March-April 2020
ISSN: 0193-4120 Page No. 5743 - 5751

A Comparative Study on Knowledge Sharing Methods amongst Faculty Members from Self Financing and Government Aided Engineering Colleges of Mysuru Karnataka India

Dr. Sri Ranjini S and Dr. Rethy B Menon
Department of Management & Commerce, Amrita School of Arts & Sciences, Mysuru, Amrita Vishwa Vidyapeetham, India.
Department of Management & Commerce, Amrita School of Arts & Sciences, Mysuru, Amrita Vishwa Vidyapeetham, India

Article Info
Volume 83
Page Number: 5743 - 5751
Publication Issue:
March - April 2020

Article History
Article Received*: 24 July 2019*
Revised*: 12 September 2019*
Accepted*: 15 February 2020*
Publication*: 29 March 2020*

Abstract:
Knowledge Management (KM) is mainly about creating the precise knowledge resource including people and other sources and to make that knowledge accessible to the correct individuals at the correct time. Knowledge management initiatives are significant for educational sector especially so in technical education segment since engineering education is a knowledge incubator for industrial growth of any country. A country cannot have a rich industrial sector without having a large base of technically educated population in it. Therefore technical education and more so engineering education must have KM techniques embedded into it. Knowledge sharing conceivably is a main feature in this procedure because enormous mainstream of KM procedures depends on it. Sharing of knowledge is not smooth in any sector because it depends on the willingness and the habits of its employees and also on the culture, incentives, technology, infrastructure and the leadership of the organization. This paper makes an attempt to analyze the modus operandi of knowledge sharing between faculty members of individual engineering colleges and comparing the knowledge sharing techniques present in self- financing and Government – aided engineering colleges of Mysuru district, Karnataka state

Keywords: *Knowledge Management, Knowledge Sharing, Engineering Colleges.*

I. INTRODUCTION

Sharing of knowledge may possibly be defined in different ways based on the framework in which it is measured. Industry and academic sectors have accepted that "knowledge" comprises of precious "intangible asset" for innovating and "sustaining competitive advantages" in their environments. "Knowledge sharing" techniques are usually maintained by "knowledge management systems"; nevertheless, expertise makes up for merely one of the various aspects that influence "knowledge sharing" in different sectors. Others factors such as "organizational culture", "trust", "push and pull" factors in the environment etc also makes up for a sizable contribution to it. Knowledge sharing poses one main challenge in the discipline of knowledge management; the reason is that employees in any organization are likely to oppose sharing their "knowledge" with the other employees. Unless there are certain factors that influence the employees or assist the employees to distribute their "knowledge" with others.

Specially in the academic sector, "knowledge" sharing is a major challenge whether in Self – Financing engineering colleges (the institute itself finances through the fees paid by the students who enrol for the course) or in "Government – Aided" Engineering colleges (engineering colleges which are owned by the "private" management but gets aid from the government) since most of the faculty members are not inclined to share

March-April 2020
ISSN: 0193-4120 Page No. 5743 - 5751

their knowledge with other "faculty members".

II. Literature Review:

• "Van Den Hooff and De Ridder's (2004) conceptualization of knowledge sharing portrays it as a process where individuals mutually exchange their implicit (tacit) and explicit knowledge to create new knowledge '(p.119)".

• "According to De Vrie, Van Den Hooff and De Ridder (2006), this definition implies that every, knowledge sharing behaviour consists of the supply of new knowledge and the demand for new knowledge '(as cited in Wabwezi, p. 14)".

• "Haas and Hansen (2007) claim that knowledge sharing has been shown to improve individual and organizational performance and innovativeness. They add that knowledge sharing is a practice that has become increasing important to organizations as most organizations are now considered to operate in a knowledge economy".

• "Knowledge sharing in an organization not only occurs at the individual level but also at the collective level (Obembe, 2010). Obembe, further states that an organization's capacity is critical as a factor in the ability to generate new knowledge as well as its ability to utilize the resources and capabilities of its members".

• "Taminiau, Smit and De Lange (2007) present two forms of knowledge sharing ie. Formal knowledge sharing and informal knowledge sharing (as cited in Wabwezi, 2011, p.15)".

• "Sheng Wang', 'Raymond A. Noe' (2010)" "The achievement of knowledge management initiatives depends on knowledge sharing. This dissertation reviews quantitative and qualitative studies of personal level knowledge sharing. Based on the literature review they developed a structure for accepting knowledge sharing research. The skeleton identifies five areas of importance of knowledge sharing research: organizational content, interpersonal and team characteristics, cultural characteristics, individual characteristics and motivational factors". This paper ends with an argument of up-and-coming subject, fresh study instructions, and realistic implications of sharing knowledge.

• "Sarros et al., (2011) in their experimental study comes on a vast investigation of 1,448 managers and superior executives who are associated with the Australian Institute of Management. The article explains the initial study in Australia that compares the responses of NFP and FP managers on management and connected constructs, and provides sustainability of the contact of managerial traditions on headship and originality in both of these sectors. Headship visualization, directorial ethnicity, and sustain for improvement in not-for-profit and commercial organizations".

• "Ziêba, M. and Schivinski, B (2015) this critique examines the association between knowledge management (KM) determined control, ethnicity and novelty achievement of knowledge-intensive undersized and average sized companies. By constructing on the earlier reported study on guidance, traditions, modernism, and management of knowledge. The article proves the correlation amid KM oriented guidance, traditions and originality on the achievement of the corporation. The examination of the theoretical replica says that the traditions arbitrate the connection of headship with improvement success".

• "Paulin D and Suneson, K (2012). In this document, the authors speak and argue the expansion and views of three conditions: transfer of knowledge, "sharing of knowledge" and barriers of knowledge. "Knowledge transfer" and knowledge sharing are now and then used similarly or are calculated to have overlapping material. This paper ends by prominence the possessions on the conditions when two dissimilar knowledge perspectives, knowledge as an entity (or the K-O view) and knowledge as a prejudiced appropriate structure (or the K-SCC view) are functional. The experiments are also shown by examples from companies in varied industries (such as Cargotec and IKEA) and vital services".

III. Statement of the Problem:

"Knowledge sharing" is the need of academics and particularly so in technical coaching segment. The knowledge augmented by a few talented teaching members has to be pooled together and made use of by other faculty members also. Teachers are the solitary people who do the dignified profession of distributing their knowledge with the students and bring them forward in the society. But this seldom happens in engineering education due to certain reasons. This paper is looking for those variables which influence the faculty members of engineering colleges to distribute their 'knowledge' amongst other members of faculty of the college. Also the current paper is comparing the factors of 'knowledge sharing' in 'Self – Financing' and 'Government – Aided' Engineering colleges of Mysuru district in Karnataka

March-April 2020
ISSN: 0193-4120 Page No. 5743 - 5751

state, India.

IV. Methodology:

The primary data for this paper was composed through a sample of 200 structured, closed ended questionnaires collected from 11 engineering colleges of Mysuru city, Karnataka state, India. Further, the engineering colleges were divided into two categories: "self – financing engineering colleges" and "Government aided engineering colleges" and Among the 11 engineering colleges 02 colleges are "Government –Aided colleges" and the other 09 colleges fall under the category of "Self – Financing engineering colleges". Samples of 100 questionnaires were collected from each of Self – Financing and Government – Aided engineering colleges. The questionnaire was prepared, keeping in mind the different variables influencing the methods of "knowledge sharing" amongst teaching members in different engineering colleges. These questionnaires were personally distributed to different designations of teaching faculties like assistant professors, associate professors, professors and heads of the departments of all the seven engineering colleges of Mysuru. The collected questionnaires were analyzed using SPSS tools.

V. Objectives:

1. To evaluate the existence of official "knowledge sharing" practices among the different "faculty members" in their respective engineering colleges of Mysuru district Karnataka.
2. To compare the existing official knowledge sharing practices of "faculty members" working in "Self – Financing" and "Government – Aided" colleges of engineering in Mysuru district Karnataka.
3. To analyze the different factors influencing the faculty members for practicing knowledge sharing in their respective colleges.
4. To compare the different factors influencing the faculty members for practising "knowledge sharing" in "Self-Financing" and "Government- Aided" engineering colleges.

VI. Hypothesis

The researcher for accomplishing the above objectives has prepared the following hypothesis and tested those using SPSS tools.

H01: There does not exist any official knowledge sharing practices among the different faculty members working in Government – Aided or in Self – Financing engineering colleges in Mysuru district Karnataka.

H02: There does not exist a significant association connecting the knowledge sharing practices among the different faculty members working in Government – Aided or in Self – Financing engineering colleges and their organizational culture.

H03: There does not exist a significant association connecting the knowledge sharing practices among the different faculty members working in Government – Aided or in Self – Financing engineering colleges and their organizational leadership.

H04: There does not exist a significant association connecting the knowledge sharing practices among the different faculty members working in Government – Aided or in Self – Financing engineering colleges and their organizational technology.

Existence of official knowledge sharing practices in engineering colleges of Mysuru

Faculty Members	Total No. of Samples	Yes		No		Maybe	
		Frequency	Percent	Frequency	Percent	Frequency	Percent
Government – Aided	100	15	15%	85	65%	0	0%
Self – Financing	100	45	45%	55	55%	0	0%
Total Samples	200	60	30%	140	70%	0	0%

March-April 2020
ISSN: 0193-4120 Page No. 5743 - 5751

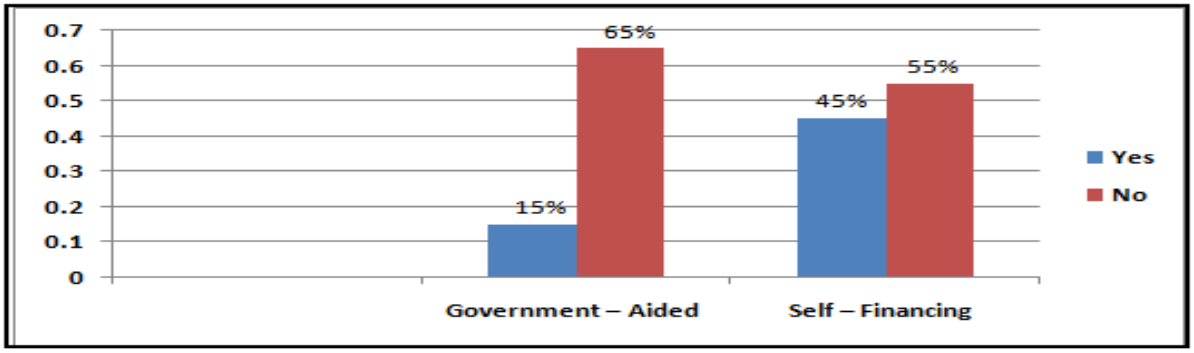

Figure 1: Existence of official knowledge sharing practices

Inference: From the above table and chart we can conclude that compared to self – financing engineering colleges, official knowledge sharing practices are very less in Government – aided engineering colleges of Mysuru, Karnataka.

Chi – Square Test.

Existence of official knowledge sharing practices

	Value	Df	Asymp. Sig (2 – Sided)
Pearson Chi - Square	9.808	2	.044
Likelihood Ratio	11.033	2	.026
Linear by Linear Association	6.994	1	.010
Number of Valid Cases	200		

Inference: The "Chi – square test" shows a "Pearson Chi – Square" value of 9.808 at 2 "degrees of freedom" and the calculated value is 0.044 which is < 0.05. Since the calculated value is < than the p value of 0.05, the "null hypothesis" is discarded and the research hypothesis is established. There exists an official knowledge sharing practices among the different "faculty members" of "Self – Financing" and "Government – Aided" engineering colleges. Therefore H01 is rejected

Existing official culture of "knowledge sharing" practices

Faculty Members	Total No. of Samples	Mandatory Knowledge sharing sessions every week	Mandatory paper presentations in conferences every semester	Mandatory publications in journals every year	Any other type of knowledge sharing practices	No official knowledge sharing practices
Govt– Aided	100	10%	5%	5%	0%	80%
Self– Fin.	100	02%	22%	7%	4%	65%
Total	200	12%	27%	12%	4%	72.5%

March-April 2020
ISSN: 0193-4120 Page No. 5743 - 5751

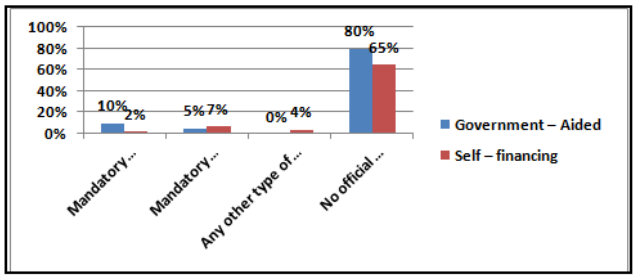

Figure 2: Existing official "organizational culture" of "knowledge sharing" practices

Inference: From the above table and chart we can conclude that the various types of "knowledge sharing practices" are more in "self – financing engineering colleges" compared to. "Government- aided engineering colleges".

Influence of "Organizational Culture" on "Knowledge sharing" practices.

. Faculty Members	Total No. of Samples	Yes Frequency	Percent	No Frequency	Percent	Maybe No. of Samples	Percent
Govt – Aided	100	58	58%	32	32%	10	10%
Self – Fin.	100	66	66%	29	29%	5	5%
Total	200	124	62%	61	30.5%	15	7.5%

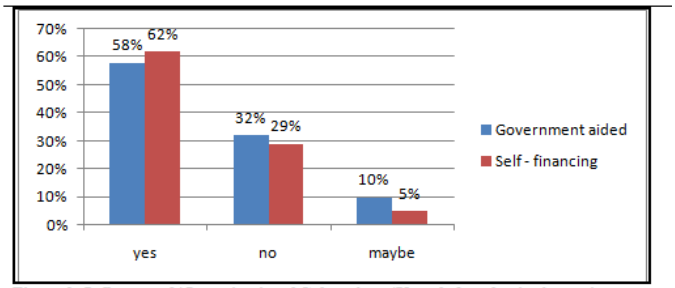

Figure 3: Influence of 'Organizational Culture' on 'Knowledge sharing' practices

Inference: From the above table and chart we can conclude that 62% of faculty members of "self – financing engineering colleges" are of the opinion that "organizational culture" has an influence on the "knowledge sharing" practices and only 29% of faculty members of "self – financing colleges" say that it does not influence and only 5% of faculty members of "self – financing colleges" are not able to decide.

Chi – square test:

	Value	Df	Asymp. Sig. (2 sided)
Pearson Chi - Square	51.01	2	.000
Likelihood Ratio	58.22	2	.000
Linear by Linear association	20.45	1	.000
Number of valued cases	200		

Inference: The "Chi – square test" shows a value of 51.01 for 2 degrees of freedom. The p value is .000 which is less than 0.05, therefore the "null hypothesis" is discarded and the "alternate hypothesis" is received. There exists a significance influence of "organizational culture" on "knowledge sharing" practices in engineering colleges of Mysuru.

Existing support from organizational leadership on knowledge sharing practices.

Faculty Members	Total No. of Samples	Monetary rewards & SCL for attending conferences	Monetary rewards for publishing papers in journals	The above are considered for appraisal	The above not considered for appraisal
Govt – Aided	100	09%	0%	11%	80%
Self – Fin.	100	26%	32%	41%	01%
Total	200	35%	32%	52%	40.5%

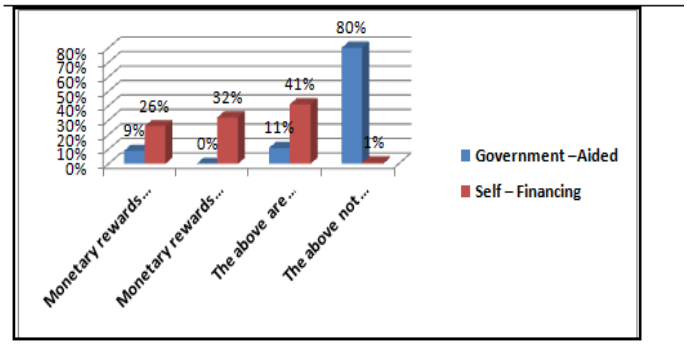

Figure 4: Existing support from organizational leadership on knowledge sharing practices

Inference: from the above table and graph we can conclude that 80% of the faculty members from "Government – aided engineering colleges" are of the

March-April 2020
ISSN: 0193-4120 Page No. 5743 - 5751

opinion that publishing papers and attending conferences and presenting papers in conferences are not considered for appraisal. 41% of faculty members from "self – financing engineering colleges" are of the opinion that they are considered for appraisal. This motivates the faculty members into "knowledge sharing"

Influence of 'organizational leadership' on 'knowledge sharing' practices.

Faculty Members	Total no. of Samples	Yes Frequency	Percent	No Frequency	Percent	Maybe Frequency	Percent
Govt – Aided	100	72	72%	27	27%	01	01%
Self – Fin.	100	88	88%	12	12%	0	0%
Total	200	160	80%	39	19.5%	1	0.5%

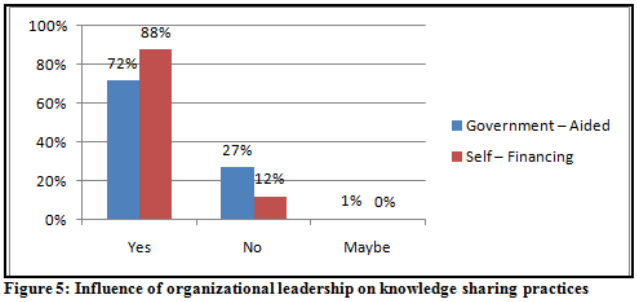

Figure 5: Influence of organizational leadership on knowledge sharing practices

	Value	Df	Asymp. Sig (2 sided)
Pearson Chi-Square	16.953	2	.000
Likelihood Ratio	17.901	2	.000
Linear by Linear Association	16.700	1	.000
Number of Valid cases	200		

Inference: from the above table and graph we can conclude that 88% of faculty members from "self-financing engineering colleges" are of the opinion that "organizational leadership" influences "knowledge sharing" compared to 72% of faculty members from "Government – aided engineering colleges".

Inference: The 'chi-square test' shows a value of 16.953 for 2 "degrees of freedom". The p value is 0.000 which is less than 0.05. Therefore the "null hypothesis" is rejected and the "alternate hypothesis" is accepted. There exists a significance influence of "organizational leadership" on "knowledge sharing" practices of faculties in engineering colleges of Mysuru.

Chi – Square test

Existing support of 'organizational technology' on 'knowledge sharing' practices

Faculty Members	Total no. of samples	ICT enabled classroom	WiFi & Intranet	Digital Depository	All the above
Govt.- Aided	100	32%	21%	27%	20%
Self-Fin.	100	15%	12%	9%	64%
Total	200	47%	33%	38%	88%

March-April 2020
ISSN: 0193-4120 Page No. 5743 - 5751

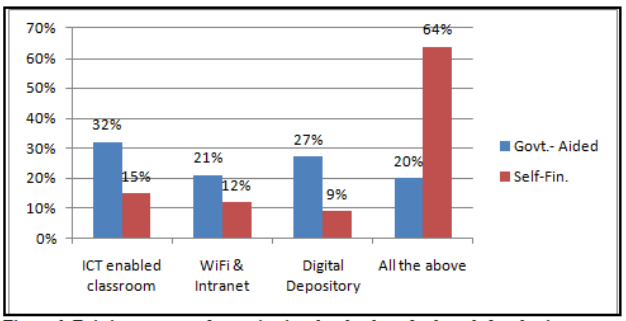

Figure 6: Existing support of organizational technology for knowledge sharing

Inference: from the above table and graph we can conclude that 64% of "self – financing" engineering colleges are having all the technology facilities compared to only 20% of "Government- aided" engineering colleges

Chi – Square test

	Value	Df	Asymp. Sig (2 sided)
Pearson Chi-Square	1.561	2	0.816
Likelihood Ratio	2.406	2	0.661
Linear by Linear Association	0.248	1	0.620
Number of Valid cases	200		

Inference: The "Chi-Square test" shows a value of 1.561 for two degrees of freedom. The p value is 0.816 which is more than p value of 0.05. Therefore the "null hypothesis" is accepted. There is no significant influence of "organizational technology" on "knowledge sharing" practices of "faculty members in engineering colleges of Mysuru".

VII. Findings:

• There exists an official "knowledge sharing" practice among "faculty members" of "Government – Aided" and "Self – Financing engineering colleges" of Mysuru.

• Contrast to "Self – Financing" engineering colleges, official "knowledge sharing" practices are very less in "Government – Aided" engineering colleges of Mysuru.

• There exists a significance influence of "organizational culture" on the "knowledge sharing" practices of faculty members in engineering colleges of Mysuru.

• The existence of the influence of "organizational culture" on "knowledge sharing" practices of faculty members is more in "self – financing engineering colleges" compared to "Government – Aided engineering colleges".

• There exists a significance influence of "organizational leadership" on the "knowledge sharing" practices of faculty members in engineering colleges of Mysuru.

• The existence of the influence of "organizational leadership" on 'knowledge sharing" practices of faculty members is more in "self – financing" engineering colleges compared to "Government – Aided" engineering colleges of Mysuru.

• There does not exist a significance influence of "organizational technology" on knowledge sharing practices of faculty members in engineering colleges of Mysuru.

VIII. Suggestions:

• The awareness about the benefits of knowledge sharing must be increased in "Government – aided engineering colleges" by organizing workshops and conferences about "knowledge sharing".

• "Knowledge sharing" sessions must be made mandatory in all departments of "self – financing" and "Government – aided engineering colleges".

• An organizational culture of intra – departmental and inter – departmental knowledge sharing sessions must be developed where faculty members will share their domain knowledge with their colleagues.

• An organizational culture must be developed where faculty members will meet and share their experiences of the seminars and conferences they have attended.

• Presentations from various faculty members about their published research articles and book chapters must be held as part of the knowledge sharing session.

• Academic leaders of the colleges must see that monetary rewards are given to faculty members who attend and present papers in "national" and "international" conferences.

• The management of the colleges must make a separate criterion in the appraisal form for academic achievement, which includes paper presentations, research publications etc.

• Faculty members must be encouraged to take up project works in various domains which provides funds for research.

March-April 2020
ISSN: 0193-4120 Page No. 5743 - 5751

• Infrastructure of the college must be updated. Converting conventional libraries into digital, updating computers in the lab and getting the latest software for it, providing free internet access like wi-fi facility to faculty members, updating regular classrooms into ICT facility etc, will motivate the faculty members towards sharing of knowledge

IX. REFERENCES

1. Girard, John P.; Girard, JoAnn L. (2015), "Defining knowledge management: Toward an applied compendium" (PDF) Online Journal of Applied Knowledge Management 3 (1): 14.
2. "Introduction to Knowledge Management" www.unc.edu University of North Carolina at Chapel Hill. Archived from the original on March 19, 2007 Retrieved 11 September 2014.
3. Snowden, D. (2002), "Complex acts of knowing: paradox and descriptive self-awareness". Journal of Knowledge Management.6 (2): 100–111. doi:10.1108/13673270210424639.
4. Polanyi, M. (2003), [1958] Personal Knowledge: Towards a Post-Critical Philosophy CRC Press. p. 428 ISBN 0-203-44215-6
5. Nonaka I. (1994), "A dynamic theory of organizational knowledge creation" Organization Science 5 (1): 14–37 doi:10.1287/orsc.5.1.14. JSTOR 2635068
6. Argote, L.; Ingram, P. (2000), "Knowledge Transfer: A Basis for Competitive Advantage in Firms". Organizational Behavior and Human Decision Processes.82 (1): 150–169. doi:10.1006/obhd.2000.2893.
7. "Model of the Multy System", BEST: Journal of Management, Information Technology and Engineering (BEST: JMITE), Vol. 1, Issue 1, pp. 33-36
8. Prusak, Lawrence; Davenport, Thomas H. (2000), Working Knowledge: How Organizations Manage What They Know, 2nd Edition. Cambridge, MA: Harvard Business School Press. ISBN 1-57851-301-4.
9. Serban, Andreea M.; Luan, Jing (2002), "Corporate Strategy Model: Scenario Planning" (PDF)University of Kentucky Retrieved 17 April 2013.
10. Bart van den Hooff, Jan A. de Ridder, (2004), "Knowledge sharing in context: the influence of organizational commitment, communication climate and CMC use on knowledge sharing", Journal of Knowledge Management, Vol. 8 Iss: 6, pp.117 – 130. DOI http://dx.doi.org/10.1108/13673270410567675
11. "Relationship between Knowledge Sharing to Individual Performance: The Role of Organizational Culture and Relationship Quality as Moderator in Family Business", IMPACT: International Journal of Research in Business Management (IMPACT: IJRBM), Vol. 4, Issue 1, pp. 67-78
12. B Van den Hooff, F de Leeuw van Weenen. Knowledge RE De Vries, B Van den Hooff, JA de Ridder Communication research 33 (2), 115-135, 2006 326, 2006 Managing ... H Bouwman, B Van Den Hooff, L Van De Wijngaert. Sage, 2006.
13. Haas, M. R. and Hansen, M. T. (2007), Different knowledge, different benefits: toward a productivity perspective on knowledge sharing in organizations. Strat. Mgmt. J., 28: 1133–1153. doi:10.1002/smj.631.
14. Demola Obembe, (2010), "Understanding individual action: when employees contravene management directives to foster knowledge sharing", Management Research Review, Vol. 33 Issue: 6, pp.656-666, doi: 10.1108/01409171011050235.
15. "Gap Analysis of Knowledge Management of Cibinong Science & Technology Park-Indonesia", International Journal of Business and General Management (IJBGM), Vol. 6, Issue 6, pp. 37-46
16. Yvette Taminiau, Wouter Smit, Annick de Lange, (2009) "Innovation in management consulting firms through informal knowledge sharing", Journal of Knowledge Management, Vol. 13 Iss: 1, pp.42 – 55DOIhttp://dx.doi.org/10.1108/13673270910931152.
17. Sheng Wang, Raymond A. Noe (2010), Knowledge sharing: A review and directions for future research, Human Resource Management Review, Volume 20, Issue 2, June 2010, Pages 115–131.
18. "Human Resource Management Practices and Individual Performance", IASET: Journal of

Human Resources Management (IASET: JHRM), Vol. 4, Issue 1, pp. 1-10

19. James C Sarros, Brian K. Cooper, Joseph C Santora (2011), Leadership vision, organizational culture, and support for innovation in not-for-profit and for-profit organizations, Leadership & Organization Development Journal 32(3):291-309, DOI: 10.1108/01437731111123933.
20. Ziêba, M. and Schivinski, B., (2015), Knowledge management driven leadership, culture and innovation success – an integrative model In: Proceedings of IFKAD 2015: 10th International Forum on Knowledge Asset Dynamics: Culture, Innovationand Entrepreneurship: Connecting the Knowledge Dots, Bari, Italy, 10-12 June 2015. Institute of Knowledge Asset Management,pp. 1193-1202.
21. "A Study on Knowledge Management Practises and its Challenges among the Blomming Companies", International Journal of Business Management & Research (IJBMR), Vol. 10, Issue 1, pp. 9–14
22. Paulin, D and Suneson, K. "Knowledge Transfer, Knowledge Sharing and Knowledge Barriers – Three Blurry Terms in KM" The Electronic Journal of Knowledge Management Volume 10 Issue 1 (pp81-91, available online at www.ejkm.com
23. Sri Ranjini S and Namasimham B V "Incorporating strategies of knowledge management practices for attaining a competitive advantage in engineering education" ZENITH International Journal of Business Economics & Management Research ISSN 2249 – 8826 ZIJBEMR, Vol.4 (9), SEPTEMBER (2014)
24. "Role of Knowledge Management in Indian Banking Industry (With Reference To SBI & ICICI)", International Journal of Educational Science and Research (IJESR), Vol. 8, Issue 1, pp. 9-18
25. Sri Ranjini S and Namasimham B V "A study on knowledge management strategies of post graduate students in mysuru city, Karnataka" ZENITH International Journal of Multidisciplinary Research ISSN 2231-5780 Vol.6 (9), SEPTEMBER (2016), pp. 1-12.