Service Delivery Through Knowledge Management In Higher Education

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ABSTRACT:

Service sector like higher education offers various programs to develop the students which can add value to the society. People, knowledge and technology plays vital role in attaining high service quality, economic development and growth. Managing these resource and capabilities supports the organization to create competitiveness among other rivals in the industry. Knowledge has being as core part to create human competence. Managing this power in the most effectively and efficiently leads the organization to attain competitive advantage leveraging the resources and capabilities for achieve its objectives. KM techniques and tools can be applied in higher education system improve academic services (teaching- learning process). This paper highlights some of the issue interlinking knowledge management with higher education service development giving a framework for adopting KM in higher education providing some of the KM based solution for higher education institution. The KM model indicates giving understanding about the approach to use appropriate development for providing service delivery and development in higher education.

Keywords: Knowledge management, Higher education, Service delivery

Introduction

With the rapid development of information and communication technologies (ICT) in the society the growth in the availability, accessibility and sharing of information and quality of the information has taken major place allowing relatively easy process than ever before. Information and communication technology plays a crucial role in organizing knowledge, both in order to enable sharing, collaboration, categorizing, dissemination and storing of knowledge which can later be retrieved and accessible as meaningful across different contexts (Mathew 2009). The people and technology plays a vital role in attaining high economic development and growth. The people of the country pass their knowledge resources to the next generation and simultaneously the system passes over. Effective flow of knowledge is only possible through the people through appropriate technology and mutual understanding (Egan 2003; Geraint 1998). The people and technology are combined to achieve sharing and regular flow of knowledge. KM is dependent directly on people and at some percent on technology. People remain vital in the knowledge sharing and because of the factor and its combination with technological and organizational aspects, knowledge management initiatives fails. The higher education system of any country nurtures young talents to practice the learned outcomes. The universities, colleges, schools and other educational institution are the places where knowledge has been acquired. Does the knowledge management (KM) and it practices are applicable in universities and colleges? If information and knowledge are considered to be valuable in all spheres of life then it must be effectively managed for the growth and development. This concept of knowledge is particularly important and applicable in the knowledge based industry especially in higher education where information and knowledge plays important role in teaching and learning. Knowledge Management (KM) is a response to these challenges, mostly seen in the business world and to some extent, in education.

It has been discussed and agreed that the higher education institution (university, colleges, ...) are the places where knowledge sharing has been maximum done. Beyond that knowledge has been added to the pool. Higher education institute are using many practices which help them to develop, reproduce, innovate and improve knowledge sources. But still at the infant stage KM practicing higher education

has to pay much effort to get expected results. We understand and believe that being at the initial stages KM in education institution is challenging but development initiatives to share knowledge for solving problems, decision making and support businesses and management. This article highlights some of the concepts, application of KM in relation to the practices which can be applied by higher education institution which will improve overall development and support the institution to enhance growth.

Basic Concepts Of Knowledge And KM

Knowledge management is essentially the process of facilitating the system by which knowledge is created, shared and used in organizations with specialization. It is sometimes misinterpreted and used in some of the organization for setting up a new department or getting in a new computer system. It involves making small adjustment or changes in the organization processes and system to the way everyone in the organization work for the improvement of the overall productivity.

"Knowledge is the foundation for organization and human competence intended to create advantage". Managing these intangible resource and capabilities supports the organization to create competitiveness among other rivals in the industry. The organization ability to identify critical knowledge resources and use them in objectively in decision making and problem solving enhances competence, develops selfconfidence and leads to achieve productivity. Knowledge can also be defined as an integration of experience, values, ideas, information, contextual sequence of data, insight, indicators, development information, decision making criteria that provides a framework for evaluating and incorporating new experiences and information. Knowledge can be captured and enhanced through sharing, education, training, work experience, dialogue, participation, group interactions etc both internally and externally. Implementing knowledge sharing culture in the work environment is considered as the most important factor in an organization. Encouraging these factors through organization knowledge culture, polices, strategies, technologies, people leads to gain experience. 'Knowledge' is considered to possess key properties like experience, truth and decision making, and is typically associated with so-called knowledge- intensive firms (Alvesson, 1995:6). "Knowledge" is the awareness and understanding of a set of information and ways that information can be made useful to support a specific task or reach a decision (Stair, and Reynolds 1998). Knowledge involves the link people make between information and its potential applications and, as such, knowledge is closer to action than either information or data (Dixon 2000; Davenport and Prusak 1998). Knowledge can also explained as the information that is linked with each other representing some meaning. Knowledge in an organization is what the employee/ worker in an organization know about their products, policies, environment, market, customers, value, processes, errors, and successes.

Dimensions Of knowledge

Nonaka and Takeuchi (1995) suggest that knowledge, unlike information, is about beliefs and commitment. Many authors and researchers have tried to determine the accuracy, creditability and methods of knowledge. It has been suggested that the tacit knowledge which exist in the minds of the employees are difficult to codify and are intangible. The knowledge can be categories as tacit knowledge existing in personal, context-specific and therefore hard to formalize and communicate (Polanyi, 1966). Explicit knowledge is more formal and systematic and can be easily articulated and transferred to others. Explicit knowledge can codified form of knowledge which is readily available in formal and contemporary form and can be easily transferred through various channels and can be transmitted in any form. Nonaka (1991) refers explicit knowledge as "formal and systematic". It is accessible in the form of letters, reports, memos, literatures, etc in the organization and can be captured only by proper documentation. They are set in rules, systems, procedures, techniques, methods which can be codified easily and can be adopted from the existing system. Explicit knowledge can be documented and can be used as best practices and are used to formulate the strategies.

Tacit knowledge is knowledge residing in individuals. Tacit knowledge can be subconsciously applied differing from individual to individual, difficult to articulate (Polanyi, 1966), developed from self action and experience. Nonaka and Takeuchi (1995) explain tacit knowledge as knowledge that comprises experience and work knowledge that resides only with the individual. Tacit knowledge can be defined as "a form of knowledge that is highly personal and context specific and deeply rooted in

individual experiences, ideas, values and emotions" (Gourlay, 2002). Tacit knowledge is obtained through experience, education, training and often difficult to articulate. It is highly invisible and confined in the mind of an individual. Nonaka and Takeuchi (1995) believe that unless shared knowledge (Tacit) becomes explicit it cannot be easily leveraged by an organization. Transformation of knowledge from tacit to explicit form increases its usability and visibility. The combination of the knowledge has been utilized by the organization which can be an asset for the organization to create advantage. The existence of the knowledge and the development of knowledge sharing culture with learning environment will create opportunities for innovation and creativity. The organization should capture, store, filter and disseminate the knowledge supporting decision making and create learning environment. The learning culture in an organization can be created with the help of knowledge workers backed with technological and management support encouraging the knowledge sharing and dissemination which will act as a great support in long run function, problem solving, continuous development and growth leading to create competitiveness. Other forms of knowledge (Mathew, 2008) can de classified under different forms are stated below:

- Factual knowledge: Knowledge based on knowing the fact
- ♦ Situational knowledge: Knowledge based and acquired on particular situation (for eg: doctor when diagnosing specific patients)
- *Procedural knowledge*: Knowledge by knowing the procedures to be followed or to be adopted (technical training)
- Social knowledge: Knowledge acquires and addressing social issues like social network (network, relationship, emotion)

Knowledge Management

Knowledge Management (KM) is a process that helps organisations identify, select, organize, disseminate, and transfer important information and expertise that are part of the organisational memory that typically resides within the organisation in an unstructured manner (Turban & Aronson, 2002). Sharing and dissemination of knowledge is considered as the most important in KM process in the organization. Knowledge dissemination and responsiveness to knowledge are cited repeatedly as the most effective way to a competitive advantage (Oxbrow, 2000; McEvily, Das & McCabe, 2000). The knowledge is shared among the employees within the functional unit and others supporting the knowledge building. Greengard (1998b) recommended that each functional department have their own responsibility in knowledge flow, transfer and process. The primary objective of knowledge sharing is to explore the existing knowledge and generate new for organization learning. Top management should encourage the knowledge sharing culture within the organization which will play a major role in contribution of knowledge process and determine the knowledge flow. Novins (2002) kept the view that KM can be thought as packaging the right content and delivering it to the right people who can make use of it at the right time. The knowledge management system is the framework of an integration of organizational elements in organizational culture, organizational information technology infrastructure and the organization's store of individual and collective experiences, learning, insights, values, etc. (Allee, 1997).

Knowledge has become the dynamic force in our global competition. Managing this power in the most effectively and efficiently leads the organization to attain competitive advantage leveraging the resources and capabilities for achieving its objectives. Dunn and Neumeister (2002) define KM as a systematic approach to managing and leveraging an organization's knowledge asset, which may include knowledge of the organization's customer's, products, market, processes, finances and personal services. Knowledge management is a systematic approach which will combine the ability of the resources and intellectual capital encouraged through various means and method for knowledge sharing which will enable the organization to depend on its own sources encouraged through various means and method for knowledge sharing which will enable the organization to depend on its own sources and gain competitive advantage through effective decision-making, efficient implementation, and innovation. It has also been predicted that by way of sharing, people within an organization share their

thoughts, beliefs, knowledge and experience, mutually establish their common understandings (Yang, 2007), trust, confidence and mutual relationship which can encourage the team cohesiveness and motivation within the group to achieve the set goals. The knowledge management process involves many sub processes including knowledge creation, knowledge capture, knowledge codification, knowledge transfer and knowledge sharing which is used for faster decision making and innovation in the organization.

Need Of KM

Studer (1998) explained as a knowledge based system as engineering technique. The technique uses knowledge and its management helping the organization to develop and use widely its expertise throughout the process of its business, especially in the area of production, marketing, design and so on. Knowledge management is also needed for various reasons to leverage experience and expertise of professional (academicians and other) and acquire knowledge which is at the possibility of diminishing at different level; reduce the duplication of the work and replicating the business process and decision making criteria's; alters strategic decision towards better results by reducing loss of information and knowledge; reduce complexity at every step repeated during the process; improve rate of innovation and increase competitiveness; reduce informal method of process to formal method of development; reduce time for decision making process; leverage knowledge and information throughout the life long tenure of the organization and in some case for industry etc.

KM In Higher Education

"Higher education institutions have significant opportunities to apply knowledge practices to support every part of their mission" (Kidwell et al 2001). KM techniques and tools can be applied in higher education system to improve the overall development. The areas of application involve research, curriculum development, academic services (teaching-learning process), alumni services, formulation and development of strategic plan, administrative services (student and alumni), access to potential customers and other stakeholder, library services, development programs etc.

KM In Higher Education - Implementation Agenda

KM initiative and implementation at higher level of education is not an easy task. The researcher conducted the study to find various implementation challenges at higher education institution. The results are as follows:

- ♦ Lack of awareness and learning about KM
- ♦ The adoption of new system provides resistance
- Short of finance for implementation of KM application
- ♦ Lack of understanding about the appropriate technology used for implementing KM in practice
- ♦ Lack of Top management initiative
- Adoption of new system will create additional cost
- Lack of motivation and initiatives
- Inability to determine the advantage created after using KM system
- ♦ Shortage of resources and expertise
- ♦ KM application may reduce work efficiency under situation
- System hanging can create big problem

♦ Training and time availability, etc.

Characteristics Of Knowledge Management System

Major characteristics which highlight KM process effective and efficient in term of organization and its development are:

- ♦ The KM process should address the business problem and support for decision making and problem solving providing flexibility and innovation.
- ♦ The KM process will continuously adopt improvement and build on the intellectual capital to provide and adopt practices for achieving higher performance and productivity.
- The knowledge which is share and transferred should be well developed for easy retrieval and adopting of the system.

Applying Knowledge Management In Education

Applying KM in the education supported by ICT will be added advantage for the institution. In the recent years, the education institutions are looking forward for the growth in form of online courses, cyber colleges, and virtual universities around the world which provides tremendous opportunity for the potential students to opt for variety of courses at the click of the mouse. Petrides & Guiney, (2002) explained that KM can be used to support educational administration, which in turn supports teaching and learning. With the combination of KM and ICT tools, the education institution will be able to provide better educational facilities, administrative services, strategic planning process, student retentions, teaching-learning process, cost effectiveness, data transfer, collaboration, research, faculty development, admissions, expand new web based offerings; students and alumni services, research process curriculum development, work analysis etc. An institution-wide approach to KM can lead to exponential improvements in sharing knowledge - both explicit and tacit, subsequently surge benefits.

Reasons For Adopting KM In Higher Education

The study conducted by International data Corporation and knowledge management magazine (2001) among various companies which represented the reason for the use and adoption of KM are: Retain expertise of personnel; Increase customer satisfaction; Improve profit, grow revenue; Support ebusiness initiative; Shorten product development cycle; Provide project workspaces. Other reason can be included as sharing knowledge among different stakeholders in the university/ higher education institution; Navigate the complex issues; Access to database and resources; Project implementation and reporting; Faculty members and administrative issues; Assessment and evaluation; Knowledge development; New knowledge domain

The researcher conducted a study for finding some of the reason which can elaborate the adoption and application of KM in higher education responded like: 1) Improve student accessibility towards learning; 2) Develop a action plan to improve teaching process; 3) Support students and teacher to adopt better pedagogical tool; 4) Support universities/ college / institution to improve databases, records, alumni services and management; 5) Provide research base education at higher level for development; 6) Assist academic staff with new skills; provide training, orientation to newly recruited teachers etc.; 7) Fulfill increased demand for new strategies that help management institutions meet external and internal demands; 7) Widen the scope of education to reach different areas and subjects; 8) Develop student and teachers to reach different areas and subject; 9) Retain expertise staff and academician; 10) Collaboration and joint research, implementation of project, faculty student exchange etc.; 11) Sharing knowledge among different components; 12) Internal documentation management; 14) Continuously keeping abreast strategic position in their rating; The study has been conducted in public, private and other higher education institutions who are offering various courses at different level. The name of the institution has not been revealed where study has been conducted due to policy reasons.

It has been clear that the KM at higher education level of teaching, learning, research and other areas will be the better option for various reasons. In the light of the other reasons higher education institution are linked with the information and communication technology with KM. They are reasoned as: supporting web based technological learning; retain expertise & workforce with the technology based on KM application; cost effective use of technology to reach the students, potential admission and other related stakeholders; technology based support to business, industry including manufacturing and service organization; technology based learning where the higher education institution has lessened the country borders and cultural restriction; creating competitive and sustainable advantages; responding the requirement of the environment issues by technology based analysis; support the academic and other staff member with technology for faster and effective way for development; improve overall profit / revenue to meet the need.

Challenges For Implementing KM

♦ Lack of KM tools and techniques

During the past years very less number of training and development program has been developed to equip teacher and researcher with KM tools and techniques and technology based learning. Need for development in various higher education components for searching, extracting, sharing, transforming (tacit to explicit knowledge), dissemination etc. for easy adoption of KM. The individual component of higher education system will affect overall research and education.

• Relative low level of awareness and understanding

The professional in higher education system are short of awareness and understanding in the use of information and technology for systematic and need based usage (Fuller 1996). This technical aspect shortens the scope of KM application.

♦ Relative "undeveloped" database

The academician and other user are not readily accessible to the databases due to undeveloped area. The major form of access may be electronic and technological forms which require complex search and relative time consuming approach. Lack of availability of database and knowledge at easy access will create inefficiency.

♦ Lack of implementation of research based system

The higher education experts are using single way of identifying and developing the educational system. They should concentrate on implementing research based system and act upon the initializing research based system design identifying the multidimensional areas and problem at various levels.

The KM application will be basically focusing on the quality of the organizational process. The KM quality of the process will be based on effective capitalization of the available knowledge in both qualitative and quantitatively to add value for the overall contribution. The outline principle of the KM is to raise the value with the existing knowledge and intellectual capital creating competitive strength. The primary focus of knowledge management is to acquire, store, analyses, distribute and create new knowledge to add value of its product and services. Knowledge Management in Education may face several barriers that make it difficult to use and share data and information effectively in educational institutions (Petrides and Nodine, 2003). These barriers include: *Lack of Staff; Disorganized information collection; Leadership; Lack of Integration of Technology; Unclear Priorities; Distrust of Data Use*

Some Other Problems

Implementing KM in an higher education institution (HEI) can face potential problem of culture and language differences (Kimble et al, 2000), geographical distance, other than the technological and place constraints. The problem varies form organizations to organization based on different aspect existing in the HEI. Some of these constraints are:

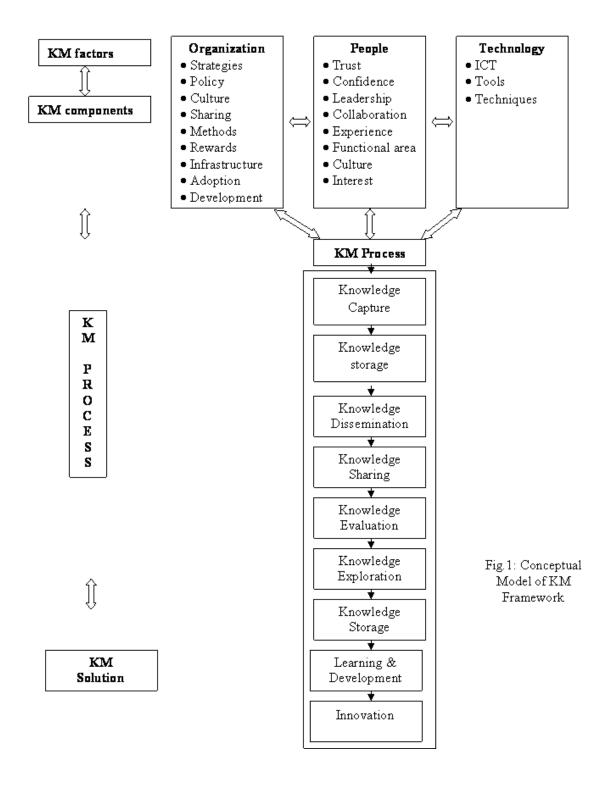
- ♦ Space and time constraints: Geographical space remains the major constraints with regards to the ICT support and other tools for applying KM in the regular process. Researches (Jarvenpaa and Leidner, 1998; Hepworth, 1989; Hildreth et al, 2000; Li, 1995) have already linked the space related constraints with the application of KM. Despite the rapid pace of ICT and the ability to move data across distances has not been fully utilized omitting social interaction due to the fact that people need social relationship as a basic need and cannot be removed from the main frame during implementation of KM. Note: It has been assumed that KM is applied throughout 24x7 for achieving its objective. It has been a fact that people and process will still be affected to confine with the time.
- Face-to-face interaction: Another problem which can be included is face to face interaction which may create constrains for knowledge sharing among the employees. Normally, human being as social element interacts with others, put trust and confidence based on the mutual interaction and relationship. The relationships are established during social interaction and face to face interaction which are duly lacking in KM especially when the geographical distance is large. In order to solve the problems, technologies such as video conferencing, MOOs, have been used for virtual presence. However, virtual interaction and collaboration find less effective, than activities performed in face-to-face interaction. The issue of trust and ambiguity that surrounds identity in the virtual world are most easily overcome in face to face interaction (Kimble et al, 2000).
- ◆ Language and cultural barriers: Effective communication can only take place when the language barriers can be solved. Language can cause possible communication problems in online communities where people come from countries that use different languages especially during the sharing and transfer of information from far distant places. Although English has established itself as the worldwide scientific and business language, many people still lack the proficiency in English to understand and communicate complex concepts and reasoning (Van den Branden, 2001). Cultural factors may also act as barriers for knowledge management process especially during creation, and sharing among different users and work group.
- ♦ Collaboration and trust: Importance of trust in an online community has been emphasized by researchers (Handy, 1995) and with the trust collaboration and exchange of knowledge can be possible. Galbreath, (2000) suggest to create domains of knowledge across departments that share academic interests or disciplines, create institutional knowledge networks and networks with other institutions and corporations. Social interaction and personal contact will support the establishment of trust and intimate relation which will be conducive to the KM process. Nonaka, Von Krogh and Ichijo, (2000) highlight that climate that fosters trust, care, and personal networks among employees is one of the most important conditions for high level of collaboration and knowledge sharing.

KM Framework In HE

With the globalization of the market at micro level the higher education institutions and universities and are attempting to provide high-quality program to students along with that to attract large number of potential students regardless of location. The higher education institutions are facing high competition in local and international market due to globalization and rapidly changing technologies and increasing demand for quality education at affordable price and convenience. The global society realize the fact that the knowledge is one of the most important tool for stay ahead and consequently, knowledge management gain high importance especially in knowledge industry like higher education. "Knowledge Management in Higher Education" has become an integral part of the system with holistic

commitment from all faculties, department and session constituting all stakeholders of the university. Knowledge management in educational settings should provide a set of designs for linking people, processes, and technologies and discuss how organizations can promote policies and practices that help people share and manage knowledge (Petrides & Nodine, 2003). Knowledge Management plays vital role in the knowledge industry involving capture, sharing, filtering and dissemination of knowledge for value derived process.

The KM framework (fig. 1) defines the relationships between KM factors, components and process giving understanding about the approach to use appropriate development for the higher education. KM framework constitute of KM factors acting as the backbone and act as guiding principles providing directions for a sound KM implementation. In absence of any of these factors, KM system fails to achieve its objective having difficulty to proceed further. Change in any of the KM factor will change in KM solution and results. The components follows KM factor with much deeper understanding and divisions. KM process constitutes of KM factor and KM components resulting in KM solution for the particular problem, learning and development through innovation. KM process includes knowledge capturing, knowledge storage, knowledge distribution, sharing and exploration resulting in KM solution and decision making. In higher education the KM framework results in continuous learning, development and innovation. The knowledge being capture through research and development will be used as intellectual capital enhancing the process of getting knowledge from tacit to explicit for easy retrieval and usage.



Benefits Of KM In Higher Education

- ♦ KM in teaching and research
 - o Achieve effective delivery
 - o Collaboration between various component, internally and externally for teaching and research
 - o Curriculum enhancement
 - o Effective use of technological aids for effective course delivery
 - o Increased adaptability for research, funding and commercial opportunities

- o Leverage previous research findings
- o Effective training and development process
- o Minimize replication of activities
- o Reduce cost of overall research
- o Reduce risk of uncertainty

♦ KM in Development process

- o Create quality practices and program outcomes
- o Enhance evaluation and administrative activities
- o Develop teaching and learning process to achieve quality outcomes
- o Enhance faculty development and other development programs
- o Develop external and internal relationship
- o Foster innovation by sharing
- o Ensure proper information transfer
- o Improve faculty, student, alumni and staff affairs and services
- o Develop and facilitate inter departmental relationship
- o Improved adaptability to teaching and learning process
- o Technological advancement

♦ KM in strategic planning

- o Develop competitiveness and competitive response
- o Support in administrative strategic planning
- o Enhance strategic decision making (resource allocation)
- o Improve performance indicators by monitoring and assessment
- o Support in financial strategic planning (budgeting)
- o Enhance students-faculty retention rates by recognizing the value of employees
- Reorganize operations and reduce costs by eliminating duplication and redundant processes
- o Improve service by reducing time
- o Boost services for quality delivery
- o Improve sharing and strategic collaboration
- o Support informational strategic planning

Other Benefits Of KM

Other benefits of KM in higher integrates academics, developing administration modules, faculty feedback, provide access and develop online resources for teaching and learning, evaluation of courses, handling students query, assignments submission, verify records and reporting, interface with intranet, grading, build and design programs and courses, integrated with other campuses, conduct and monitor examinations, counseling, information management, technological development, staff management, library development etc.

The major objective of KM is to acquire and sharing knowledge and transfer of individual experience and knowledge to organizational capabilities (Yang, 2007). Higher the rate of individual knowledge sharing and transfer of individual knowledge transfer, higher the strength of the organization for achieving better learning. The major impact of KM in the higher education is more likely to affect the teaching-learning and research at both department and at institutional level. The knowledge sharing and transfer depends on various factor ranging from individual to organization and various other factors like incentives, motivation, concentration, beliefs, values, culture, cohesiveness etc. Studies found relationships between education levels and experience, a high degree of education with a lot of work experience, thus sharing this experience with others depended on the personality.

Implementation Of KM

The higher education institution should take high care while implementing KM tools and techniques. The forwarded recommendation suggests some of the thing that should kept in mind while implementing KM techniques at institutional level:

♦ Rapid implementation

The institution should develop smooth and effective strategy and action plan to implement KM application. Pilot projects of KM application will help to create awareness and to measure the impact in terms of creating sustainable competitive advantage, overall cost benefits, easy adoption of the system and credibility

- ♦ Implementation of appropriate ICT tool to support knowledge sharing and transfer.
- ♦ Develop institutional infrastructure and strategy

The institution should adopt specific technology, develop overall infrastructure and make strategy for implementation, measurement, support activities and efficiency. The strategy should be well framed for easy adoption of KM with low risk.

- Sharing relevant cases, databases from internal and external sources having quality and standards
- ♦ Top management to achieve high level reliability

For the successful use and implementation of KM the top management achieves high level of reliability for the success of the approach. This can be only created with understanding and measuring the impact in various terms like financial, cost reduction, relationship, development and benefits.

♦ Development of Knowledge team

The team should be set up for implementing KM project essentially at initial stages for planning a role of a mediator which exert the supportive role among the employees in the institution.

- *Identify well defined practices* and knowledge reuse for exerting new result and performance.
- ♦ *Redefine the KM process*

The development of the action can be redefined after implementing and adopting new uses and areas related to KM.

Conclusion

'Knowledge' is considered to possess key properties like experience, truth and decision making, and is typically associated with so-called knowledge- intensive firms (Alvesson, 1995:6). The combination of the knowledge (explicit and tacit) has been utilized by the organization which can be an asset for the organization to create advantage. The existence of the knowledge and the development of knowledge sharing culture with learning environment will create opportunities for innovation and creativity. Higher education institutions have significant opportunities to apply knowledge practices to support every part of their mission" (Kidwell et al 2001, P 24) In the recent years, the education institutions are looking forward for the growth in form of online courses, cyber colleges, and virtual universities around the world which provides tremendous opportunity for the potential students to opt for variety of courses at the click of the mouse. The primary focus of knowledge management is to acquire, store, analyses, distribute and create new knowledge to add value of its product and services. "Knowledge Management in Higher Education" has become an integral part of the system with holistic commitment from all faculties, department and session constituting all stakeholders of the university. KM model will support implementation of KM process as the backbone and act as guiding principles providing directions for a sound KM implementation in higher education.

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