

Original Article

# What Do Indian B Schools Expect From KMS?

<sup>1</sup>Dr. Vaishali Kulkarni, <sup>2</sup>Vaibhav Kulkarni

<sup>1,2</sup>General Management Dept., N L Dalmia Institute of Management Studies and Research, Maharashtra, India.

Received Date: 20 February 2024

Revised Date: 01 March 2024

Accepted Date: 08 March 2024

Published Date: 28 March 2024

**Abstract:** *The discipline of knowledge management views intellectual capital as a managed resource. It is widely acknowledged that knowledge management is a crucial element of an organization that is managed proactively. An organization can do a self-analysis of its strengths and shortcomings with the use of knowledge management, and then take appropriate action depending on the opportunities presented to it. Good solutions improve both individual and organizational performance and are in line with the business plan of the company. The goal of the research is to determine how important it is to implement knowledge management. In order to develop an effective strategy for the business, research was conducted to determine the several reasons Indian B-Schools would desire to implement KMS.*

**Keywords:** *Knowledge Management, Decision Making, Strategic Advantage, Competitive Advantage, Employee Participation.*

## I. INTRODUCTION

The nature and scope of management education in India are changing paradigmatically. But every advancement has its own set of difficulties. Simultaneously, each difficulty presents a hidden potential, and every breakthrough originates from overcoming challenges. The nation's education system, according to rhetoric, can unwaveringly deliver the best theoretical knowledge available. However, unintentionally, it has not been able to turn it into a practical catalyst for advancement. The discipline of knowledge management views intellectual capital as a managed resource. It is well acknowledged that knowledge management is a crucial element of an organization that is managed proactively. An organization can do a self-analysis of its strengths and shortcomings with the use of knowledge management and then take appropriate action depending on the opportunities presented to it. Good solutions improve both individual and organizational performance and are in line with the business plan of the company.

The goal of this research is to examine the expectations that Indian business schools have for KMS. This will enable the institute to make informed decisions on knowledge management matters and ultimately turn the institute into a learning organization.

## II. LITERATURE REVIEW

Knowledge Management (KM) is a collaborative and integrated approach adopted at various levels to ensure that an organization's knowledge assets are best utilized to increase organizational performance. (Agrawal, 2021) In recent years, innovations, ideologies, strategies, and techniques that originated in the corporate sector have been mirrored by academic administration. These consist of reengineering business processes, total quality management (TQM), and monitoring. [Bimbaum, R.2000]. Knowledge Management System (KMS) is the latest method catching managers' interest in the business industry. It has roots in several related business enhancement areas, including TQM, reengineering business processes, information technology, and management of human resources (Metaxiotis, K., Ergazakis & Psarras, K.J., 2005). According to some studies (Bhatt, G.D. (2000), Cole, R. (1998), Leonard-Barton (1998), Lynn, G. (1998), Nonaka, I. (1994), Porter-Liebskind, J. (1996)), knowledge processes are increasingly becoming necessary for an organization to succeed. KMS is becoming a popular discipline and attracting a lot of attention from the corporate world. [Goh, A.L.S.,2005.]. In July 2005, the Malaysian Prime Minister made the following statement at the International Conference on Knowledge Management in Kuala Lumpur: "People are an especially significant variable in an economy based on knowledge, an era of change which always contributes to the following knowledge administration paradigm." The ability to survive and sustain oneself depends more and more on knowledge management. (Azizan, 2005). The Malaysian Ministry of Human Resources (2011) supports this by stating that practically all colleges nowadays concentrate on finding ways to collaborate with industry to improve students' quality and skills. The necessity of preparing for 21<sup>st</sup> century skills is growing due to the changing nature of employment.

As universities work on internationalizing their curricula and providing students with top-notch programs, the HEI marketplaces are expanding globally. The academic sector likewise faces industry demands. Employers seek knowledgeable workers who are versatile and flexible. Universities were also supposed to turn out leaders, creators of new information, problem solvers with fresh perspectives, and innovators with innovative approaches to well-worn issues.



Universities have a responsibility to educate students to think beyond the box and be ready for unimagined futures. [Henry, W. (2001)]. Additionally, KMS is becoming more and more popular in businesses and academia. [Nazir, A.S., Alinda, A.R., Nor, H.Z., Kamaruddin, M.M. and Shamsul, Shamsul. 2004]. HEI has come to the realization that KMS may be a valuable asset to their company in helping them enhance the quality of their services. It has been difficult for HEI to produce and share information. [Hawkins, D.E. 2006]. The investigators address KMS's function in HEI in this work.

When individuals need to decide on action, KMS connects them to the knowledge they require. Managing knowledge is an essential component of gaining a competitive advantage in the world of business. By identifying knowledge gaps, KMS techniques and practices can assist people get the understanding they require and are encouraged to share it with others as well, which can occasionally result in the creation of new knowledge and better decision-making. [Petrides, L.A., Nguyen, L. 2006]. Kidwell et al. (2004) observed that Higher Education Institutions (HEI) could use KMS to improve their organizations' mission [Kidwell, J.J., Vander Linde. KM and Johnson. S.I. 2004]. According to Martin (1999), KMS may help preserve organizational assets by maximizing internal knowledge, promoting knowledge production, and applying that knowledge to instruction and learning. [Martin, W. 1999.]. According to Tajuddin (2008), the first step in implementing KMS is to change the curriculum to include more humane and compassionate teaching methods that will benefit a larger population. According to Sallis and Jones (2002), KMS is equally necessary in HEI. According to Kidwell et al. (2000), HEI are good candidates for implementing KMS practices to assist their operating and administrative processes. Stewart and Carpenter, H. (2001) and Townley (2003) Classify effective KMS based on the leadership's capacity to guide faculty members toward the university's flexible transformation vision. According to Bernbom (2001), running a KMS program in a HEI should support the aims of the academic strategy plan, which the leadership created and in which a clear vision, goals, and objectives are stated for a long-term KMS program. Fireston (2003) confirmed that the arrangement procedures benefit from the use of KMS (capture, codification, sharing, and distribution of knowledge) and overseeing the procedures for knowledge production (knowledge making, creation, and discovery). Additional advantages of putting KMS into practice include enhanced performance, more efficient information gathering, sharing, and utilization within businesses, fewer expenses and delays in research, increased innovation inside the firm, and the ability to document best practices. The Malaysian Ministry of Higher Education (2010) claims that because KMS is a source of fresh ideas, it is a method that could promote institutional innovation. The fundamentals of KMS that underpin its application in HEI should be founded on a KMS program that tackles the attitudes, customs, and conduct that are particular to HEI. People may now communicate vast volumes of information without being limited by time or place, thanks to KMS. KMS can be grouped according to how well its leadership is able to guide academics and staff toward the university's objective of adaptive change. HEIs could use KMS to further the goals of their institutions. When Martin (1999) discovered a KMS strategy for a university, he noticed a number of shared objectives, such as applying lessons and standards of excellence from across the HEI. KMS may be important for making decisions on education inside the institution. Chan and Chau (2005) established a basis for information keeping and use that connected KMS and HEI and offered the latter a competitive edge. A large portion of the emphasis on KMS for academia is defined as a constant sharing of efforts, in contrast to the corporate drive for competitive performance. The core of an educational system is its emphasis on knowledge acquisition and activity sharing. Organizations can now compete more effectively thanks to KMS and globalization. To generate and preserve significant value for essential business competencies, Knowledge Management Systems (KMS) facilitate the generation, sharing, and utilization of knowledge. KMS is a procedure used by academic institutions to identify and preserve resources that come from staff members or faculty members in different departments or faculties, as well as occasionally from outside organizations or institutions with related interests. By decentralizing strategy planning, exchanging internal and external data, creating strategy plans with a market focus, and exchanging knowledge from a range of sources of information, the KMS method at HEI enhances the development of strategy.

Over the last ten years, several studies have been conducted in comparatively wealthy establishments with the aim of obtaining strategic benefits from Knowledge Management (KM). Scholars have investigated the potential for KM to be implemented in organizations efficiently (Davenport and Prusak 1998, Davenport et al. 1998). KM projects are generally fairly costly and do not always produce the expected outcome. According to Davenport (2000), Knowledge Management (KM) operations entail significant investments in a variety of fields linked to knowledge acquisition, archiving, dissemination, value addition, and, ultimately, training staff members on the advantages of knowledge generation and sharing. The knowledge management method combines human, communication, and IT tools intriguingly (Petrash 1996). It is crucial for effectively disseminating, storing, and enhancing knowledge (Ruggles 1997). Experience has shown that information and communication technologies have advanced to a very sophisticated level and are able to carry out knowledge exercises effectively (Van der Spek and Spijkervet 1997). Simultaneously, numerous investigators noted that the human element is primarily responsible for the inability to generate adequate effort and assistance in constructing an effective knowledge system within an organization (Davenport 1997, Hickins 1999, Cross and Baird 2000, Asllani and Luthans 2003). In order to assess the elements that contribute to knowledge management project success, Davenport et al. (1998) studied 31 projects across 24 firms in 1998 (Davenport et al. 1998). Eighteen initiatives were deemed profitable, five were deemed unsuccessful, and eight were too recent

to receive a rating. Senior management support clearly stated KMS purpose and goals, links to economic performance, numerous avenues for transferring knowledge, incentives to motivate KM users, a knowledge-friendly culture, a strong organizational and technological foundation, and a standard, adaptable knowledge framework were common characteristics found among successful KM projects in this study.

Additionally, as noted in several later studies, some abstract factor—such as the capacity to recognize, capture, and convey crucial tacit information—was seen to be essential to the effectiveness of Knowledge Management (KM) (Koskinen 2001). Ginsburg and Kambil (1999) recognized key success factors as technical problems, including representation of knowledge, storage, search, retrieval, visualization, and quality control. Consistent results were obtained from several subsequent studies. A few KM projects were found to require strong leadership and the support and commitment of upper management (Holsapple and Joshi, 2000). Other research (Holsapple and Joshi 2001) indicated that funding factors such as staff skill levels, monetary assistance, and identifiable knowledge sources were significant. Using incentives does not always ensure a successful KMS, as noted by Malhotra and Galletta (2003).

Integrated technical infrastructure, which establishes networks and archives of structural knowledge, is one of the 12 components supported by Jennex and Olfman (2004). This factor may be crucial for the successful implementation of knowledge processes in academic institutions, as previously suggested by Keong et al. (2001), Davenport et al. (1998), and Barna (2002). Another crucial component may be the users' dedication and motivation, which includes their training and rewards. This was previously suggested by Lorange (1996), who contended that faculty members, whether from discipline-based or inter-disciplinary backgrounds, are stimulated towards personal and professional development by such rewards and training. Effective knowledge management (KM) activities in such organizations cannot be disregarded if they are supported by an organizational culture that values learning, sharing, and application of information (first promoted by Alavi and Leidner (1999), Sage and Rouse (1999), and others). One may argue that the development of a knowledge management culture is contingent upon the top management's willingness to promote democratic leadership, the distribution of resources, and the provision of sufficient training facilities (as previously noted by Holsapple and Joshi 2000 and Barna 2002).

Indian management schools constantly face challenges in maintaining their relevance when it comes to learning and research. Management institutions produce information on students, courses, teachers, and staff. This information includes facts about lectures, organizational personnel, managerial systems, high-quality research, and more. Every leadership institution can greatly benefit from this helpful information, which acts as a strategic input in order to raise the standard of the educational process. Studies indicate that a lack of focus on cultural concerns contributes to the failure of many IT implementations in educational institutions rather than the technology itself (Levine, 2001; Friedman and Hoffman, 2001). Numerous insightful experiences and studies—let's call this knowledge—have frequently been encountered in student counseling, admissions, assessments, and courses. This information would improve data exchange, examine various approaches to managing student relationships, boost program and performance achievement, etc. Knowledge Management (KM) employs methodical techniques to locate, comprehend, and utilize knowledge in order to generate value (Probst, Raub, and Romhardt, 2000; O'Leary, 1998; Mikulecký and Mikulecká, 1999).

### III. RESULTS AND DISCUSSION

#### A) *Research Methodology:*

##### a. **Population:**

IT Faculty Members/ IT Heads in B-Schools.

##### b. **Sampling Technique:**

Stratified sampling

##### c. **SAMPLE SIZE:**

35 B-Schools in India. The data covers colleges from Tier 1, Tier 2, and Tier 3 and is gathered from four states in India.

##### d. **Selection of States:**

The B-Schools were selected from four different states of India, namely:

- Maharashtra- 15 Colleges
- Gujrat- 7 Colleges
- Madhya Pradesh- 9 Colleges
- Kerala- 4 Colleges

##### e. **NOTE:**

These B-Schools comprise 21 university-affiliated colleges and 14 autonomous colleges.

### **B) Data Collection Method**

Interviews and a structured questionnaire were used to gather primary data. Secondary data was gathered using forms, procedures, books, research journals, techniques, and literature reviews that were available from the institutes.

In order to investigate the degree of KMS implementation aspirations by Indian B-schools, the variables noted below were intended to collect and evaluate the responses. Respondents were asked to rate the parameters on 5 point scale: (Scale- 1: Very important, 2: Important, 3: Can't say, 4: Not important, 5: Not at all important.)

#### **a. Parameters:**

1. To improve the competitive advantage of your organization.
2. To increase your company's competitive advantage.
3. To assist in knowledge integration within your company or institution.
4. To enhance the acquisition and application of information from non-organizational sources.
5. To enhance knowledge transfer or sharing both among stakeholders and within the organization.
6. To safeguard your company against knowledge loss brought on by employee leaving (person- or system-oriented).
7. To provide employees with the training they need to achieve your organization's strategic goals.
8. To promote staff involvement and creativity in the procedures.
9. To make it easier for teams or projects that are geographically dispersed to collaborate.
10. To encourage knowledge sharing and transfer among stakeholders.
11. To strengthen the ability to make decisions.

### **C) Discussion:**

Factor analysis was done on the data to determine which of the previously indicated parameters were influential. The results are displayed in tables 01, 02, 03, 04, 05, and 06 of the document.

The KMO test indicates that the data was appropriate for factor analysis at a significance level of less than 0.05. The outcome unequivocally shows that three key elements or criteria were crucial for the organization's KMS implementation.

#### **a. Component One:**

Improvement in competitive advantage

1. To increase your company's competitive advantage.
2. To boost productivity by applying knowledge to enhance general academic procedures.
3. To make working on projects, assignments, or staff members who are physically apart easier.

Organizations' goals for implementing KMS varied; however, the majority of them stated that their top goal was to increase their competitive edge because, in the current market, b-schools face intense competition from the growing number of management institutes in India. Every B-school is developing new programs and cutting-edge methods for the instructional process. Additionally, organizations sought to improve academic procedures generally through kms. Organizations were hoping to find a way to work together with other academic and scientific institutions, companies, and employees who were physically located elsewhere. Its primary goal was to shorten process delays in general.

#### **b. Component Two:**

Improvement in the decision-making process through knowledge capture and integration.

1. To assist in knowledge integration within your company or organization.
2. To enhance the techniques for gathering information and using it from sources outside your company.
3. To strengthen the ability to make decisions.

Because of inadequate data collection and integration techniques, institutions were having trouble making decisions at the strategic, tactical, and operational levels of management. It resulted in inconsistent and insufficient data. The answers to questions two and three unequivocally demonstrate that companies lacked the instruments and strategies necessary for efficient data collection, storage, and distribution.

#### **c. Component Three:**

Employee participation and collaborative work

1. To improve the sharing and transfer of information across stakeholders and inside the organization.
2. To protect your business from knowledge loss caused by departing employees (whether they are system- or person-oriented).
3. To encourage staff participation and innovation in the procedures.

4. To facilitate collaboration between geographically dispersed teams and projects.

The primary goal of B-Schools in India that led to the implementation of KMS was to adopt a global viewpoint in the classroom. B-Schools needed to work with other research institutions, global libraries, international management schools, corporations for projects and placements, and other academic institutions in order to accomplish this goal. B-Schools were also trying to find a way to stop the knowledge loss brought on by staff churn. The b-schools state that this might be accomplished by promoting staff involvement in the creation and application of novel procedures. The B-Schools claim that it would also encourage staff members to think more systemically.

#### IV. CONCLUSION

The study shows that the business schools find that KMS implementation is important for them for the following reasons:

1. Enhanced competitive advantage.
2. Enhancement of the decision-making process via the integration and capture of knowledge.
3. Participation and teamwork among employees.

Business schools are more likely to use kms to monitor and optimize the academic process as well as to increase their competitive advantage. Additionally, they view kms as a tool for organizing knowledge that would otherwise be dispersed around the company and not updated in a systematic manner. The business schools assert that KMS would undoubtedly improve management's and employees' capacity for making decisions. Knowledge exchange and transmission among internal and external stakeholders would also benefit from KMS. Business schools claim that KMS is helpful in promoting employee involvement, enhancing creative thinking, and boosting teamwork, all of which help a firm transform into a learning organization.

#### Appendix 1: KMO and Bartlett's Test

##### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.524
Bartlett's Test of Sphericity	Approx. Chi-Square	68.900
	df	45
	Sig.	.012

#### Appendix 2: Communalities

##### Communalities

	Initial	Extraction
To improve the competitive advantage of your organization	1.000	.640
To help integrate knowledge within your firm or organization	1.000	.527
To improve the capture and use of knowledge from sources outside your organization	1.000	.504
To improve sharing or transferring of knowledge within organization and with the stakeholders	1.000	.399
To protect your organization from loss of knowledge due to employee departure( Person oriented/system oriented)	1.000	.475
To train employee to meet strategic objectives of your organization	1.000	.603
To encourage employees participation and innovation in the processes	1.000	.590
To ease collaborative work of projects /assignments or teams that are physically separated	1.000	.564
To promote sharing and transferring of knowledge with stakeholders	1.000	.484
To improve decision making ability	1.000	.477

Extraction Method: Principal Component Analysis.

### Appendix 3: Total Variance

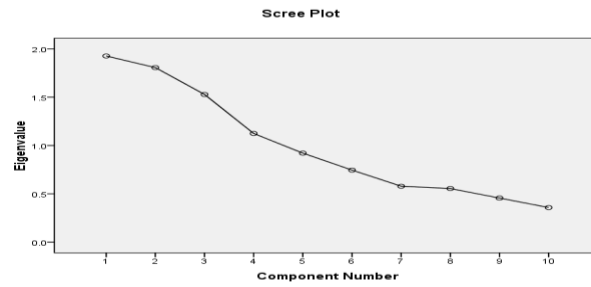
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	1.926	19.264	19.264	1.926	19.264	19.264	1.753
2	1.807	18.070	37.334	1.807	18.070	37.334	1.771
3	1.529	15.287	52.621	1.529	15.287	52.621	1.763
4	1.125	11.246	63.867				
5	.921	9.207	73.074				
6	.746	7.456	80.530				
7	.578	5.785	86.315				
8	.555	5.546	91.862				
9	.456	4.563	96.424				
10	.358	3.576	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

### Appendix 4: Scree Plot



### Appendix 5: Component Matrix

Component Matrix<sup>a</sup>

	Component		
	1	2	3
To train employee to meet strategic objectives of your organization	.760		
To ease collaborative work of projects /assignments or teams that are physically separated	.565	-.393	
To improve the competitive advantage of your organization	.364	-.626	-.341
To improve the capture and use of knowledge from sources outside your organization		.615	.310
To improve decision making ability		.595	
To help integrate knowledge within your firm or organization	.414	.476	-.359
To protect your organization from loss of knowledge due to employee departure( Person oriented/system oriented)	-.370	-.416	.406
To encourage employees participation and innovation in the processes	.391		.624
To improve sharing or transferring of knowledge within organization and with the stakeholders	-.346		.524
To promote sharing and transferring of knowledge with stakeholders	.454		.475

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

## Appendix 6: Component Score Coefficient Matrix

Component Score Coefficient Matrix

	Component		
	1	2	3
To improve the competitive advantage of your organization	.021	-.444	-.078
To help integrate knowledge within your firm or organization	-.014	.076	-.406
To improve the capture and use of knowledge from sources outside your organization	.175	.354	-.110
To improve sharing or transferring of knowledge within organization and with the stakeholders	.095	.154	.334
To protect your organization from loss of knowledge due to employee departure( Person oriented/system oriented)	.049	-.042	.392
To train employee to meet strategic objectives of your organization	.277	-.040	-.308
To encourage employees participation and innovation in the processes	.430	.003	.166
To ease collaborative work of projects /assignments or teams that are physically separated	.365	-.192	.033
To promote sharing and transferring of knowledge with stakeholders	.372	.170	-.034
To improve decision making ability	-.046	.382	.009

Extraction Method: Principal Component Analysis.  
Rotation Method: Oblimin with Kaiser Normalization.

## V. REFERENCES

- [1] Ali, N., Ahmed, L., and Rose, S. (2018). Identifying predictors of students' perception of and engagement with assessment feedback. *Act. Learn. High. Educ.* 19, 239–251. doi: 10.1177/1469787417735609
- [2] Ammirato, S., Linzalone, R., and Felicetti, A. M. (2021). Knowledge management in pandemics. A critical literature review. *Knowl. Manag. Res. Pract.* 19, 415–426. doi: 10.1080/14778238.2020.1801364
- [3] Agarwal, N. K., and Marouf, L. N. (2014). Initiating Knowledge Management in Colleges and Universities: A template. *International Journal of Knowledge Content Development & Technology* 4, 67–95. doi: 10.5865/ijkct.2014.4.2.067
- [4] A. Kok, "Intellectual Capital Management as Part of knowledge Management Initiatives as Institutions of Higher Learning", *The Electronic Journal of Knowledge Management*, vol. 5, Issue 2, pp. 181- 192, 2005.
- [5] Alshehri, A. (2020). Mobile Technologies and Knowledge Management in Higher Education. *World Journal of Education*, 12.
- [6] Azizan (2005), July 10. Moving towards Knowledge Management. *New Straits Times*, p.4.
- [7] Bernbom, G. (Ed.), *EDUCAUSE Leadership Strategies*. No 3: 25 – 42. San Francisco: Jossey-Bass.
- [8] Bhatt, G.D. (2000). Organizing knowledge in the knowledge development cycle. *Journal of Knowledge Management*, 4(1), 15-26.
- [9] Bimbaum, R. (2000). *Management Fads in Higher Education: Where they come from, what they do and why they fail?* San Francisco: Josey-Bass Publishers.
- [10] Cole, R. (1998). Introduction. *California Management Review*, 40(3), 15-21.
- [11] Hawkins, D.E. 2006. Transferring tourism knowledge: the role of higher education institutions. *Journal of Quality Assurance in Hospitality & Tourism*. Vol.7, no.2: 13-27.
- [12] Holsapple, C.W. and Joshi, K.D. (2001), "Organisational Knowledge Resources", *Decision Support Systems*, (31:1).
- [13] Holsapple, C.W. and Winston, A.P. (1996) *Decision-support Systems: A Knowledge Based Approach*, Minneapolis: West Publishing Company.
- [14] Kidwell,J.J., Vander Linde.K.M. and Johnson.S.I. 2004. Knowledge Management Practices Applying Corporate in Higher Education: Colleges and universities have significant opportunities to apply knowledge management practices to support every part of their mission, No.4. *Educause Quarterly*.
- [15] Leonard-Barton, D. (1995) "Wellsprings of knowledge: building and sustaining the sources of innovation". Harvard University Press, Boston. USA
- [16] Leonard-Barton. (1998). *Wellsprings of Knowledge: Building and sustaining the source of innovation*. Boston:Harvard Business School Press.
- [17] Lorange, P. (1996), "A business school as a learning organisation", *The Learning Organisation*, Vol.3, No.5, pp.5-13.
- [18] Madhur, Mohamed Abdul, (2017) *Knowledge Management in Higher Educational Institutions with Special Reference to College of Applied Sciences (CAS)*, Ministry of Higher Education, Sultanate of Oman (August 23, 2010).
- [19] Malhotra, Y. and Galletta, D. (2003), "Role of Commitment and Motivation as Antecedents of Knowledge Management Systems Implementation", *36<sup>th</sup> Hawaii International Conference on System Sciences*, IEEE Computer Society.
- [20] Martin, W. 1999. New directions in education for LIS - knowledge management programs at RMIT. *Journal of Education for Library & Information Science*. Vol.40, No.3: 142-150.
- [21] Metaxiotis, K., Ergazakis & Psarras,K.J. (2005). Exploring the world of Knowledge Management: Agreements and disagreements in the academic /

- practitioner community. *Journal of Knowledge Management*, 9(2), 6-18.
- [22] Nazir, A.S., Alinda, A.R., Nor, H.Z., Kamaruddin, M.M. and Shamsul, Shamsul. 2004. Knowledge Management Framework for Representing Lessons Learned System for Communities of Practice in Institutions of Higher learning. *Malaysian Journal of Library & Information Science*. Vol. 17, No. 1: 1-12.
  - [23] Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(10), 14-37.
  - [24] Nonaka, I. and Takeuchi, H. (1995) *The Knowledge-Creating Company*. Oxford, Oxford University Press
  - [25] Nonaka, I. and Takeuchi, H. (1995). *The Knowledge Creating Company – How The Japanese Companies Create the Dynamic Innovations*. Oxford Univ. Press, New York, NY.
  - [26] Nonaka, I., Konno, N.: The Concept of Ba: Building a Foundation for Knowledge Creation. *California Management Review* 40(3), 40–54 (Spring 1998)
  - [27] Nonaka, I., Takeuchi, H.: *The Knowledge Creating Company*. Oxford University Press, New York (1995)
  - [28] Nonaka, I., Toyama, R., Konno, N.: SECI, Ba and Leadership: A Unified Model of Dynamic Knowledge Creation. *Long Range Planning* 33, 5–34 (2000)
  - [29] Nonaka, I., Reinmoeller, P. and Senoo, D. (2000), *Integrated IT Systems to Capitalize on Market Knowledge, Knowledge Creation: A Source of Value*, London: MacMillan Press Ltd.
  - [30] Nonaka, I. and Takeuchi, H. (1995), *The knowledge-creating company: how Japanese companies create the dynamics of innovation*. Oxford University Press: New York, NY.
  - [31] Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company*. New York: Oxford.
  - [32] Petrides, L.A., Nguyen, L. 2006. Knowledge management trends: Challenges and opportunities for educational institutions. In A. Metcalfe (Ed). *Knowledge Management and Higher Education*: 21-33. Hershey, PA: Information Science Publishing.
  - [33] Porter-Liebskind, J. (1996). Knowledge strategy and the theory of the firm. *Strategic Management Journal*. 17, 93-107.
  - [34] Sallis, E., & Jones, G. 2002. *Knowledge Management in Education* London: Kogan Stewart, A. C., & Carpenters-Hubin, J. 2001. The Balanced Scorecard. *Planning for Higher Education*, 37- 42.
  - [35] Ramakrishnan, K., & Yasin, N. M. (2012). Knowledge management system and higher education institutions. *International Conference on Information and Network Technology (IPCSIT)* 37, 67 71.
  - [36] Townley, C. T. 2003. Will the academy learn to manage knowledge. *Educause Quarterly*. Vol2: 8-11.