

KNOWLEDGE MANAGEMENT PRACTICES IN CORPORATE SECTORS IN INDIA: SPECIAL REFERENCE TO TATA CONSULTANCY SERVICE (TCS)

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Abstract Knowledge Management to facilitate the creation, storage, transfer, and application of knowledge in organizations has received wide attention in practice and research in the past several years. As a significant challenge in Knowledge Management practices is the issue of organizational culture often cited. Although many studies raise the issue of organizational culture's influence on Knowledge Management success, few investigate the way in which this influence manifests itself. This paper aims to explore how organizational culture influences Knowledge Management practices. Using a case study method, attempts have been made to examine the cultural values and Knowledge Management approaches within a large information technology service provider company like Tata Consultancy Service (TCS). The purpose of this article is to find out TCS capacity to absorb and manage knowledge as a prior condition to the successful adoption of innovations and entrepreneurial growth. The findings highlight the influence of culture on the use of Knowledge Management technologies and the outcomes of such use.

Keyword: Knowledge Management, Knowledge Management practices, Organizational Culture, Corporate Sectors, TCS

INTRODUCTION

Knowledge Management refers managing the knowledge of individuals to be used as an organizational resource. From an information system perspective, it implies capturing and storing employees' knowledge to use by making accessible to others in the organization. For every organization the Knowledge Management system is increasingly becoming an important area. Knowledge Management (KM) helps an organization to solve problems very quickly, make better decisions, reduces R&D costs, increases worker independence, enhances customer relations and improves services to customers. Knowledge Management focuses attention on different process such as creating, sharing, and acquiring knowledge. The KM activities that enable for knowledge creation are Knowledge Strategy, Measurement, Policy, Content, Processes, Technology and Culture. Information Technology (IT) sectors are trying with the utmost capacity to capture, manages, and constructs suitable information into organizational knowledge to improve the quality of its actions. Therefore Knowledge Management practices for any organizations an especially IT sectors are regarded as a major driving factor in the core activities of storing and distributing knowledge. IT sectors like TCS gives a new dimension in managing its knowledge and help in carrying out and maximizing the management's initiatives in harmonizing the appropriate strategies in the short and long terms.

LITERATURE REVIEW

The propose of Knowledge Management is to enhance organizational performance by explicitly designing and implementing tools, processes, systems, structures, and cultures to improve the creation, sharing, and use of different types of knowledge which are critical for decision-making. Different views are here given below, *Tan and Narsurdin (2011)* show that Human Resources Management (HRM) practices (performance appraisal, career management, training and reward system recruitment) have a positive effect on organizational innovation. Their findings indicate that training is positively related to three dimensions of organizational innovation that is product innovation, process innovation and administrative innovation. *Moffet and Hinds (2010)* reveal that, successful knowledge management implementation among employees. Knowledge workers have flexibility and freedom to conduct their work according to their own intelligence, experience and initiative. They support each other as well as by technology and information infrastructure, which resultantly benefits both themselves and the organization. *Ibrahim and Reid (2009)* indicate that Knowledge Management practices improve organization's operational activities in a variety of ways, such as reducing the design cycle time, lead time, cost, and reducing time product-to-market and improving the quality of the product. *Hoegl and Schulze (2005)* found that the companies that used Knowledge Management methods in the creation of New Product Development have accrued a lot of benefits

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Table 1. Distribution of Respondents Different TCS of India n= 342

Sl. No.	Category	x1 TCS Bangalore	x2 TCS Bhubaneswar	x3 TCS Gurgaon	x4 TCS Guwahati	x5 TCS Hyderabad	x6 TCS Kolkata	x7 TCS Mumbai	x8 TCS New Delhi	x9 TCS Pune
1	System Engineer	12	10	9	10	14	18	8	10	11
2	Asst. System engineer	9	7	5	7	10	10	8	5	9
3	Asst. System engineer Trainee	10	6	5	9	12	11	10	5	9
4	Asst. Consultant	5	3	3	6	5	6	5	3	7
5	Team Leader	8	4	3	5	5	8	3	3	6
6	Knowledge Manager	1	0	0	1	1	1	0	0	1
		45	30	25	38	47	54	34	26	43

through workshops which is one of the Knowledge Management methods. With this method, employees gather a vast amount of experiences and tacit knowledge which comprises both technical knowledge and personal knowledge about relationships and team structures. *Khalifa and Liu (2003)* study shows that culture is an important Knowledge Management infrastructural capability. It shapes the behavior of organizational members through driving the norms and practices within the firm. Appropriate norms and values motivate knowledge sharing and collaboration. *Argote and Ingram (2000)* propound that Knowledge Management business addresses, challenges and enhances customer responsiveness. This can be achieved through the production of innovative products or services and managing or enhancing relationships with existing and new customers, partners and suppliers. *O'Dell and Grayson (1998)* indicate that Knowledge Management results in less-frustration among staff members. As staff members can access information themselves and there is no need to rely on the availability of other people through document libraries. Work processes are documented so that when an employee leaves the organization or department, others can easily pick up those tasks without confusion. *Porter (1985)* states that Knowledge can be a customer value by addressing business problems. A firm's competitive advantage depends more on its knowledge; that is what the organization knows and how fast it can know something new.

OBJECTIVE OF THE STUDY

Effective Knowledge Management not only forms the basis of successful innovation processes, it also greatly enhances an organization ability to innovate. The basic central tasks of Knowledge Management are to shape an organizational culture that supports effective knowledge exchange. A learning organization is capable of changing its knowledge base through systematic perception of the environment and adoption of appropriate information, documentation and communication process on the basis of the importance of Knowledge Management in the TCS organization the following objectives have been formulated.

- To find out the reasons for implementing Knowledge Management in different TCS of India
- To highlight the effectiveness of Knowledge Management in TCS of India.

SCOPE OF THE STUDY

The scope of the study includes Tata Consultancy Service (TCS) of India. Where there is the existence Knowledge Management practices. The study basically covers the different cities of India. Thus the study includes the Knowledge Management Practices in TCS. The study is

identifying general trends in Knowledge Management practices of all over TCS in India to facilitate the sharing of both tacit and explicit knowledge. The present study covers six categories of personnel of TCS of India, which includes System Engineers, Asst. System Engineers, Asst. System Engineer Trainees, Asst Consultant, Team Leader and Knowledge Manager.

METHODOLOGY

The present study is based on Systematic Random Sampling method which covers nine numbers of TCS of India. The present study covers 50% of software professionals out of 684 persons out of which 342 person's i.e. (50%) of the total population have taken into consideration. The sample covers 9 TCS, which are set up in different places of India namely, Bangalore, Bhubaneswar, Gurgaon, Guwahati, Hyderabad, Kolkata, Mumbai, New Delhi, Pune and also 6 categories of employees. The total picture has been shown in Table-1.

ANALYSIS OF DATA

The KM practices in TCS have been accessed through survey method. The questionnaire contains two parts. The first part is designed with 12 numbers of probable reasons with process of use of Knowledge Management has been evaluated on a 5-point Likert's scale where 1 is for 'not at all important' and 5 for 'crucial'. The second part of the questionnaire has been designed to access the effectiveness of KM through 14 numbers of advantages to be evaluated by the respondents on a 5-point scale where 1 is for 'not at all effective' to 5 for 'crucial'. The data so obtained have been analyzed as contained in Table-2 showing the extent of use of KM for different purposes in TCS and Table-4 showing the perceived effectiveness of KM in TCS.

From overall assessment that the purposes and processes of KM in TCS in the descending orders are capturing and using knowledge from outside sources (88%), preventing loss of knowledge due to employees' departure (88%), making employees to accept innovation (88%), use of knowledge to improve productions (87%), training workers (87%), sharing and transferring knowledge (86%), integrating knowledge within organization (85%), promoting sharing/transfer of knowledge with clients (85%), protecting strategic knowledge in the organization (83%), bridging worksites through collaborative work (82%), improving employee retention (81%), and for competitive advantages of the organization (79%). So the result shows that all the reasons or process of KM are vital and crucial as perceived by the respondents whose percentages are very high varying from 79 to 88. However some degrees of variations are found with the individual TCS units on the mean score and percentages.

Table 2. Extent Use of Knowledge Management for different purposes in TCS

Reasons/ Process of KM	Bangalore N=45		Bhubane swar N=30		Gurgaon N=25		Guwahati N=38		Hyderabad N=47		Kolkata N=54		Mumbai N=34		New Delhi N=26		Pune N=43		N=342 Overall %		
	Mean Score	%	Mean Score	%	Mean Score	%	Mean Score	%	Mean Score	%	Mean Score	%	Mean Score	%	Mean Score	%	Mean Score	%	Mean Score	%	
Competitive advantages of organization	3.84	77	3.70	74	3.52	70	3.95	79	4.02	80	4.28	86	3.91	78	3.69	74	4.02	80	4.02	80	79
Integrated knowledge within organization	4.62	92	4.30	86	4.24	85	4.21	84	4.28	86	4.19	84	3.65	73	3.88	78	4.60	92	4.60	92	85
Capturing and using of knowledge from outside sources	4.29	86	4.20	84	4.20	84	3.94	79	4.47	89	4.43	89	4.41	88	4.81	96	4.44	89	4.44	89	88
Sharing and transferring knowledge	4.24	85	4.43	89	4.08	82	4.23	85	4.40	88	4.30	86	4.41	88	4.23	85	4.28	86	4.28	86	86
Use of knowledge to improve production	4.49	90	4.30	86	3.72	74	4.28	85	4.45	89	4.31	86	4.56	91	4.42	88	4.33	87	4.33	87	87
Preventing loss of knowledge due to employees departures	4.33	87	4.33	87	4.56	91	4.32	86	4.45	89	4.46	89	4.21	84	4.12	82	4.23	85	4.23	85	88
Training for workers	4.53	84	4.30	86	4.32	86	4.26	85	4.47	89	4.35	87	4.41	88	4.35	87	4.44	89	4.44	89	87
Making employees to accept innovation	4.08	91	4.30	86	4.56	91	4.34	87	4.21	84	4.30	86	4.92	82	4.38	88	4.42	88	4.42	88	88
Improve employees' retention	3.62	72	3.93	79	4.40	88	3.66	73	3.55	71	3.44	69	3.76	75	4.46	89	2.95	59	2.95	59	81
Protecting strategic knowledge in organization	3.80	76	3.77	75	4.72	94	4.26	85	3.74	75	3.72	74	4.06	81	4.27	85	3.88	78	3.88	78	83
Bridging work-sites through collaborative work	3.88	78	4.20	84	4.48	90	4.08	82	4.00	80	3.65	73	3.76	75	4.50	90	4.12	82	4.12	82	82
Promoting sharing / transferring knowledge with Clients	4.15	83	3.97	79	4.56	91	4.26	85	4.21	84	4.11	82	4.29	86	4.54	91	4.21	84	4.21	84	85

Table- 3 Correlation Matrix On the Proposes of KM in TCS

	Bangalore	Bhubaneswar	Gurgaon	Guawahati	Hyderabad	Kolkata	Mumbai	New Delhi	Pune
Bangalore	1.00								
Bhubaneswar	0.75	1.00							
Gurgaon	-0.09	0.06	1.00						
Guawahati	0.67	0.48	0.23	1.00					
Hyderabad	0.81	0.74	-0.25	0.60	1.00				
Kolkata	0.75	0.49	-0.37	0.54	0.90	1.00			
Mumbai	0.38	0.37	-0.17	0.46	0.67	0.62	1.00		
New Delhi	-0.03	0.21	0.40	-0.08	0.07	-0.17	0.42	1.00	
Pune	0.82	0.58	-0.12	0.75	0.85	0.78	0.40	-0.07	1.00

N.B. – Figures in bold are significant at 0.05 levels.

In order to find out the degrees of relationships between the individual TCS units on the perceived purposes/ reasons of KM in their units, correlation study has been made and the results are shown in table 3.

The extent of relationships among the TCS unit perceived purposes/reasons of KM are found from the table to vary from 0.06 to 0.90, but the values of 0.48 and more are having statistical significance at 0.05 level with degree of freedom 10(12-2). Some negative relationship is exist but is too feeble (small) and having no significance, which might have arose due to the statistical fallacies. Further it is found that the TCS units at Gurgaon and New Delhi have got no significance relationships with other TCS units on this matter which might be fact that the units are in nascent stage and introduction stage respectively.

On overall assessment it is found from the table 6 that the perceived effectiveness of KM in the descending orders are increasing knowledge sharing across organizations(71%), improving organizational memory(71%), improving employees' productivity (69%), improving skills and knowledge of employees (68%), improving involvement of employees in workplace (67%), increasing knowledge sharing above organizational hierarchy (66%), adding new products and services (65%), increasing markets at different locations (64%), increasing flexibility in production and innovation (64%), increasing ability to capture knowledge from external research sources (64%), improving client and customer (63%), increasing ability to capture knowledge from external business organizations (63%), increasing adaptation of products or services to client requirements (62%), and preventing duplicate research and development (59%). Thus the effectiveness of use of KM in TCS as perceived by executives varies from 59% to 71% which is satisfactory but not of higher order. In order to find out the extent of correlation study has been made, the results of which are as shown in table 5.

From the table 5, it is found that there exist significant relationships between the executives of the TCS units on the perceived effectiveness of the use of KM in their units as all the computed values are significant at 0.05 levels with 12 degree of freedom (14-2).

CONCLUSIONS

The present findings show that there is positive relationship between Knowledge Management and organizational performance. It is also observed that properly designed Knowledge Management systems gives employee flexibility and reduces process time and organizational costs. Knowledge Management creates sustainable competitive advantage for an organization, reduces design time and costs just to mention but a few. There is also a positive relationship between Knowledge Management and productivity. The research findings also reveals that for IT companies too fully benefit from Knowledge Management they must train and develop staff, rewarding employees for sharing knowledge, promoting a culture of knowledge sharing and allowing employee participation in decision making. The success of KM system implementation ultimately depends upon designs that result in responsive and adaptive organizations that are skilled in creating innovative business models. Executives and HR professionals are encouraged to meet the discussed challenges of the changing business environment by 1) designing a flexible, responsive KM system based on highly integrated technologies, structures, and processes that overcome typical cultural, complexity, and conceptual barriers; 2) creating and sustaining an organizational culture that encourages, recognizes, and rewards inclusion and knowledge-sharing; 3) providing open access to knowledge throughout the organization; and 4) modelling the way through experimenting and taking risks, fostering collaboration, and creating a spirit of community.

Table 4. The perceived effectiveness of KM in TCS

Sl. No.	Bangalore N=45	Bhubaneswar N=30	Gurgaon N=25	Guwahati N=38	Hyderabad N=47	Kolkata N=54	Mumbai N=34	New Delhi N=26	Pune N=43	N=342
	Mean Score	Mean Score	Mean Score	Mean Score	Mean Score	Mean Score	Mean Score	Mean Score	Mean Score	Overall %
1	3.58	72 3.60	72 3.56	71 3.58	72 3.55	71 3.54	71 3.59	72 3.58	72 3.58	72 71
2	3.27	65 3.23	65 3.28	66 3.24	65 3.26	65 3.26	65 3.38	68 3.31	66 3.33	67 66
3	3.33	67 3.37	67 3.40	68 3.37	67 3.38	68 3.37	67 3.41	68 3.42	68 3.42	68 68
4	3.42	68 3.43	69 3.52	70 3.42	68 3.40	68 3.41	68 3.47	69 3.50	70 3.53	71 69
5	3.16	63 3.13	63 3.28	66 3.16	63 3.09	62 3.13	63 3.38	68 3.23	65 3.14	63 64
6	3.13	63 3.23	65 3.16	63 3.16	63 3.23	65 3.28	66 3.12	62 3.27	65 2.95	59 63
7	3.13	63 3.27	65 3.40	68 3.24	65 3.02	60 3.15	63 3.44	69 3.35	67 3.26	65 65
8	3.13	63 3.07	61 3.08	62 3.16	63 3.13	63 3.04	61 3.18	64 3.15	63 3.12	62 62
9	3.20	64 3.27	65 3.28	66 2.87	57 3.28	66 3.30	66 3.26	65 3.35	67 3.23	65 64
10	2.89	58 3.23	65 2.96	59 3.05	61 3.09	62 2.80	56 3.18	64 3.12	62 3.00	60 59
11	3.62	72 3.53	71 3.56	71 3.55	71 3.47	69 3.52	70 3.56	71 3.65	73 3.67	73 71
12	3.20	64 3.17	63 3.12	62 3.16	63 3.19	64 3.28	66 3.26	65 3.19	64 3.30	66 64
13	3.20	64 3.00	60 3.24	65 3.18	64 3.15	63 3.17	63 3.38	68 3.19	64 3.16	63 63
14	3.24	65 3.57	71 3.28	66 3.32	66 3.30	66 3.28	66 3.29	66 3.56	67 3.23	65 67

Table 05. Correlation Matrix on the Perceived Effectiveness of KM in TCS

	Bangalore	Bhubaneswar	Gurgaon	Guawahati	Hyderabad	Kolkata	Mumbai	New Delhi	Pune
Bangalore	1.00								
Bhubaneswar	0.68	1.00							
Gurgaon	0.89	0.68	1.00						
Guwahati	0.83	0.70	0.76	1.00					
Hyderabad	0.88	0.79	0.71	0.71	1.00				
Kolkata	0.92	0.66	0.84	0.68	0.86	1.00			
Mumbai	0.82	0.55	0.91	0.78	0.59	0.66	1.00		
New Delhi	0.91	0.84	0.94	0.78	0.85	0.87	0.80	1.00	
Pune	0.92	0.68	0.87	0.79	0.79	0.80	0.88	0.88	1.00

N. B. – All values are significant at 0.05 levels.

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