COMMONWEALTH JOURNAL OF COMMERCE & MANAGEMENT RESEARCH

**Vol.4, Issue 9 (September 2017) ISSN: 2393-851X Impact Factor: 0.612 UGC & ISI Indexed**

# KNOWLEDGE MANAGEMENT SYSTEM FOR IT ORGANIZATION ENVIRONMENT

**N. Raja Rajeshwaran**

Research Scholar, Jamal Institute of Management, Jamal Mohamed College, Tiruchirapalli, Tamil Nadu

**A. Sengottuvel**

Research Scholar, Jamal Institute of Management, Jamal Mohamed College, Tiruchirapalli, Tamil Nadu

**Dr. U. Syed Aktharsha**

Associate Professor, Jamal Institute of Management, Jamal Mohamed College, Tiruchirappalli, Tamil Nadu

## ABSTRACT

*The purpose of this paper is to examine the relationship between Knowledge Management (KM) infrastructure capability, KM process Capability, KMS effectiveness and Perceived Service benefits and risks in IT Organization. A sample of 116 employees was drawn from the population of 250 employees using a structured questionnaire working in leading IT Company of Particular district. The results of Partial Least Square Path Modelling have shown that Structure and Technology, Knowledge Acquisition, Conversion and Protection are found to be significant predictors of KMS effectiveness and KMS effectiveness of the IT organization plays a vital role in Perceived Service benefits and risks of IT organization*

**Key Words:** KM Infrastructure capability, KM Processes capabilities, KMS effectiveness

Vol.4, Issue 9 (September 2017) ISSN: 2393-851X Impact Factor: 0.612 UGC & ISI Indexed

## INTRODUCTION

Knowledge management systems (KMS) are seen as the means to aid organizations in creating, sharing and using knowledge. In the past, firms have invested millions of dollars in these types of systems in order to create competitive value. Knowledge management systems are defined as systems designed and developed to give decision makers/users in organizations the knowledge they need to make their decisions and perform their tasks (Davenport, 1998). Knowledge management systems are concerned with the management of knowledge in the organization.

## NEED OF THE STUDY

KM capability of a firm includes two key components: KM infrastructure and KM process capabilities. In particular, KM infrastructure capability consists of technology, structure, and culture which form a definitional basis for the theoretical framework of social capital while KM process capability is comprised of acquisition, conversion, application and protection processes which form an operational perspective for the framework of knowledge combination and exchange that underlies the theory of knowledge integration. In past, KM researchers adapted varied measures from a number of authors to assess the benefits of KMS in an organization. Previous research focused on exploring the aspects of organizational culture, structure, and technology that are directly related to KM as its antecedents. Even though, there are prior studies in the field of KMS, it was understood from the existing stock of literature that the effectiveness of KMS and the benefits and risks associated with it, were less explored in IT organizations. So, there has been a recognized need for the study by which deeper understanding of the Knowledge Management Capabilities and Knowledge Management System can be gained in the context of IT organizations.

Vol.4, Issue 9 (September 2017) ISSN: 2393-851X Impact Factor: 0.612 UGC & ISI Indexed

## RESEARCH OBJECTIVES

- To examine the impact of KM Infrastructure Capability on KMS Effectiveness.
- To examine the influence of KM process Capability on KMS Effectiveness.
- To examine the potential impact of KMS Effectiveness on Perceived services benefits and risks.
- To test and validate the research model.

## REVIEW OF LITERATURE

**Knowledge Management Infrastructure capability**

Knowledge management infrastructure capabilities or KM enablers (or influencing factors) are the overall organizational activities or mechanisms that can stimulate knowledge creation, protect knowledge, and facilitate the sharing of knowledge in an organisation (Lee & Choi 2003; Migdadi 2005). Choi (2000) conducted an empirical study of factors affecting successful implementation of KM based on the survey responses of 217 participants from different sectors. The research concluded that top management leadership, fewer organizational constraints, and information systems infrastructure were the top three critical success factors for KM to succeed. Baldanza and Stankosky (2001) postulated four key elements, namely leadership, organisational structure, technology and learning, as the foundational building block for long-term success of KM. From another perspective, Gold, Malthotra and Segars (2001) argue that three key infrastructures, technical, structural and cultural, enable maximization of social capital. The same KM infrastructure elements are used by Lee and Lee (2007) who add 'people' as a fourth KM infrastructure element to their model. According to Mintzberg (1979), organisational structure can be defined as the result of the combination of all the ways in which work can be divided into different tasks, the coordination of which must subsequently be ensured. The organisational structure may encourage or inhibit knowledge management. Technology as one of the infrastructures of knowledge includes Information Technology (IT), systems that are capable of integrating information and knowledge in organizations as well as create, transfer, storage, and securing the knowledge resources of the organization. (Webb and

Vol.4, Issue 9 (September 2017) ISSN: 2393-851X Impact Factor: 0.612 UGC & ISI Indexed

Schlemmer, 2006).In order to implement knowledge management programs, it seems necessary to change organizational culture (Bhatt, 2001).

**Knowledge Management Process Capabilities**

Gold et al. (2001) examined an empirically effective KM model from the perspective of organisational capabilities. This perspective suggests that a knowledge infrastructure, consisting of technology, structure and culture, along with knowledge process architecture of acquisition, conversion, application and protection, are essential organizational capabilities or preconditions for effective KM. Similarly, Pentland(1995) defines KM processes as an ongoing set of practices embedded in the social and physical structure of the organisation with knowledge as their final product□. Effective KM processes should be conducted frequently, consistently, and flexibly (Grant 1996a). Song (2008) showed that creating knowledge can significantly associate with organizational improvement. In addition, when the knowledge gained is used properly, there will be a significant and positive relationship between knowledge acquisition and organizational performance (Seleim and Khalil, 2007). The knowledge obtained from various sources (inside and outside the business) needs to transform and change to be applied within the organization (Lee and Suh, 2003). Therefore, the data must be quickly converted into information and information into organizational knowledge in order to gain the maximum benefit from the conversion process (Bot, 2001).Knowledge application involves those activities showing that the organization apply its knowledge (Bhatt, 2001). Moreover, knowledge application means activating knowledge to create value in the organization which can be reflected in innovations, creations and new products (Miils and Smith, 2010). Protection of knowledge is necessary for performance and effective control in the organization which regularly includes the usage of copyright and patents with the information technology systems allowing the knowledge to give users the right of their usage through file name, username, passwords and shared protocols (Lee and Young, 2000).

Vol.4, Issue 9 (September 2017) ISSN: 2393-851X Impact Factor: 0.612 UGC & ISI Indexed

**Knowledge Management System**

Important management issues in knowledge management (KM) include the strategic use, management support, content currency and the effective design of knowledge management systems (KMS) (King, Marks, & McCoy, 2002, Sharp 2003). KM processes include knowledge creation, storing, sharing and usage, while KMS include the systems, policies, processes and procedures used to manage the creation, storing, sharing, and reuse of knowledge (Alavi&Leidner, 2001; Lee & Choi, 2003). Conceptually, then, a KMS is a system that allows for the creation, diffusion or transfer, and the ready availability of knowledge in the organization.

**Perceived Services Benefits and Risks**

Beerli et al. (2002), states that many companies currently investing a large amount of their money to develop their information systems to support and facilitate their Knowledge sharing activities, but they also need to provide training sessions to import the benefits of ease of knowledge and relate to business. Meanwhile, Wong and Aspinwall (2005), states that companies adopt knowledge management will have a useful benefit for the company, namely: the decision by the company will be better, the time required to solve problems more quickly, the benefits can be enhanced and productivity improvement. Meanwhile Djohanputro (2006), states that the risk of the system is part of the risk process, namely the potential for distortion results because of a defect or discrepancy in the operating system company.

# RESEARCH MODEL

Through the literature review it is clear and evident that there could be interrelationships between the dimensions of KM Infrastructure Capability, KM Process capability, KMS effectiveness and Perceived services Benefits and risks. But, there are few empirical supports to prove that KMS effectiveness has a significant and positive effect on Perceived services Benefits and risks. This research curiosity has led to the construction of following research model (figure 1) and its corresponding hypotheses.

COMMONWEALTH JOURNAL OF COMMERCE & MANAGEMENT RESEARCH

Vol.4, Issue 9 (September 2017) ISSN: 2393-851X Impact Factor: 0.612 UGC & ISI Indexed

***H1: KM Structure has significant effect on KMS Effectiveness.***

***H2: KM Technology has significant effect on KMS Effectiveness.***

***H3: KM Culture has significant effect on KMS Effectiveness.***

***H4: Knowledge Acquisition has significant effect on KMS Effectiveness.***

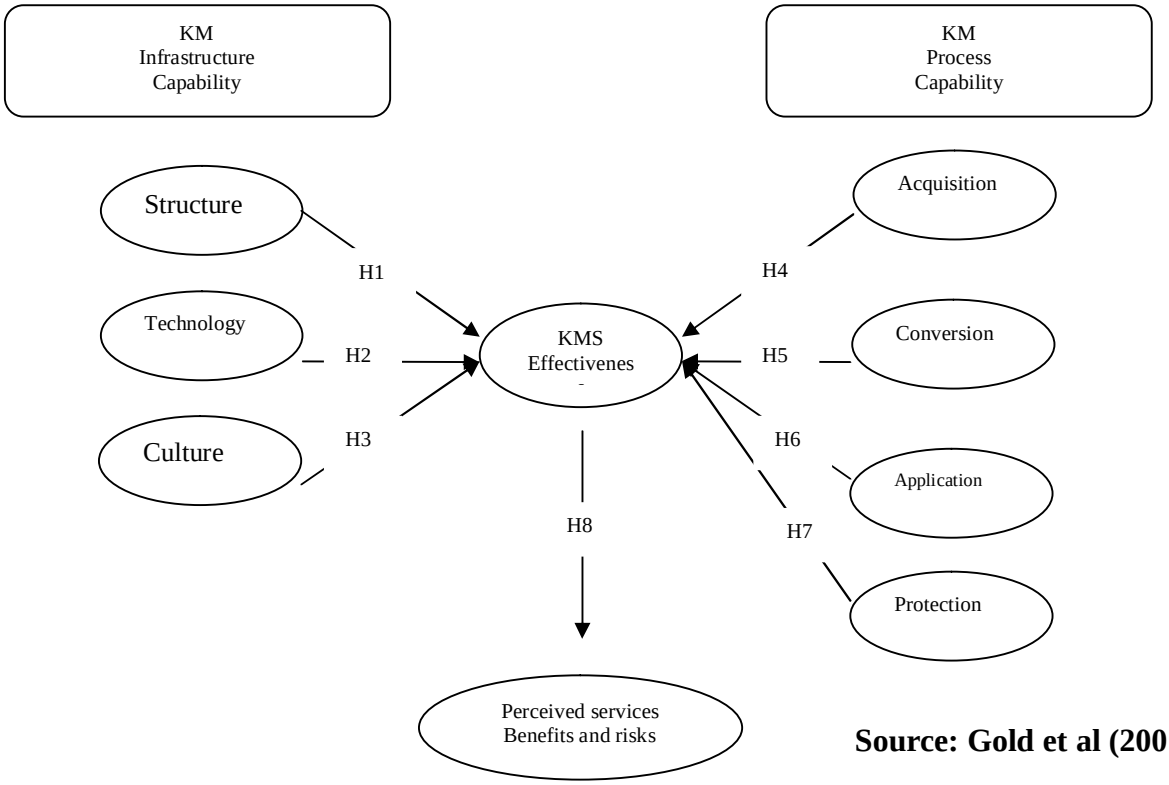
***H5: Knowledge Conversion has significant effect on KMS Effectiveness.***

***H6: Knowledge Application has significant effect on KMS Effectiveness.***

***H7: Knowledge Protection has significant effect on KMS Effectiveness.***

***H8: KMS Effectiveness has significant effect on Perceived services benefits and risks.***

**Figure 1. Proposed Research Model**




**Source: Gold et al (2001)**

COMMONWEALTH JOURNAL OF COMMERCE & MANAGEMENT RESEARCH

Vol.4, Issue 9 (September 2017) ISSN: 2393-851X Impact Factor: 0.612 UGC & ISI Indexed

## RESEARCH METHODOLOGY

This study is an empirical and quantitative in nature and data-based research, which can give conclusions based on observation. Literature pertaining to KM Infrastructure Capability, KM Process Capability, KMS Effectiveness and Perceived services Benefits and risks have been studied to understand the relevance of each one of them, and also, to examine the antecedents and consequences of the same and used in the formulation of the working hypothesis. The respondents are employees who render services to clients in their respective leading IT company situated in a particular district of Tamil Nadu. Finally, the metric in the form of a self-administered questionnaires with 5-point Likert scale ranging from Strongly Agree to Strongly Disagree , were distributed to 250 employees which forms the total population and the responses were obtained from 116 employees which constitute the sample size for the study. Disproportionate simple random sampling was adopted to collect responses from the samples. It was ensured that there would be no bias in their response. The data collected were analysed using SPSS 21.0 and Visual PLS. This study is limited to only IT Company of one particular district of Tamil Nadu. Besides, the responses were obtained from IT employees only. The structured questionnaire consists of 8 questions on Demographic characteristics and 15 questions on KM infrastructural capability , 20 questions on KM process capability and 5 questions on KMS effectiveness and 5 questions on perceived service benefits and risks . The reliability and convergent validity of the instrument was verified which is given in Table 1. The study employed 'Cronbach alpha coefficient' for assessing the reliability of the scale. According to Nunnally (1978), Cronbach alpha level of 0.60 or above is considered to be acceptable for construct. Also, Convergent validity of all the constructs was examined using the measure of Average Variance Extracted (AVE) that is the average variance shared between a construct and its items (Fornell & Larcker, 1981). Chin et al 1999 & 2003 indicated that a construct with an AVE of over 0.5 is expected to have adequate convergent validity. Table 1 presents that all the constructs exhibit adequate reliability with internal consistency values which is greater than recommended alpha value of 0.60. Also, The AVE of each of construct was over 0.40 which satisfies the standard values.

COMMONWEALTH JOURNAL OF COMMERCE & MANAGEMENT RESEARCH

Vol.4, Issue 9 (September 2017) ISSN: 2393-851X Impact Factor: 0.612 UGC & ISI Indexed

**Table 1: Reliability and Validity**

| Dimensions | No. of items | Cronbach's Alpha value | AVE value |
|---|---|---|---|
| Structure | 05 | 0.65 | 0.58 |
| Technology | 05 | 0.74 | 0.56 |
| Culture | 05 | 0.68 | 0.55 |
| Acquisition | 05 | 0.79 | 0.51 |
| Conversion | 05 | 0.66 | 0.56 |
| Application | 05 | 0.77 | 0.54 |
| Protection | 05 | 0.67 | 0.61 |
| KMS Effectiveness | 05 | 0.73 | 0.62 |
| Perceived services benefits and risks | 05 | 0.66 | 0.57 |
| **Total Items** | **45** | | |

# DATA ANALYSIS

### Demographic Characteristics

Out of 116 respondents, 64 percent of the employees were Males. 69 percent of the employees were between the age group of 21-30 years. 56 percent of employees were Engineers. About 38 percent of employees were in cadre of Software Engineer. 43 percent of employees were working in Development department. 48 percent of employees were working for about 5 – 10 years of experience. About 57 percent of employees were drawing a yearly salary ranging from 2,00,000 to 4,00,000 per annum.

### Model Validation

In order to test the proposed Hypothesis, this study employed a construct level Correlation analysis as an initial verification. Visual PLS is used to compute the constructs

scores. Using these constructs scores as a base, the study explored the relationship between the variables .The construct correlation has been presented in the table 2.

**Table 2: Construct Level Correlation of Model**

| Hypothesis | Independent variables | Dependent Variables | Pearson's Correlation | Significance level at 1 % |
|---|---|---|---|---|
| H1 | Structure | KMS Effectiveness | 0.352 | 0.000 |
| H2 | Technology | | 0.358 | 0.000 |
| H3 | Culture | | 0.355 | 0.000 |
| H4 | Acquisition | | 0.457 | 0.000 |
| H5 | Conversion | | 0.628 | 0.000 |
| H6 | Application | | 0.191 | 0.000 |
| H7 | Protection | | 0.213 | 0.000 |
| H8 | KMS Effectiveness | Perceived services Benefits and risks | 0.442 | 0.000 |

The correlation table indicates that there exists a positive relationship between KM Infrastructure Capability, KM Process Capability and KMS Effectiveness. Also there found to be positive correlation between KMS Effectiveness and Perceived services benefits and risks. Staples et al (1998) indicated that through the bivariate correlation are significant between the construct, it is still required to assess the path coefficient in the structural model as a causal effect. (Efron 1979, Efron and Gond, 1983) expressed that in order to ensure that path coefficients are statistically significant, this study has employed a bootstrap and jack knife re-sampling procedures to estimate standard errors for calculating values using visual PLS. The results are examined and the t-statistic value at the 0.05 level is 1.96. If the t-statistic value is greater than 1.96, the path is considered to be significant.

COMMONWEALTH JOURNAL OF COMMERCE & MANAGEMENT RESEARCH

Vol.4, Issue 9 (September 2017) ISSN: 2393-851X Impact Factor: 0.612 UGC & ISI Indexed

**Figure 2 Structural Equation Results of Model**

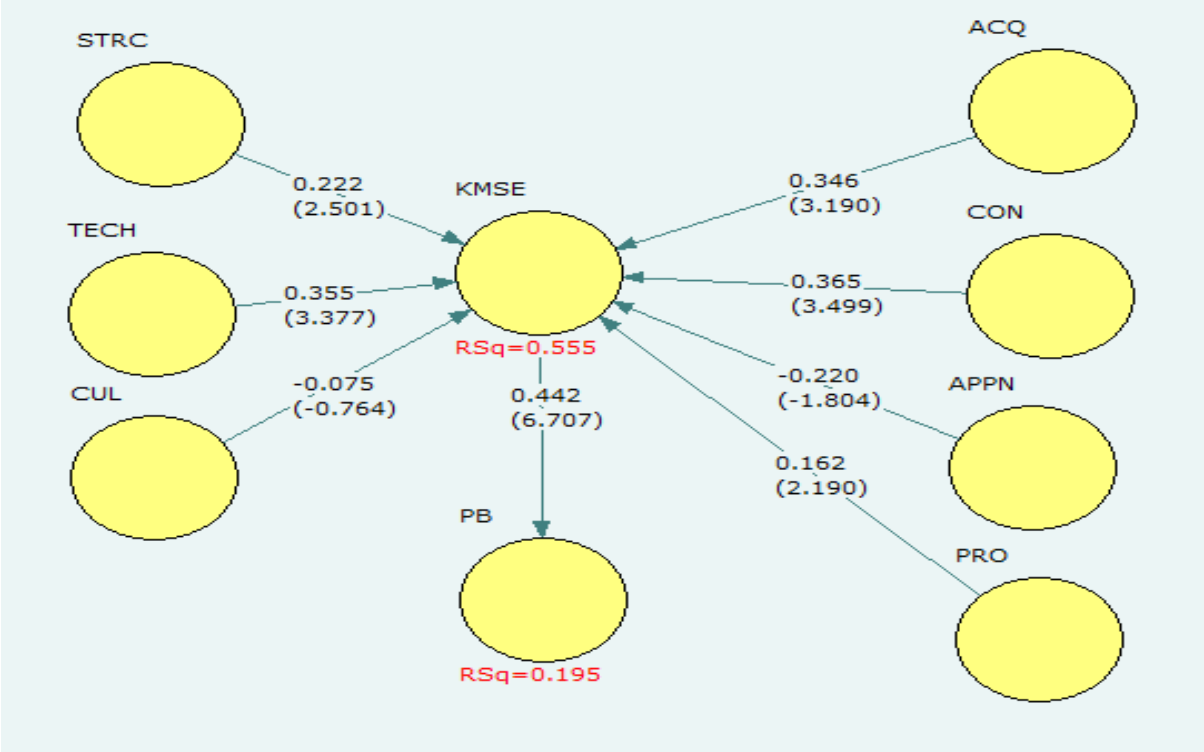



**Table 3: Bootstrap Summary of Model and Hypothesis Result**

| Hypothesis | Entire sample estimate | Mean of sub sample | Standard error | t-Statistic | R square value | Result |
|---|---|---|---|---|---|---|
| H1 | 0.222 | 0.2237 | 0.0888 | **2.5013** | 0.555 | **Significant** |
| H2 | 0.355 | 0.2747 | 0.1051 | **3.3773** | | **Significant** |
| H3 | -0.075 | -0.1227 | 0.0982 | -0.7639 | | Insignificant |
| H4 | 0.346 | 0.3031 | 0.1085 | **3.1901** | | **Significant** |
| H5 | 0.365 | 0.4125 | 0.1043 | **3.4987** | | **Significant** |

| | | | | | | |
|---|---|---|---|---|---|---|
| H6 | -0.22 | -0.1725 | 0.122 | -1.804 | | Insignificant |
| H7 | 0.162 | 0.1371 | 0.074 | **2.1896** | | **Significant** |
| H8 | 0.442 | 0.4664 | 0.0659 | **6.7072** | 0.195 | **Significant** |

As presented in figure 2 and table 3 ,the path linking Structure to KMS Effectiveness was found to be Significant at 0.05 level (beta=0.222, t=2.501), indicating Structure has significant effect on KMS Effectiveness . This provided support for H1.

The path linking Technology and KMS Effectiveness was significant at 0.05 level (beta=0.355, t=3.377), indicating Technology has a significant effect on KMS Effectiveness. This provided support for H2.

The path linking Culture to KMS Effectiveness was found to be Insignificant at 0.05 level (beta= -0.075, t= -0.0764), indicating Culture has no significant effect on KMS Effectiveness. This provided no support for H3.

The path linking Knowledge Acquisition to KMS effectiveness was significant at 0.05 level beta= 0.346, t=3.190), indicating Knowledge Acquisition has significant effect on KMS effectiveness. This provided support for H4.

The path linking Knowledge Conversion to KMS Effectiveness was found to be significant at 0.05 level (beta= 0.365, t=3.499), indicating Knowledge Conversion has significant effect on KMS Effectiveness. This provided support for H5.

The path linking Knowledge Application to KMS Effectiveness was Insignificant at 0.05 level (beta= -0.220, t=-1.804), indicating Knowledge Application has no significant effect on KMS Effectiveness. This provides no support for H6.

Vol.4, Issue 9 (September 2017) ISSN: 2393-851X Impact Factor: 0.612 UGC & ISI Indexed

The path linking Knowledge Protection to KMS Effectiveness was found to be significant at 0.05 level (beta= 0.162, t= 2.190), indicating Knowledge Protection has significant effect on KMS Effectiveness. This provided support for H7.

The path linking KMS Effectiveness to Perceived service benefits and risks was found to be significant at 0.05 level (beta= 0.442, t=6.707), indicating KMS Effectiveness has significant effect on Effect on Perceived service benefits and risks. This provided support for H8.

Collectively, KM Infrastructure Capability, KM Process Capability explained about 55 percent of the variance in the KMS Effectiveness. In addition, the KMS Effectiveness explained a variation of 19 percent in Perceived service benefits and risks.

# DISCUSSION

**Knowledge Management System Effectiveness**

It is theorized that Knowledge management System Effectiveness are predicted by KM Infrastructure capabilities (Structure, Technology, and Culture) and KM Process Capabilities (Acquisition, Conversion, Application, and Protection). In other words, it can be understood that KM Infrastructure and KM Process Capabilities possessed by the IT organization significantly predict Knowledge management System Effectiveness.

The overall results of the structural model analysis revealed that KM Structure and KM Technology acted as significant predictors in KMS Effectiveness whereas KM Culture fails to predict KMS effectiveness. It is also found that KM Process Capabilities such as Acquisition, Conversion, and Protection are the significant predictors of Knowledge management System Effectiveness in IT organization whereas KM application does not have potential impact on KMS effectiveness of IT Company.

It has been found that KM Structure had a significant effect on Knowledge management System Effectiveness. This finding is consistent with the findings of Zaim et al. (2007). It implies that the present structure of firm encourages employees to search and capture needed knowledge where ever it is available in the organization. Also, there has been a structure that

facilitates creation of new knowledge across the boundaries. It is also reported that the KM structure does not inhibit the interaction and sharing of knowledge among the employees.

From the results, it was determined that technology had a significant effect on Knowledge management System Effectiveness. This finding is in consistency with Baldanza and Stankosky (2001). It reveals that the Technologies adopted by firm are one of the basic foundations for the long term success of Knowledge Management system. Also, from the above findings, it is evident that there have been clear rules for formulating and categorizing organization's services knowledge and organization's process knowledge.

On other hand, Culture did not have impact on Knowledge Management system effectiveness in organization. This finding implies that the culture followed by the firm may not support the employees to manage their knowledge for the firm's success. It shows that employees are not encouraged to ask others for assistance and discuss their work with people in other workgroups. It is also clear that the support of top management in KM implementation has not been impressive.

The data shows that Knowledge Acquisition had a significant effect on Knowledge Management System Effectiveness. This finding is in consistency with Boisot (1999). It shows that Knowledge acquisition or creation will create potential value for Knowledge Management system of the firm to enhance its effectiveness. It implies that organization have got potentiality in terms of structured process through which they can acquire knowledge about their clients and generate new knowledge from existing stock of knowledge.

The study also reported that Knowledge conversion had a significant effect on Knowledge Management System effectiveness. This finding is in consistency with Bhatt (2001). It shows that employees are in a position to distribute and integrate the knowledge from different sources.

Knowledge Application is found to be insignificant and does not contribute towards Knowledge Management system effectiveness. This is not in line with the results of Droge et al (2003). It is evident that there is no room for the application of knowledge learned from experience. Also, the Knowledge base of organization is not accessible by the employees who need it really.

Vol.4, Issue 9 (September 2017) ISSN: 2393-851X Impact Factor: 0.612 UGC & ISI Indexed

From the analysis, it is revealed that Knowledge Protection had a significant effect on Knowledge management System Effectiveness. This finding is consistent with the findings of Emadzade et al, (2012). It implies that the need and importance of knowledge protection has been well recognized and inappropriate use of their stored knowledge has been prevented by appropriate technology.

## PERCEIVED SERVICE BENEFITS AND RISKS

In this study, it is hypothesized that Perceived Service Benefits and risks of an organization is to be determined by Knowledge Management System Effectiveness. It implies that Knowledge Management System Effectiveness is the significant predictor of Perceived Service Benefits and risks of the organization. From the analysis, it is found that Knowledge Management System Effectiveness had a significant effect on Perceived Service Benefits and risks. This finding coincides with the findings of Beijerse (1999). This finding reveals that there were many benefits gained from the Knowledge Management System like improving efficiency, knowledge of the employees, better decision making ,etc.,. It can be seen as a good indicator for the growth and development of the firm. Further, the capabilities of organization in terms of the adaptability of unanticipated changes and responsiveness to new client demands also enables them to improve the productivity of employee and overall effectiveness of the company.

## RESEARCH LIMITATIONS AND FUTURE RESEARCH

The research setting for the current study was an IT organization in a particular district. Respondents were limited to employees working in IT sector. The study's findings are based on the modest sample size of 116 respondents. Although PLS Graph can handle small sample sizes and generates valid results, a larger sample with more statistical power would have permitted me to use other covariance based structural equation modelling tools such as LISREL. Future research should verify the findings of this research study using covariance based tools.

Vol.4, Issue 9 (September 2017) ISSN: 2393-851X Impact Factor: 0.612 UGC & ISI Indexed

## IMPLICATION FOR PRACTICE

This paper has put forward some valuable insights to guide Employees who are in IT field, to identify problems in their respective areas and will help them in getting rid of the same by taking self-corrective actions. The results have revealed that Prevailing Culture in Organization does not impact KMS effectiveness. It may be due to the absence of understanding on the benefits of KM implementation and knowledge sharing. It may be recommended that the management should play predominant role in creating KM awareness and it is important to educate the employees regarding strategic benefits of KM which will enable them to fulfill their duties systematically. Likewise, Knowledge Application do not contribute towards KMS effectiveness. It will direct IT organizations and administrators to look into the problems and pitfalls associated with organizational processes. Also, it will enable them to design and develop well-defined organizational process, which will create a platform for applying knowledge in new services development and problem solving. The results have also indicated that KMS effectiveness is a significant predictor of Perceived service benefits and risks. So, by these, the management can improve Service productivity of employees and by that they can improve overall client satisfaction.

## CONCLUSION

The purpose of this study is to investigate the relationship between the KM Capabilities, KMS effectiveness and Perceived Service benefits and risks in IT Organization. A sample of 116 employees was drawn from a leading IT organization in a district. A model is developed and tested using structured modeling approach. Organizational Structure, Technology and Knowledge Acquisition, Conversion and Protection have a positive impact on KMS effectiveness. Among these KM capabilities, Technology, Knowledge Acquisition and Conversion are found to be dominant KM capabilities and both are significantly related to KMS effectiveness. Also, the findings have demonstrated that the KMS effectiveness is closely linked to Perceived Service benefits and risks in IT Organization. It is concluded that when there is proper Knowledge management System in IT sector, it will encourage Employees to share and

transfer the knowledge, which increases service productivity and overall effectiveness of IT Organization.

## REFERENCES

Achjari, D. (2000).”Potensi Manfaat dan Problem di E-Commerce”. Jurnal Ekonomi dan Bisnis Indonesia 2000, Vol.15, No.3,388-395.

Alavi, M., & Leidner, D. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. MIS Quarterly, 25(1), 107-136.

Aydin, B. and Ceylan, A. (2009), “The role of organizational culture on effectiveness”, Ekonomie a Management (E + M), Vol. 3, pp. 33- 49.

Beerli, A.J., Svenja, F., and Daniel, D. (2002).”Knowledge Management and Networked Environments: Leverating Intellectual Capital”. American Management Association, New York.

Beijerse, R.P.U. (1999).”Question in Knowledge Management: Defining and Conceptualising a Phenomenon”. Jounal of Knowledge Management (3:2). pp. 94-109.

Beveren, JV 2003, 'Does health care for knowledge management?' *Journal of Knowledge Management*, vol. 7, no. 1, pp. 90-5.

Bhatt, G. D. (2001) Knowledge Management in Organisations: Examining the Interaction between Technologies, Techniques, and People, Journal of Knowledge Management (5:1), pp. 68-75.

Boisot, MH 1999, Knowledge Assets: Securing Competitive Advantage in the Information Economy, Oxford University Press, Oxford.

Chiasson, M. W., & Davidson, E. (2004). Pushing the contextual envelope: Developing and diffusing IS theory for health information systems research. Information and Organization, 14(3), 155-188.

Choi, Y.S. (2000). An Empirical Study of Factors Affecting Successful Implementation of Knowledge Management, University of Nebraska.

Cohen, W & Levinthal, D 1990, „Absorptive capacity: a new perspective on learning and innovation", Administrative Science Quarterly, vol. 31, no. 1, pp. 128-52.

Davenport, T. H., & Glaser, J. (2002). Just-in-Time delivery comes to knowledge management, Harvard Business Review, 80(7), 107-111.

Davenport, T. H., De Long, D. W., & Beers, M. C (1998). Successful knowledge management projects. Sloan Management Review, 39(2), 43-57.

Davidson, P. and Griffin, R.W. (2006). Management, 3rd Australasian edition. Milton: John Wiley & Sons Australia.

Dilnutt, RP 2000, 'Knowledge management as practiced in Australian organizations: a case study approach', DBA thesis, Southern Cross University.

Djohanputro, B., (2006).”Manajemen Risiko Korporat Terintegrasi”. Cet 2 – Jakarta: Penerbit PPM.

Droge, C., Claycomb, C. and Germain, R. (2003), “Does knowledge mediate the effect of context on performance? Some initial evidence”, Decision Sciences, Vol. 34, No. 3, pp. 541-68.

Emadzade, M; Mashayekhi, B. and Abdar, E. (2012), “Knowledge management capabilities and organizational performance”, interdisciplinary journal of contemporary research in business, Vol. 3, No 11, pp. 781-790.

Gold, AH, Malhotra, A & Segars, AH 2001, 'Knowledge management: an organizational capabilities perspective', *Journal of Management Information Systems*, vol. 18, no. 1, pp. 185-214.

Grant, RM , 1996a, 'Toward a knowledge-based theory of the firm', Strategic Management Journal, vol. 17, no. Winter Special, pp. 109-22.

Hansen, MT, Nohria, N & Tierney, T 1999, 'What's your strategy for managing knowledge? *Harvard Business Review*, vol. 77, no. 2, pp. 106-16.

Hinds, P.J. and Pfeffer, J. (2003).”Why Organizaion Don’t Know What They Know”. Sharing Expertise – Beyond Knowledge Management-MIT Press

King, W. R., Marks, Jr., P. V., & McCoy, S. (2002). The most important issues in knowledge management. Communications of the ACM, 45(9), 93-97.

Lampel, J., & Mintzberg, H. (1996). Customizing Customization. Sloan Management Review, 38(1), 21-31.

Lee, H., & Choi, B. (2003). Knowledge management enablers, processes and organizational performance: An integrative view and empirical examination. Journal of Management Information Systems, 20(1), 179-228.

Maharsi, S. (2000).”Pengaruh perkembangan teknologi informasi terhadap bidang Akuntansi Manajemen”. Jurnal Akuntansi dan Keuangan. Vol 2. No.2. November 2000.pp. 127- 137.

Martin, M., Myers, L. A., & Murdock, D. (2000). Facilitating change through KM at premier inc. Knowledge Management Review, 3(4), 20-23.

Mintzberg, H. (1979) The Structuring of Organizations, Englewood Cliffs, NJ: Prentice-Hall.

Nonaka, I. and Takeuchi, H. (1995) The Knowledge-creating Company, NY: Oxford University Press

Pentland, B. T. (1995) Information Systems and Organisational Learning: The Social Epistemology of Organisational Knowledge Systems, Accounting, Management & Information Technology (5:1), pp. 1-21.

Sarin, S. and Mcdermott, C. (2003). The effect of team leader characteristics on learning, knowledge application, and performance of cross-functional new product development teams. Decision Sciences, 34(4): 707-39.

Sanchez, R & Mahoney, JT 1996, 'Modularity, flexibility, and knowledge management in product and organisation design', *Strategic Management Journal*, vol. 17, no. Winter Special, pp. 63-76.

Seleim, A. and Khalil, O. (2007), "Knowledge management and organizational performance in the Egyptian software firms", International Journal of Knowledge Management, Vol. 3, No. 4, pp. 37-66.

Sharp, D. (2003). Knowledge management today: Challenges and opportunities. Information Systems Management, 20(2), 32-37.

Soo, C., Devinney, T., Midgley, D., and Deering, A. (2002). Knowledge management: Philosophy, processes and pitfalls. California Management Review, 44(4), 129- 150.

Webb, B.R. and Schlemmer, F. (2006). The impact of strategic assets on financial performance and on internet performance. Electronic Markets, 16(4): 371-85.

Wong, K.Y., Aspinwall, E. (2005)."An Empirical Study of the Important Factors for Knowledge Management Adoption in the SME Sector". Journal of Knowledge Management (9:3). pp. 64.

Zahra, S. A. and George, G. (2002), "Absorptive capacity: a review, reconceptualization, and extension", Academy of Management Review, Vol. 27, No. 2, pp. 185-203.

Zaim, H., Taoglu, E., and Zaim, S. (2007). Peformance of knowledge management practices: a causal analysis. Journal of Knowledge Management, 11(6), 54-67.

Zander, D., and Kogut, B. (1995) Knowledge and the Speed of the Transfer and Imitation of Organizational Capabilities: An Empirical Test, Organization Science (6:1), pp. 76-92.

Zheng, W, Yang, B & McLean, GN 2010, 'Linking organizational culture, structure, strategy, and organizational effectiveness: mediating role of knowledge management', *Journal of Business Research*, vol. 63, no. 7, pp. 763-71.