

## Knowledge Management Practices in the Higher Education Sector with Special Reference to Business Schools

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### Abstract

Higher education institutions are creators and disseminators of knowledge, yet, it is questionable whether they follow scientifically established knowledge management practices. The paper attempts to review the knowledge management practices appropriate for business schools and highlights key enablers and barriers. There is a special need in business schools versus rest of the higher education ecosystem in respect of knowledge management in business schools, given the differences in the value of diverse kinds of knowledge and their storage and retrieval. This paper lists the major parameters of knowledge management relevant to higher education and presents a framework for managing knowledge as a strategic tool for developing and maintaining sustainable competitive edge for business schools. It observes that business schools hold in higher regard current and up-to-date applied, actionable, and context-rich kinds of knowledge, whereas other constituencies of a university value less transient kinds of knowledge. Also, knowledge in business schools is found more in networks than in nodes and hence effective leveraging of such knowledge calls for different strategies. The integration with knowledge ecosystems outside the institutional libraries is crucial. The nature of knowledge expected by business schools is scholarly yet rooted in practice. The contexts provided included globalization, higher education internationalization, and there is special mention of their implications for knowledge management.

**Keywords:** Knowledge management, competitive advantage, globalization, educational strategy, organizational culture, higher education, business schools.

## Практика управления знаниями в секторе высшего образования с акцентом на бизнес-школы

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### Аннотация

Высшие учебные заведения аккумулируют и распространяют знания. В исследовании анализируется практика управления знаниями, свойственная бизнес-школам, выделяются ключевые факторы, способствующие и препятствующие развитию обучающихся. В бизнес-школах, по сравнению с остальной частью экосистемы высшего образования, существует особая потребность в управлении знаниями. Это объясняется различиями в ценности разных видов знаний, в их хранении и поиске. В данном исследовании приведены основные параметры управления знаниями, актуальные для высшего образования. Представлена структура управления знаниями в качестве стратегического инструмента развития и сохранения конкурентного преимущества бизнес-школ. В работе отмечается, что бизнес-школы в большей степени ценят современные прикладные, практические и контекстуальные знания, в то время как другие университеты ценят менее транзистентные виды знаний. Знания, необходимые в бизнес-школах, нередко встречаются в информационных сетях, и их эффективное использование требует специальных стратегий. Интеграция с экосистемами знаний за пределами институциональных библиотек играет важную роль. Природа знаний, актуальных для бизнес-школ, двойственна: они носят научный характер, но имеют практическую основу. Представленные контексты учитывают глобализацию и интернационализацию высшего образования, что немаловажно для управления знаниями.

**Ключевые слова:** управление знаниями, конкурентное преимущество, глобализация, образовательная стратегия, высшее образование, бизнес-школа.

### Introduction

Revolutionary changes, leveraged by knowledge, are taking place around the globe in the spheres of economy and society (Naser, Al Shobaki, & Amuna, 2016). Some of the drivers of these changes are globalization, demographic shifts, technological breakthroughs, mergers and acquisitions, reduction in product life cycle, individualization of society and emergence of new values (Shima & George, 2014; Sharma & Kaur, 2016). To cope with change, an organization has to have the capacity to change its structures, processes, workflow, and information flow (George & Paul, 2020). It has to be a learning, sentient and intelligent organization for whom knowledge is a significant strategic tool for developing and sustaining competitive edge (Chaudhary, 2005; Mohan, George, & Nedelea, 2006). Organisations now require a plethora of data, information and knowledge to deal with their increasingly complex business environment (Dwivedi, et al, 2011). Indeed, knowledge in this new era is the most critical resource which organizations

need to harness and deploy for generating and sustaining superior values (Alavi & Leidner, 2001; Davenport & Prusak, 2000). As knowledge becomes a strategic resource, organizations are under compulsion to focus on its acquisition, generation, retention, transfer and application (Mursidi, Setyowati, & Wulandari, 2018). The current global business scenario is far more turbulent than ever before, hence, the rate of change has to be more dynamic and non-linear (Shams & Belyaeva, 2019). In these circumstances, knowledge and competencies remain the most viable basis for adapting to the changes and establishing competitive advantage (Shiroor, 2010) and even a necessity for survival (Nonaka & Takeuchi, 1995). In addition, the digital economy prioritizes the centrality of information and knowledge in the organizations (Shiroor, 2010). It enables as well as requires organizations to continually learn new knowledge and automatically deploy it for value creation (Nonaka & Takeuchi, 1995). This review seeks to address the question: to what extent are business schools practicing knowledge management; what challenges are being faced by them in the domain of knowledge management and, what coping strategies are being adopted by the schools to address these challenges.

### **Knowledge Management (KM)**

Hislop (2013) defines knowledge management as an umbrella term which refers to any deliberate effort to manage the knowledge of an organization's workforce, which can be achieved via a wide range of methods including directly, through the use of particular types of ICT or indirectly through the management of social process, structuring the organization in particular way or via the use of particular culture and people management practices. Drucker described KM as a technique that is intended at solving the emerging organizational challenges to enhance the efficiency of core business processes while concurrently incorporating uninterrupted improvement (Drucker, 1999; Geisler & Wickramasinghe, 2003). To Shiroor (2010), KM consists of a variety of practices used by organizations to identify, generate, represent, disseminate and enable implementation of what the organization knows and how the organization knows it. Moreover, KM often includes classifying and plotting knowledgeable assets within the organization producing new knowledge for reasonable benefit constructing huge amounts of information available, partaking of greatest practices and technology that accelerates business activities including groupware and intranets (Carroll et al., 2003).

Mathew (2010), however, added that sharing and dissemination of knowledge is considered to be the most important steps in knowledge management process. Sajeve & Jucevicius (2010) mentioned that the KM does not exist in vacuum. Tiwana (2004) also focused on integration of fragmented knowledge to facilitate opportunistic application through creation, distribution and exploitation of knowledge. It is said that knowledge management activity should be embedded within the DNA of the organization. Employees should be recognized and rewarded for engaging in knowledge management activities and their use should be reflected in performance plans (Key et al., 2009).

From the above definitions we see that knowledge management is a process of creating a supportive environment in the organization for identifying, acquiring, generating, storing, sharing, disseminating and applying knowledge effectively by the people in the organization and integrating the same with the business process in the organization for enhancing competitiveness. Thus, it is evident that knowledge management is a process and hence, it consists of certain steps. According to Davenport & Prusak (1998) the steps are creating a setting for sharing knowledge, eliminating communication filters, prioritizing the task and keeping time budgets.

Based on the definitions mentioned above the functional framework of knowledge management has been developed as shown below:

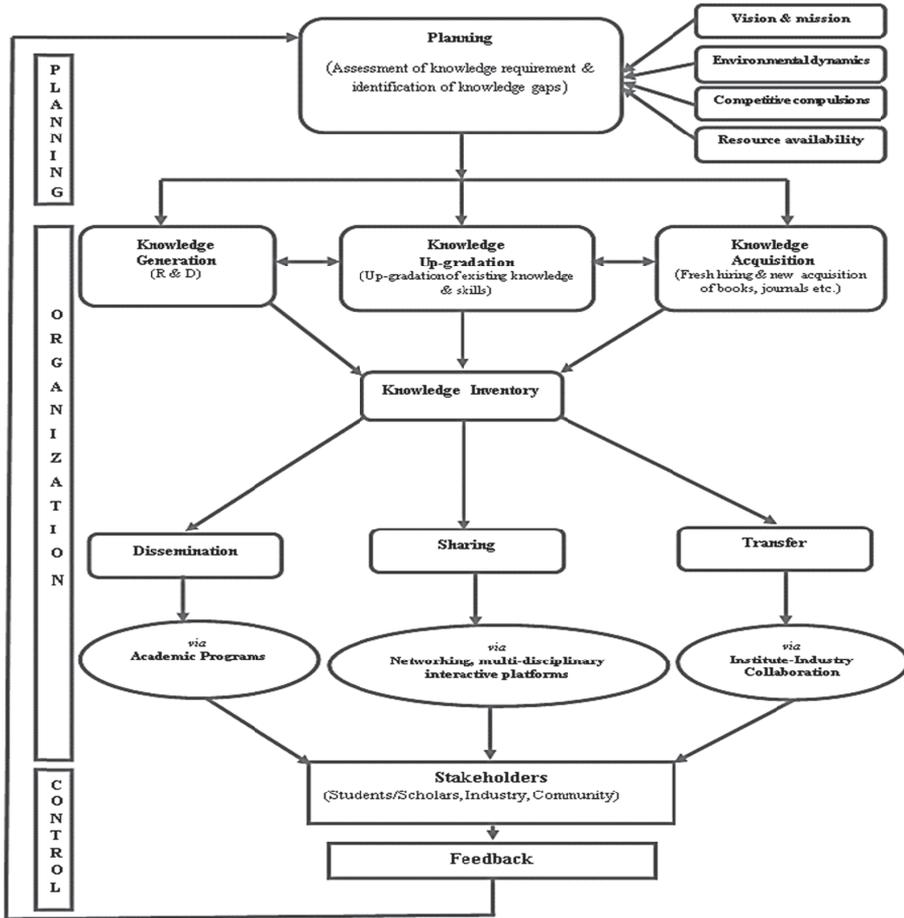


Figure 1. Functional Framework of Knowledge Management

### Knowledge Management in Higher Education (HE)

There is no doubt that Higher Education Institutions (HEIs) are in the knowledge business but although managing knowledge with prime focus in higher education has become crucial due to the increased competition among the institutions of higher education, little work has been done in this field (Vashisth & Mehta, 2013; Shukla, 2012). KM is one of the key elements of R&D in HEIs which is the base of creating new knowledge. Universities are expected to generate new knowledge because in addition to making people competent of generating capital they have a noble role in the all-round development of society and the world as a whole (Kasemsap, 2016). Knowledge management may have a role to improve the output in HEIs involved in conducting such research activities (Vashisth & Mehta, 2013). According to Mahdi, Nassar, & Almsafir (2019), KM is at the core of competitive advantage of any knowledge enterprise, universities included.

Ramakrishnan and Yasin, (2012) stated that HEIs have noteworthy opportunities for applying KM practices to their mission. Businesses want flexible and adaptable knowledge workers and, in this context, universities have a role to play. They can produce people who can produce new knowledge and lead (Barrera, Gutiérrez, & Ávila, 2018). Knowledge management systems in higher education institutions improve the strategic

planning towards this objective. It integrates students, staff and employers. It can also improve the administrative services, development efforts, administrative decentralization, administrative policies and responsiveness and communication capabilities. Dhamdhere (2015) has said that internationalization of higher education, lifelong learning, paradigm shift from teaching to learning, new technologies and globalization are the key factors for developing knowledge management in higher education institutions.

Cranfield and Taylor (2008) stated that in today's economy, the university is presented with a dichotomy of priorities, one which aims to provide quality teaching and research activity and the other to ensure effective and efficient management and administration within an increasingly competitive market. The study found that implementing knowledge management at university level is difficult because the university set up is decentralized. All of deans and heads are given power and hence the centre i.e., the vice chancellor cannot make any university-wide change quickly as the departments can easily oppose it. Keeping in mind this fragmented nature of the university structure Doctor & Ramachandran (2008) said that the intellectual output of faculty and research staff should be available at one centralized location for search through institutional repository. Information retrieval from this repository would be possible on the basis of communities, collections, key words, author and title (Chidambaranathan & Swarooprani, 2017). However, in many countries, the development of institutional repositories is still in its initial stage (Abrizah, 2017). Moreover, universities today are also facing new competitive forces.

HEI faculty members have long been concerned about knowledge transfer processes and the development and application of knowledge (Dunford, 2000) as the transfer and application of knowledge provide more contribution to innovation performance (Kamasak & Yavuz, 2016) and innovation and up-gradation is the only way to have a competitive advantage (Porter, 1985). Keeping in mind the significance of knowledge management in HEIs, Rowley (2000) suggested that to enhance the knowledge environment in universities there is a need to tackle institutional norms and values as they relate to knowledge, e.g., decision audit program, reward and bonuses for individual contribution. They also stated that decentralized management structure and a culture of individual creativity are needed for the success of knowledge management.

Rowley (2000) further suggested that higher education institutions seeking more proactive approach in knowledge management need to be confronted with the following points:

- I. Respective individuals must be involved.
- II. People may be reluctant to document their core knowledge so they need to be convinced.
- III. Knowledge management process takes time to embed.
- IV. Communities of interest are central to knowledge management.
- V. Packaging of knowledge for non-experts is important.
- VI. Specific role must be assigned to different individuals.

Moreover, Jalaldeen et al., (2009) recommended that knowledge management adoption requires changes in the organizational set up and members' behavior. It is said that if you would plant roses in the desert, first make sure the ground is wet. Alshahrani (2015) has identified 10 critical success factors of knowledge management specifically in HEIs and these need to be fulfilled to successfully implement knowledge management. They are: leadership, availability of information technology, inter departmental communication, applying e-government, availability of e-learning, adoption of the knowledge management system, financial support for knowledge management system, support knowledge management experts to obtain the benefits from their experience,

availability of human resources in the area of knowledge management, and qualifications of the employees.

### **Higher Education Internationalization and Knowledge Management**

Internationalization has increased the need for knowledge management practices and also their complexity (Dash & Mohapatra, 2016). The impacts of globalization in higher education are extensive. They include movement of students, teachers across borders; changes in curriculum, adding more courses suitable to global issues and challenges; global technology transfer and so on. Yeravdekar (2014) explained the evolution of internationalization of higher education, through four levels: first, on the basis of student mobility; second, on the basis of program mobility. The third level is categorized by the incidence of branch campuses. And the fourth level is the commencement of education hubs. Knowledge management has emerged as a key process driving systematic internationalization in higher education. Knowledge is universal and the institutions producing knowledge have universal appeal. Today knowledge has become a strategic resource for organizational success. It is said that as the economic sector produce economic goods, so the higher education sector produces as well as distributes knowledge (Zapp, 2017).

Alon & McAllaster (2009) assert that global competence is a prerequisite for the success of internationalization of higher education and global leadership. Lee Olson and Kroeger (2001) found that anything less than a global intercultural education will place students at a severe disadvantage. Reimers (2008), in his work 'Educating for global competency' addressed the issues related to global moral values, foreign language skills and globalization expertise. He discussed the tri-dimensional nature of global competency, its significance and ways to develop global competency. These three interdependent dimensions of global competency were described as the Affective dimension, the Action dimension and the Academic dimension. He emphasized the need to make the development of global competence a policy priority for mass education systems. It is a challenge for the education sector to combat all the challenges of internationalization of higher education and reap the benefits of it.

### **Major Domains of Knowledge Management in Business Schools**

Knowledge management is needed for various reasons including the leveraging of experience and expertise of professionals (academicians and others), reduction of the duplication of work, replication of the business processes and decision-making criteria, reduction of time for decision making (Mathew, 2010; Carrion, 2006). According to Chen & Wei (2019), organizations that do not have an information management strategy would get flooded by information, making it a challenge to transform information into knowledge. To maintain competitiveness in such an environment, management of knowledge is indispensable. In addition, organizations need to make proper decisions to be successful in their business. To make proper decisions, organizations need to know about the individual and collective knowledge available in the organization so that they may make optimum use of it. A KM initiative helps in this by making knowledge visible (Pugna & Boldeanu, 2014:560).

To manage the intense competition faced by different segments of the economy, including the HEIs, the services of trained and qualified managers are seen in organizations as essential. In this setting, management education has become important and gained wide popularity. However, the mushrooming of schools in the resulting milieu has ultimately led to intense competition among the business schools. To tackle this competition, the

schools are keen to create and define their own competitive edge (Martinez-Crespo & Lopez-Arellano, 2019).

Defining and developing competitive edge has always been one of the key functions of organizations, be it in manufacturing, IT, banking, insurance, engineering or education (El-Amin & George, 2020). But since the inception of globalization, creating a sustainable competitive edge has become necessary because of the continuous change in the business environment. A sustainable competitive edge can result from investing in advantage-creating resources to consistently satisfy quality criteria and increase the perception of their quality (Madan & Khanka, 2010:390). Not all resources create a sustainable competitive edge (Almeyda & George, 2018; George, 2018). Physical, financial or technological resources hardly confer any edge because these resources can be easily acquired or imitated by others (George, Adams, & Hopkins, 2019). In contrast, knowledge is a strategic resource or tool that remains embodied within organizations and endows these organizations with some inimitable rare properties that make the organizations distinct from others (Djan & George, 2016).

According to Mahajan and Nangia (2012:02), management education has evolved into an industry with players seeking profit out of it. Bhattacharya, (2010) opined that management education has acquired the status of a commodity, to be bought and sold in markets like other commodities. In such situation, management education (which is in the knowledge business) must realize that in this knowledge era knowledge renders the only sustainable competitive edge. Moreover, management education is undergoing a major transition in several countries (McDonald, 2017). Internationalization, cross cultures, strategic alliances, partnerships and mergers are the new trends which are further increasing the significance of managing knowledge in management institutions (Ravi & Chellayya, 2015). The KM process would help business schools to stay ahead of their competitors by leveraging their intellectual capital and the knowledge assets created by its stakeholders such as faculty members, research scholars, students, administrative staffs (Ghanwar et al, 2014). In the words of Anvari & Alipourian (2011) although knowledge management has become a crucial factor in competitive environments but there is a lack of empirical studies that measure knowledge in higher educational environments.

Basu & Sengupta (2007), Sahay & Thakur (200), Madan & Khanka (2010), Ranjan & Khalil (2007), Bhusry & Ranjan (2011), and Shukla (2012) mentioned the significant domains of knowledge and the areas on which knowledge management should focus on in the business schools. There are summarized in the following table:

*Table 1. Knowledge Domains in Business Schools*

S/N	Domains	Sub-domains
1	Student	Student enrolment, student growth, demographic data, alumni records and update.
2	Faculty	Faculty growth, faculty attrition, record of intellectual contribution performance evaluation of faculty, FDP, training and development.
3	Curriculum	Research on curriculum, past curriculum records, continuous up gradation of curriculum.
4	Administration	Resources available, planning and development, records of best practices, provision of knowledge centers, MDPs, training and development.
5	Publications and reports	Maintaining reports of all important events organized, Records of publications made Records of pass out students and their feedback, Teaching and learning process.

6	Placement	List of companies that normally come for recruitment, criteria followed by the recruiters, alumni track, and performance evaluation of students appearing in campus interviews.
7	Academic Research	Consultancy services, records of researches undertaken, international alliances, financial support for R and D.
8	Industry-interface	Frequent industry- institute interface, practical classes by people from industry, provision of residential training by the firms for the teaching staff.
9	Admission	Admission rules, evaluation rules, GD and PI criteria.

**Discussion: Sustainable Competitive Advantage through Knowledge Management**

The importance of knowledge for gaining competitive advantage is widely accepted (Osterloh & Frey, 2000). Chaudhary (2005) stated that the term knowledge in itself consists of three elements: know, learn and edge. To him knowledge in itself is a process of learning to know everything through observation, experience, and teaching in order to have competitive edge over others. This relationship of know, learn and edge of knowledge is shown as below-Source - Chaudhary (2005:18)

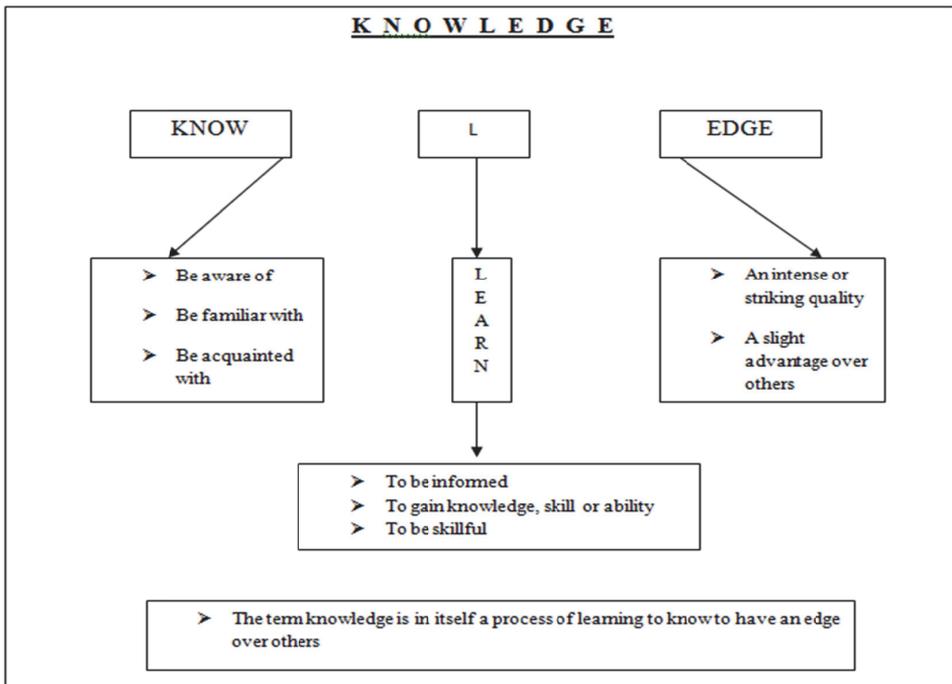


Figure 2. The Competitive Edge of Knowledge

Even a few decades ago manufacturers and nations used to create and maintain competitive advantage based on physical resources. There was a time when technology used to be the source of competitive advantage but that is no longer the case. There is shift from a resource based to a knowledge-based view of the firm. Now it is only knowledge which can provide a sustainable competitive edge (Brown, George, & Mehaffey-Kultgen, 2018). Competitive edge can be built on some scarce, valuable and reasonably durable resource and knowledge is that resource (Spender, 1996). Davenport & Prusak (1997)

stated that a firm's competitive advantage depends on its knowledge, i.e., what it knows, how it uses what it knows, and how fast it can know something new.

KM is increasingly claimed to be the key critical resource and resource for competitive edge in the modern global economy (Chivu & Popescu, 2008; Saxena & Tiwari, 2013; Allameh, 2011). Lara et.al., (2012) specifically mentioned that in future, the sole sustainable competitive edge will be the generation and collection of tacit knowledge. Lubit (2001) described two pathways by which knowledge can be used to create sustained competitive advantage. Firstly, organizations can internally spread knowledge that other companies will find near to impossible to copy. Secondly, organizations can develop greater knowledge management capabilities and hence, foster innovation (Argote & Ingram, 2000; Waddel & Stewart, 2008).

Based on the inputs provided by Basu & Sengupta (2007) who were of the view that strategy, culture, ICT Infrastructure, Systematic Process and Rewards help in successful implementation of KM Sahay and Thakur (2007) proposed a model of input, process and out for effective implementation of knowledge management practices. Madan & Khanka (2010) investigated how knowledge management practices can be used to improve strategic positioning and competitiveness in service industries, particularly business schools. Ranjan & Khalil (2007:19) suggested the Online Learning Teaching Application (OLTA) initiative for business schools. Bhusry & Ranjan (2011) proposed a conceptual framework for the efficient identification, acquiring, storage, transfer and application of organizational knowledge for achieving the organizational goals and objectives. From these studies the authors identified a number of parameters for the Study.

*Table 2. Parameters for Study of Knowledge Management Practices of Business Schools*

<i>S/N</i>	<i>Domains</i>	<i>Parameters</i>
1	Academic Research	Availability of required infrastructure for R and D, administrative support, time relaxation, guidance in getting research grants from external sources, internal financial support for research, percentage of faculties actively engaged in sponsored research projects and number of average annual sponsored research completed by the faculty.
2	Industry-institute interface	Frequency of industry-student meet, mood and size of students group for such meet, industry-faculty meet, provision of residential training for the faculties, students' internship, provision of including industry experts in evaluation of students' projects
3	Faculty development	Faculty development program, financial support to attend FDP/ seminar/conferences, time relaxation to attend such programs, mode of performance appraisal of faculties, correction and improvement system in force, quality of work life, faculty exchange program.
4	Courses and curriculum	Courses offered, mode of curriculum design and development, involvement of stakeholders, frequency of curriculum up gradation and revision.
5	Teaching-learning and evaluation process	Learning ambience, availability of resources for quality teaching and learning, teacher-student ratio, ratio of full time vs. part time faculty, assessment of special learning needs of students, provision of remedial classes, diversity of students, students' evaluation process, mode of teaching, provision of foreign and rural immersion.
6	Institutional structure and Values	Teamwork, informal forums, Compensation structure, campus environment, academic freedom of faculties.

## Conclusion

This paper explored and listed the parameters of knowledge management for business schools through a review of literature. In this process, it developed some key propositions which can form the base for future research on a larger canvas. It offers a blueprint for the implementation of the comprehensive KM framework for business schools. This framework if implemented would lead to development and sustenance of competitive edge in business schools.

In the higher education scenario, strengthening the network to get research grants from external sources may be achieved by engaging some dedicated staff specifically for this purpose and also by providing training to the faculty members for enhancing research skills and developing attractive research proposals. Until the institute gets autonomy with respect to designing compensation structure for its employees it may apply some alternative strategies including extra payment for taking classes in executive programs, granting institute sponsored research projects to new entrants, arranging guest lectures for faculty members in other reputable business schools which will not only help to assure extra earning for the faculty members but also fulfill the requirements of acquiring world class faculties in other business schools.

Specifically, exchange programs involving faculty members should also be enhanced. Knowledge often lies in inter-institutional networks and not tapping into them is clearly a missed opportunity (Castellanos & George, 2020). The exchange program should be an institutional norm. The business school managements should frame strategies to motivate the faculty members to engage in exchanges as many hesitate to go leave their families. The students' exchange program too should be enhanced. All the students should get the optimal opportunity of a full-term exchange program. The institutes should have more practice-based evaluation student system and provision for re-sitting examination within a specific time from the date of declaration of final result.

Knowledge management practices, quality improvement, and performance excellence are significantly interconnected (Choi, et al., 2020). Universities that strengthen externally focused knowledge management practices contribute more constructively to the development of nations and businesses. There is no question of whether higher education institutions are ready for knowledge management – the question is only how ready they are and how fast they could address the inadequacies (Strunga, 2015). With ready to use knowledge management system tools and technologies, many of them open source licensed and free to use, the path to efficient and effective knowledge management practices is not as hard as it once used to be.

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