

A Study on Implications of Knowledge Management on the Financial Performance and Efficiency of Selected Indian Companies

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Abstract

Knowledge management (KM) came into existence in India at the beginning of 2000 but to date, the extent of KM implementation differs widely across industries. Some companies have successfully implemented knowledge management but there are others that practice KM in bits and pieces. Empirical evidence to some extent supports that KM has a positive impact on operational performance including financial performance. The purpose of this study is to confirm these findings in selected Indian organizations via an awareness study of the employees. The sample for the study is companies listed in Indian stock exchanges with 200 respondents across different sectors and with different levels in the organization. KM practices in these organizations vary from moderate to high. Data for the study was collected between 2019-2020. The findings of the study indicate that most of the organizations which claim that they have implemented KM but are not deriving the results out of it may not be aware of the term “effective KM”. Effective KM does not mean ‘more the learning the better’ or ‘the more knowledge the better’ rather it means relevant knowledge. The results of the study indicate a proclivity towards better financial performance for companies that are practicing effective KM. This study thus rejects the findings of some previous studies which state that KM does not have an impact on financial performance limitation of the study is that it is focused on a few sectors and based on the perception of the employees.

Key Words: Efficiency, Financial Performance, Knowledge Management, Listed Companies.

1.Introduction to Knowledge management (KM)

The rapid growth of technology has resulted in the formation of a knowledge-based business environment. If one was to think of the way businesses have evolved over the years, they moved from a position where capital was the prime requirement to set up a business, moving on to mass production becoming the criterion for a successful business and later to the business idea or knowledge insight being the centre for good business growth (Drucker, 1995). This development happened somewhere in the early nineties where it was realized that knowledge management is not a trend but a necessity and needs to be adopted as a discipline.

2.Review of Literature

The literature on KM indicates that knowledge does cause a change in organizational performance (Tippins and Sohi, 2003; Kalling, 2003; Darroch, 2005; Kridan and Goulding, 2006; Marque's and Simon, 2006; Sigala and Chalkiti, 2007; Bogner and Bansal, 2007; King et al., 2008; Pillania, 2008).

However not all the studies support that the change is a positive one. Kalling (2003) in his study linking KM to the performance observed that the link between KM and performance might not always exist and that the relationship may stop at representations of profit but not profit itself.

Darroch (2005) testing the impact of KM on innovation and firm's performance debated that of all the KM processes, only responsiveness to knowledge had an impact on financial performance.

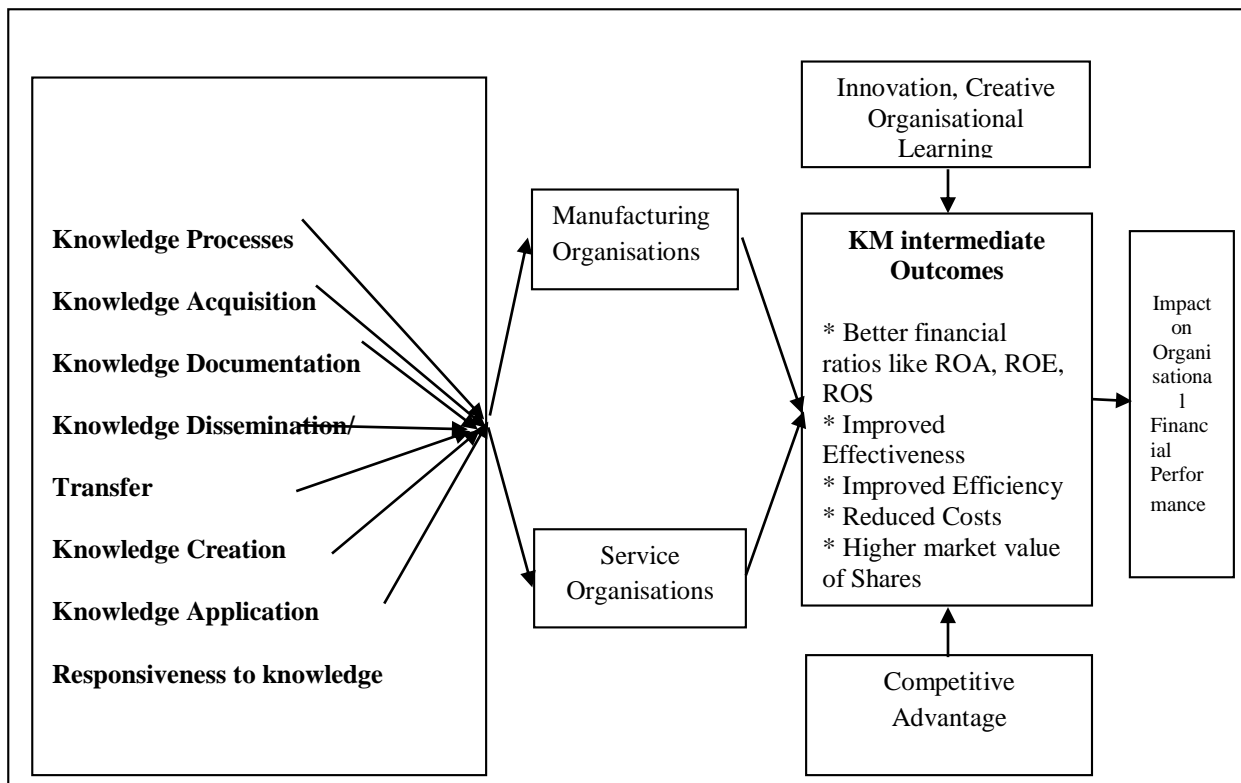
Seleim (2011) in his study KM and OP in Egyptian software firms concludes that only knowledge application influences organization performance.

Marque's & Simon (2006), in their study, observed that The effect of KM on firm performance has suggested that the relationship could exist but it can be tested by conducting a longitudinal study and the results could be clearer. Authors, however, believe that KM has various financial and non-financial benefits which have a bearing on the organizational performance like 'better decision making, flatter teamwork, improved learning, better communication, enhanced employee skills, higher employee satisfaction, enhanced flexibility, better customer relations, better service quality, improved customer satisfaction' (Singh et.al, 2006; Dalkir, 2005; Chase, 1997); increased employee empowerment, employee loyalty, and business continuity, developing core competencies, improved business processes, risk reduction (Anantatmula & Kanungo, 2006; Beijerse,1999); sharing best practices (Davenport, 1998); developing new business opportunities (KPMG, 2000); innovation (Darroch, 2005; Davenport, 1998; Dalkir, 2005); efficient management of intellectual capital (Demarest, 1997); improved labor productivity (Pham & Hara, 2011).

The listing is important for knowing which benefits are directly impacting financial performance and which have an indirect impact. Under financial benefits, KM is known to have resulted in higher sales/profits; increased operational efficiency by cycle time reduction; improved revenues through licensing of patents (Singh et. al, 2006, Anantatmula & Kanungo, 2006; Chase, 1997), reduced costs (Feng et. al, 2004); Higher ROA and ROS (Vidoviæ, 2010).

5Based on the literature review, a model has been developed for the study:

Knowledge Management and Organisational Performance Model



3. Objectives of the Study:

- To identify whether the employees of the organizations are aware of the KM practices which the organization is pursuing.
- To study the perception of the employees about KM and its benefits.
- To relate to the financial performance to assess the tangible benefits of KM.

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4. Methodology

Sample Selection

The study is an awareness-based study and stratified random sampling has been used. The sample for the study is companies listed on the National Stock Exchange(S&P Nifty50). The companies were arranged in descending order based on their turnover. S&P Nifty50 companies were selected as samples and were contacted for the survey. Out of 50, 20 companies agreed to respond to the survey giving a response rate of 40%. A structured questionnaire comprising 40 questions was sent to these company employees which included all the levels – senior, middle, and executives. The employees were contacted via email or personal meetings to collect the responses. The completed questionnaire responses were received from Five companies only which were used for the analysis. A total of 200 responses were collected across these companies.

The instrument for the study was an adopted one from a study conducted in Egypt in 2007 but since this study was conducted on the Egyptian software firms, the questionnaire needed modifications to make it suitable for the Indian scenario and covering questions on all kinds of industries. The modified instrument was tested by conducting a pilot study in a banking & finance company at its multiple locations. Based on the pilot study, changes were made in the instrument before it was sent to other companies for their responses. The instrument was tested for reliability which was 0.95 and considered to be very good (Nunally,1967).

The research in the discussion is part of the broader study on knowledge management which is being conducted to see if KM has an impact on the financial performance of the companies. This tool was designed to assess the level of KM in the organizations and if it had an impact on financial performance. The study is being conducted in two broad sectors being manufacturing and service. In each of these sectors, different organizations were contacted to participate in the survey. The companies include a wide range of sectors like – banking and finance, Information technology, infrastructure, automobile, steel, telecom, aviation, and pharmaceuticals. The questionnaire is based on a five-point Likert scale from 1 to 5 where 1 denotes complete disagreement and 5 denotes complete agreement to a practice/condition. There were 40 questions in all focusing on various KM aspects/practices like knowledge acquisition, knowledge documentation, knowledge transfer, knowledge creation, knowledge application, responsiveness to knowledge, and KM related performance. The demographics which are an important part of this study have been discussed in the next section. Data for the study was collected between 2019-2020.

5. Data Analysis and Findings

Demographics of the Study

Five companies were taken for the study with an equal representation of four industries each from both the manufacturing and service sector. The number of respondents was 200 but the number varied from organization to organization. The respondent details are given below in the following figures.

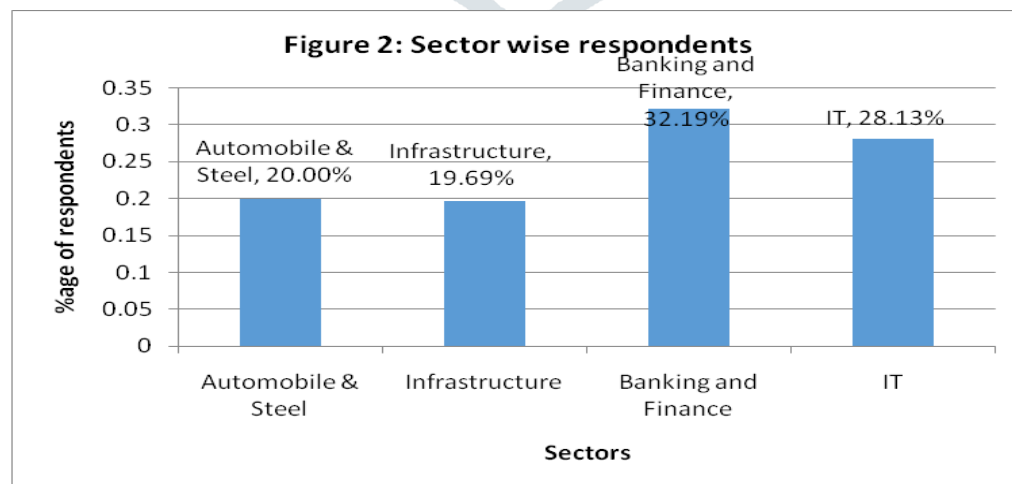


Figure 3: Gender

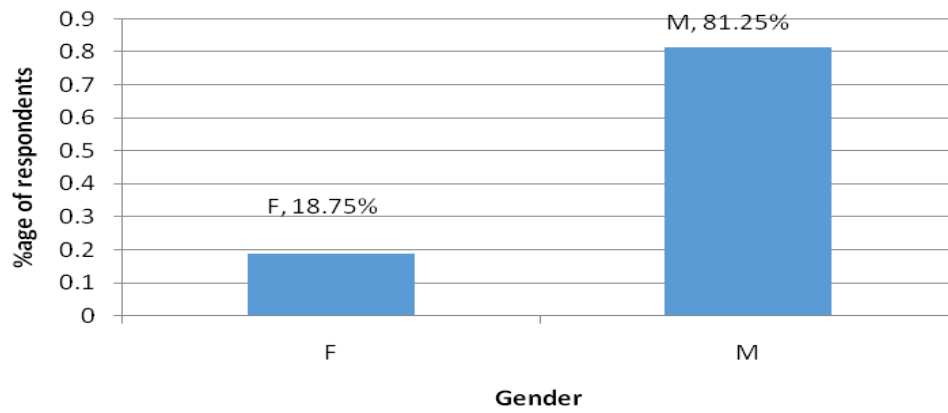


Figure 4: Experience in years

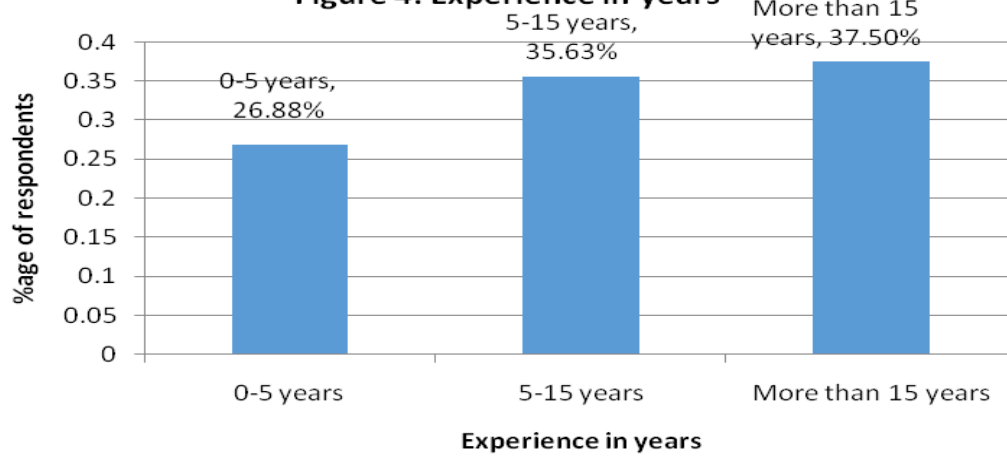
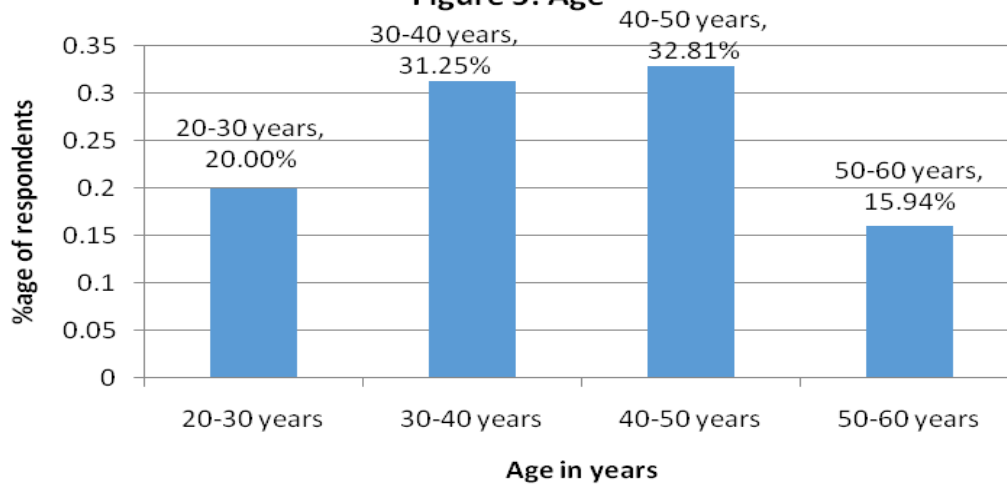
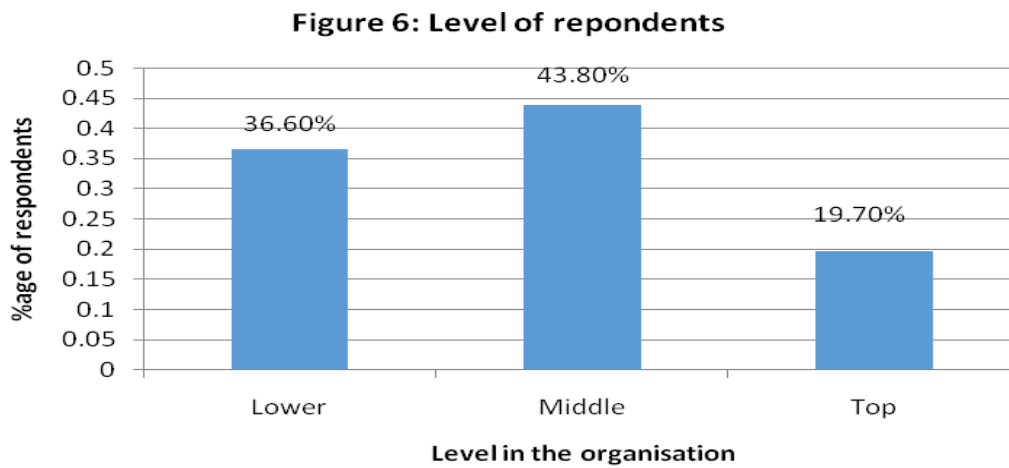


Figure 5: Age



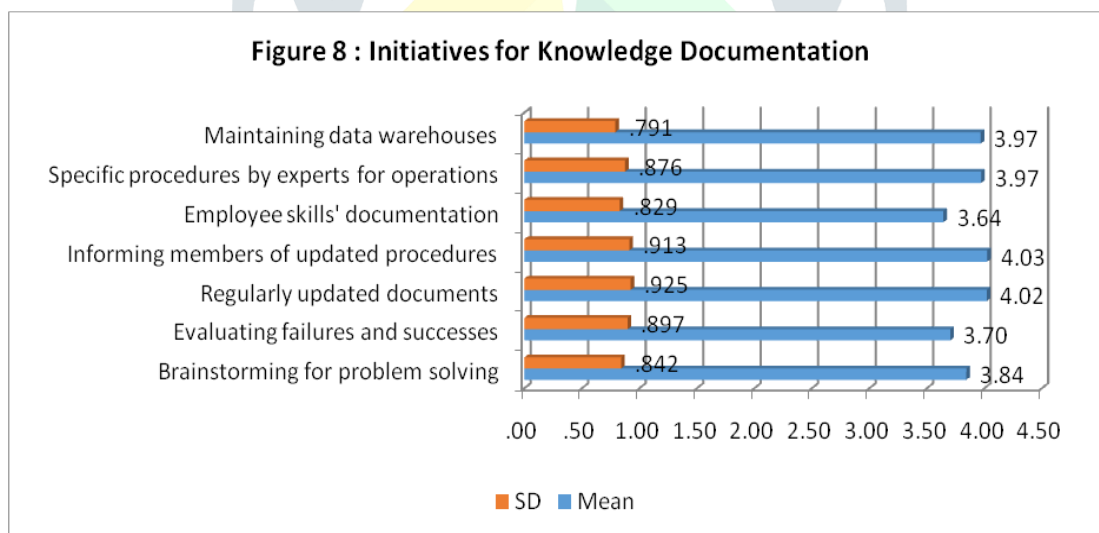


Initiatives for Knowledge Acquisition (KA)

Knowledge acquisition practice as a construct had eight items. The responses show that the most highly observed practice in KA for organizations is recording the needs of customers i.e. regularly collecting information about the needs of customers with a mean score of 4.11. This was followed by conducting regular training with a mean score of 4.01 wherein employees in the firm regularly attend courses, seminars, or other training programs to remain informed.

Initiatives for Knowledge Documentation (KD)

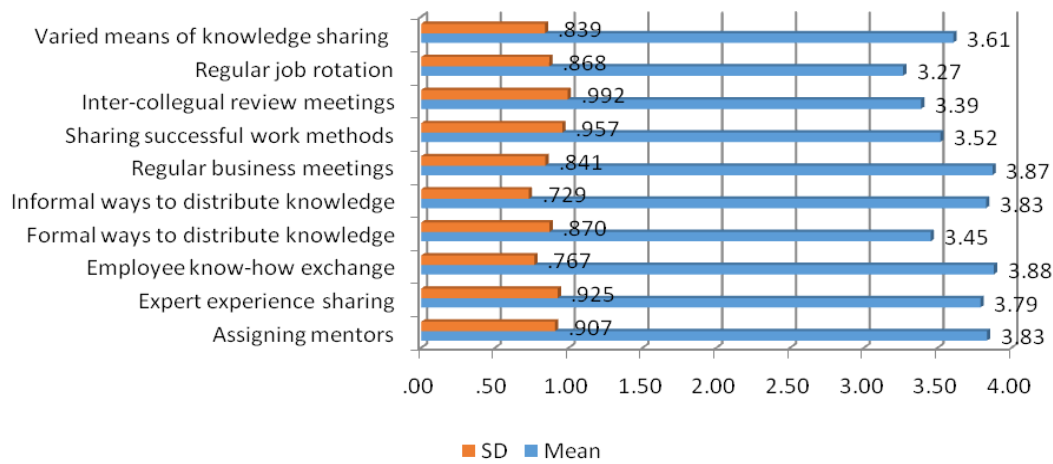
The mean score in knowledge documentation is lower than the highest mean score in the KA practice. While for KA practices, it was 4.11, here it is only at 4.03 which is for informing members for updated procedures which means that the firm informs its members from time to time of changes in procedures, handbook, etc.



Initiatives for Knowledge Transfer (KT)

Compared to KD and KA, the mean scores for this practice are much lower. The highest score in this category if were 3.88; for employee know-how exchange i.e. the extent to which employees share with colleagues and others their knowledge/know how.

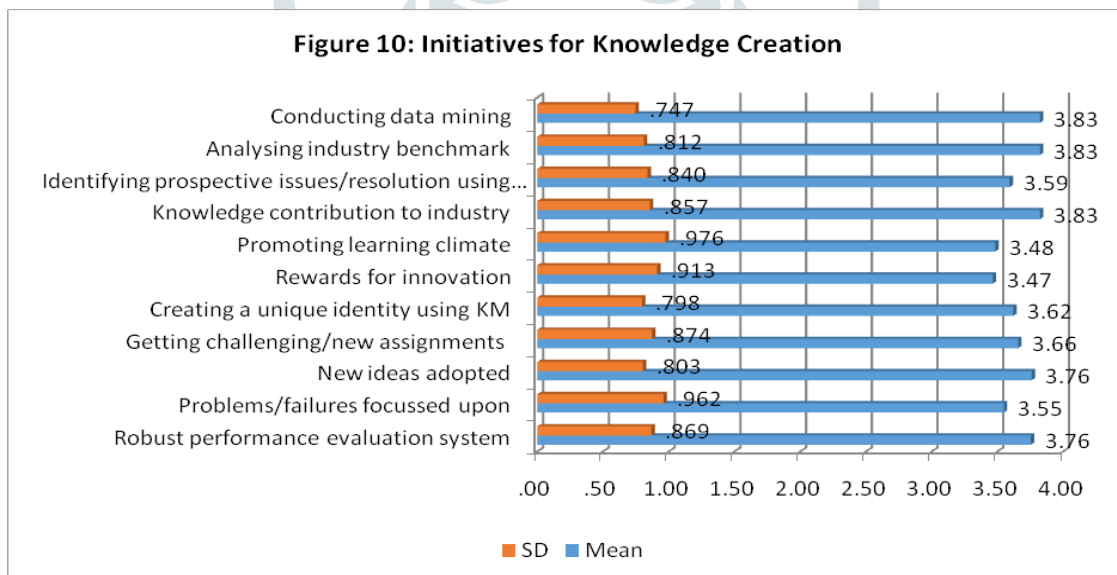
Figure 9 : Initiatives for Knowledge Transfer



Initiatives for Knowledge Creation (KC)

The mean scores for the responses for knowledge creation showed that most of these were in the category of agreeing rather than strongly agree. Three practices being – conducting data mining to discover new knowledge and insights, analyzing benchmark at the industry level, and contributing to the development of the important ideas and knowledge in the industry had a mean score of 3.83.

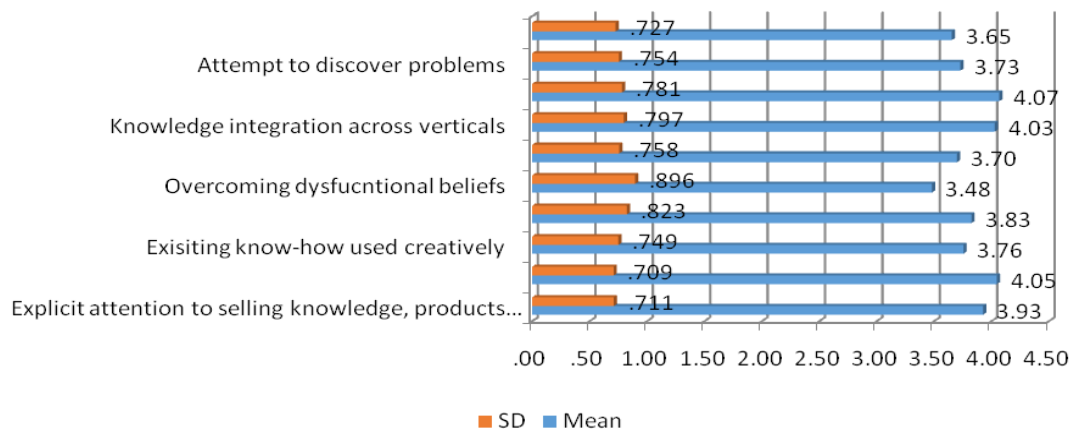
Figure 10: Initiatives for Knowledge Creation



Initiatives for Knowledge Application (KAp)

The highest score in this category was 4.07 for maximizing knowledge use which implies that the firm maximizes knowledge to use through its organizational structure, management systems, and practices.

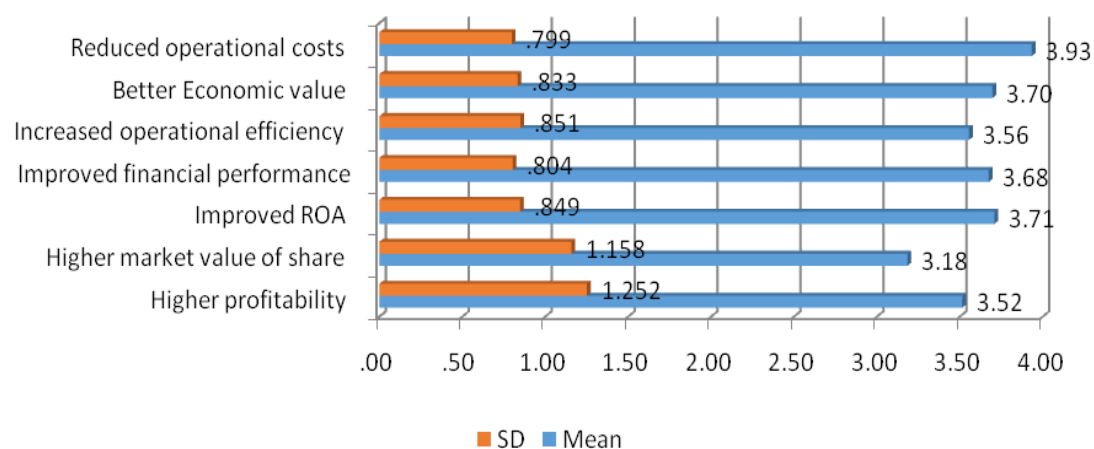
Figure 11: Initiatives for Knowledge Application



Impact on Financial Performance

The next part of the tool was aimed at ascertaining whether the respondents felt that knowledge management had an impact on the financial performance of their organization. The responses here were in the range of neutral to somewhat agree. The highest mean score was 3.93 for the reduced operational cost which implied that KM implementation helped in reducing operational costs. The respondents also felt that their Return on Assets improved due to KM and rated it at 3.71. The third important aspect was that KM resulted in a better Economic value for the organization with a score of 3.70. A mean score of 3.68 was given to better financial performance as respondents felt that post-KM implementation, their financial performance has been better than before. Increased operational efficiency and better profitability were two more benefits of KM with a mean score of 3.56 and 3.52 respectively. The respondents felt that the day to day operations had improved due to the existence of knowledge documents, data warehouses, and a lot of time could be saved not hunting for information which was the case before KM being implemented. Since the cost was being saved and operational efficiency had improved, the impact on profitability was direct. However, it was not clear as to what percentage of increase was attributable to the KM efforts.

Figure 12: Impact on financial performance



KM and Increased Efficiency

By adjudging the scores on how responsive the company was to the acquired knowledge, the impact on efficiency was ascertained. The highest mean score was 4.27 for a prompt response to customer complaints/concerns/ queries. The

respondents agreed that their firm was quick in resolving customer complaints as their staffs was trained and sufficiently aware to handle the situation. The second prevalent practice in this category was a well-developed marketing function resulting in marketing plans being implemented effectively. The third was the organization being flexible and pro-active in implementing strategies with a mean score of 3.86. Information about new technological developments affecting business being circulated quickly in the organization had a score of 3.85. The lowest score of 3.74 was for competitors' strategic actions quickly circulated in the organization. Though this score is low compared to the other scores in this category but standalone even this figure is implying that respondents agree to it.

6. Conclusion

Out of the different practices which were evaluated amongst the employees, the initiatives for knowledge acquisition, documentation, and application were found to be more popular than knowledge transfer and sharing. Employees felt that KM has an impact on the financial performance but they did not rate it very high in their responses. A possible reason could be that either the employees felt that their organization could do even better or they were not sufficiently aware of all the financial benefits which were accruing to the business. The latter could be true with employees at the entry-level or with lesser years of experience who may not understand the financial implications fully. Nevertheless, personal interviews with senior-level managers revealed that they were optimistic about KM bringing a positive impact on their financial performance. Almost all the respondents were optimistic about KM and its impact on efficiency. They felt that operational issues like resolving customer queries, robust marketing functions, introducing new technological developments, agility to change, and fighting competition were all possible due to KM. Firms use KM to improve their financial performance, keep ahead of the competition by introducing new products/technologies, and keep innovating using the existing knowledge for long term sustainability. The study rejects the findings of previous researchers who suggested that KM does not have an impact on financial performance. The study can be extended by mapping the financials of these companies and seeing if the results converge or diverge with the perception study.

7. Limitations of the Study

The study has been done in India and covers selective sectors. The results could vary if bigger sample size is taken.

References:

1. Anand, A., & Singh, M. D. (2011). Understanding knowledge management. *International Journal of Engineering Science and Technology*, 3(2), 926-939.
2. Arora, R. (2002). Implementing KM-a balanced score card approach. *Journal of knowledge management*, 6(3), 240-249.
3. Bagorogoza, J. K., de Waal, A. A., van den Herik, H. J., & van de Walle, B. A. (2011). Improving organisational performance through knowledge management: The case of financial institutions in Uganda (No. 2011/18).
4. Bogner, W. C., & Bansal, P. (2007). Knowledge management as the basis of sustained high performance. *Journal of Management Studies*, 44(1), 165-188.

5. Chase, R. L. (1997). The knowledge-based organization: an international survey. *Journal of Knowledge Management*, 1(1), 38-49.
6. Courtney, J. F. (2001). Decision making and knowledge management in inquiring organizations: toward a new decision-making paradigm for DSS. *Decision support systems*, 31(1), 17-38.
7. Darroch, J. (2005). Knowledge management, innovation and firm performance. *Journal of knowledge management*, 9(3), 101-115.
8. Davenport, T. H., De Long, D. W., & Beers, M. C. (1998). Successful knowledge management projects. *MIT Sloan Management Review*, 39(2), 43.
10. Demarest, M. (1997). Understanding Knowledge Management. *Journal of Long Range Planning*, 30(3), 374-84.
11. Fowler, A. (2000). The role of AI-based technology in support of the knowledge management value activity cycle. *The Journal of Strategic Information Systems*, 9(2), 107-128.
12. Holsapple, C. W. and Joshi, K. D. (1999, January): Description and analysis of existing knowledge management frameworks, In *Systems Sciences, 1999. HICSS-32. Proceedings of the 32nd Annual Hawaii International Conference*, p. 15-IEEE.
13. King, W. R., Chung, T. R., & Haney, M. H. (2008). Knowledge management and organizational
14. KPMG, Knowledge Management Research Report 2000, KPMG Consulting (ed.), Retrieved June 22, 2010 from www.insite.cz/data/kpmg_Knowledge_Management_report2000.pdf (accessed on December 20, 2014).
15. Liao, S. H. (2003). Knowledge management technologies and applications—literature review from 1995 to 2002. *Expert systems with applications*, 25(2), 155-164.
16. Liebowitz, J. (2001). Knowledge management and its link to artificial intelligence. *Expert systems with applications*, 20(1), 1-6.
17. Palacios Marqués, D., & José Garrigós Simón, F. (2006). The effect of knowledge management
18. practices on firm performance. *Journal of Knowledge Management*, 10(3), 143-156.
19. McAdam, R., & Reid, R. (2001). SME and large organization perceptions of knowledge management: comparisons and contrasts. *Journal of knowledge management*, 5(3), 231-241.
20. Moustaghfir, K. (2008). The dynamics of knowledge assets and their link with firm performance. *Measuring Business Excellence*, 12(2), 10-24.
21. Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford university press.
22. Nunnally, J. C., Bernstein, I. H., & Berge, J. M. T. (1967). *Psychometric theory* (Vol. 226). New York: McGraw-Hill.
23. Pham, Q. T., & Hara, Y. (2012). KM Approach for Improving the Labor Productivity of Vietnamese Enterprise. *Dynamic Models for Knowledge-Driven Organizations*, 206.
24. Pillania, R. K. (2008). Strategic issues in knowledge management in small and medium enterprises. *Knowledge Management Research & Practice*, 6(4), 334-338.