessment in order to determine the state and culture of the organization and how ICT tools best and serve the needs of its users. This can be completed through organizational development strategies such as action research. The pre-assessment will determine if the organization has the proper equipment, support infrastructure, resources, human resources, and structure to adopt a technological innovation. It is important to conduct the pre-assessment before undertaking the adoption of a technology device.

Developing a vision and corresponding goals is important, but if the appropriate policies and procedures are not developed, the goals and vision will never

become a reality. Conduct and analyze the technological needs of the organization.

It is also critical to identify the gap between the technology vision and policy and its present situation. Closing such gap will then become the focus of planning for ICT adoption. If the needs assessment is conducted effectively, one should not only discover the strengths and weakness, but also opportunities and threats. Administration should support and encourage the faculty in their endeavors by removing roadblock and barriers in the technology adoption process.

Leadership :

Organization leaders need to have strategies and practices for effective change management structures. They need to think beyond providing more hardware, software and internet. The purpose of evaluating the implementation process using in developing the adoption initiative is to get timely feedback and constructive criticism on any revisions, adjustments, or weaknesses in the process. Evaluation also helps to ensure that the adoption plan is aligned with the overall mission, vision and organizational goals and procedures.

It is also important to identify technology leaders who have an understanding of both technology tools and processes and how they fit with teaching and learning practices. Individuals from different levels in the organization can relate to each other in a safe and meaningful manner to build relationships and find creative ways to continually improve their teaching, the organization and the student.

Training and development :

Training and development is very essential to the success and failure of technology adoption in higher education. Involve all Stakeholders, faculty, administration, trainers, and students. Administration must provide support, encouragement and extend resources to the continuous process of training and professional development. A key point to remember is that all training and development plans needs to be connected to the data collected during the needs assessment stage.

In order to effectively adopt technology for faculty use, administration must

facilitate an environment that helps faculty to familiarize with technology and its potential uses, and to learn and use technology effectively. This step involves not only technology training, but also instructional training. Make sure the training is relevant and current to the need of the faculty. Do not rely entirely on online training in some cases faculty need face-to-face interaction to learn effectively.

Resources :

Provide faculty with the relevant and current technology tools, best practices and strategies. Provide faculty with instructional design support personnel and timely technology support assistance. Finally, provide grant or supplement funding to support faculty adoption of ICT tools.

Knowledge management :

Knowledge management is the process of transforming information and intellectual assets into enduring value (Kidwell et al 2000). Effective knowledge management programs therefore tend to identify and leverage the know-how embedded in work, with a focus on how it will be applied. The challenge in Knowledge management is to make the right knowledge available to the right person at the right time for assistance in the right kind of a decision.

Knowledge Management and its role in higher education :

Knowledge management concept in education makes eminent sense- a wonderful combination of good intuition, practical know-how, and a feel for what might be best described as an asset of emerging theories focusing on the effective management of knowledge in higher educational institutions. Assuming simplistically, that Knowledge management applies systematic approaches to find, understand and use knowledge to create value.

In view of the present Indian scenario we therefore believe, that knowledge management initiatives can benefit Indian higher Education System because

*   The institutions usually possess a modern information infrastructure.

* Sharing Knowledge with friends, peers and scholars.

* Accessing Knowledge from available sources as fast as possible.

Conclusion :

The adoption of ICT throughout an educational institution cannot be seen as separate from the learning process that all members of the organization go through as they learn about their new roles in relation to technology, as they struggle to transform their perspectives toward technology in general, and as they begin to appreciate the value that it can add to the learning process (Sherry 1998). For faculty to effectively adopt ICT for teaching and learning practices, they need to familiarize themselves with the technology, utilize the technology, integrate the technology into their teaching, transition to the reorientation phase, realign teaching and student learning outcomes with the technology, and finally become revolutionized in their teaching practices where technology usage is evident, and the process facilitates the quality teaching and active student learning mission. The need of ICT based Knowledge management initiatives is a potent enabler for restructuring the existing Higher education system in India.

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