APPENDICES

In our research we present three appendices which are the two set of questionnaires and a paper presented at the First International Conference on Knowledge Management for Productivity and Competitiveness, New Delhi, January, 2007. These two questionnaires were filled up in the presence of the researcher. These questionnaires were designed to elicit response from the senior managers of the medium sized IT companies in Eastern India.

The main purpose of the questionnaire – I was to find out about the company and its commitment to knowledge management. This commitment is in the form of committing resources, money, time and people for gaining knowledge for the company. This questionnaire is also meant to find out the conviction of the top management about the returns from implementing and using knowledge management in their company.

Questionnaire – II was the final round of interaction with the companies and this round of interviews was meant to elicit the exact domains where knowledge management was used by the companies. Also it helped us in finding out the priority areas where it was felt that knowledge management intervention would benefit the company.

The paper which was co-written with Dr. Bandyopadhyay deals with the challenges Indian IT companies face when dealing the prevailing marketing environment and the means by which they can challenge and succeed in this environment. The key differentiator in this marketing scenario is knowledge management which acts as a very effective tool for business success.
Questionnaire - I

Impact of Knowledge Management on Medium-Sized IT Companies in Eastern India

Introduction

1. Name:

2. Designation:

3. Organization name and address:

4. Contact No:

5. Email:

6. Years of consulting/Development experience:

Preliminary information on KM initiative (External)
1. Does your organization have a dedicated Knowledge Management initiative and the Year of launching KM initiative

2. What are the parameters of KM that are important to your company

3. Does your company have a knowledge sharing agreement with any external organizations like Microsoft, Oracle, SAP etc

4. What is the kind of knowledge which is shared between the external suppliers and your company

5. Does your company encourage employees to:

   a. Attend Workshops and Conferences in India and abroad and what kind?

   b. Any important workshop or conference you wish to mention

   c. Organize conferences and technical forums and any?

   d. Any recent conference or workshop you organized?
e. Are you or your organization a member of any technical forum?

f. Participate in national and international fairs and what kind?

Preliminary information on KM initiative (Internal)

1. How frequently are training schedules organized?

2. Is cross functional training encouraged?

3. Does your company have a dedicated intranet for employees and what is it used for?

4. Does your company have an internal magazine and what kind of articles does it publish?

5. Do you have regular meetings in your office, are they cross-functional and what does each member bring to the table?

Apparent benefits of KM initiative (External)
1. Does meeting people in conferences and trainings lead to a long lasting relationship?

2. Are these networking initiatives encouraged?

3. Do these networking lead to business relationships?

4. Does your company believe in external networking or advisory boards to generate sales leads?

Apparent benefits of KM initiative (Internal)

1. Does your company maintain close professional interaction with these external advisory boards and in what way?

2. When a new product is developed, does your company call upon these networked professionals for technical or sales inputs?

3. Does these external advisory boards also give advice on non-performing products?
As a professional are you convinced that these KM initiatives are beneficial to your company and in what way?

Do you feel that the returns (both monetary and non-monetary) have been commensurate with the resources committed and what innovation would suggest getting better returns?
Questionnaire - II

Impact of Knowledge Management on Medium-Sized IT Companies in Eastern India

Introduction

7. Name:

8. Designation:

9. Organization name and address:

10. Contact No:

11. Email:

12. Years of consulting/Development experience:
What are the priority areas for KM in your company?

a. 

b. 

c. 

d.

What are the cost areas in implementing the KM initiative?

a. 

b. 

c. 

d.

What benefits do you see in implementing KM in your organization?

a. 

b. 

c. 

d.
What are the areas where there are chances of success in implementing KM?

a. 

b. 

c. 

d. 

What are the areas where your organization will invest resources for KM implementation?

a. 

b. 

c. 

d. 

What are the areas where there are chances of failure in implementing KM?

a. 

b. 

c. 

d. 

What is your organization planning to do to mitigate these chances of failure?
Impact of Knowledge Management in IT Products marketing in India

(Presented at International conference organized by NPC, New Delhi, January, 2007)

Keywords: Knowledge management, IT products marketing, learning organization

Abstract
Knowledge is an organization’s intellectual capital which is now recognized in most organizations as an essential ingredient in their future development and profitability. Hence knowledge management (KM) becomes important due to its contributions to:

a. gaining competitive advantage
b. learning from past successes/mistakes and improving products and services
c. enabling coordination between different functions and divisions thereby improving service and cross-selling
d. reducing costs and time requirements which in turn increases the efficiency and financial of the organization, and
e. most importantly it enables organization’s to adapt and innovate as per the changing market demands

Most information technology (IT) companies in India have invested in some form of KM or the other as this industry is a knowledge intensive industry. Unfortunately however KM is confused with IT and this robs organizations of harnessing the full power of knowledge management to contribute towards corporate welfare. Hence when it comes to actual implementation of knowledge management and its use, many companies are at a loss to fully understand the power of KM and its interrelation with different functional areas.
Marketing is one area where the statement 'knowledge is power' can be aptly applied. IT products can be characterized by fast changing technology, low shelf life, high attrition rate and continuous marketing investments. IT product marketers need to have characteristics of real-time knowledge of: competitors, market tastes, productive manpower, marketing infrastructure etc. All IT product marketers are in search of that 'silver bullet' which can solve all marketing problems with one go. For this they have experimented with many vehicles of marketing like, internet, mobile phones, kiosks, direct marketing with varying degrees of success, but that 'silver bullet' is always missing. The latest focus of interest is to be come a ‘learning organization’ and harness the power of knowledge management.

Introduction

The Indian economy was liberalized since the early 1990s and this has been beneficial to the Indian economy as a whole. The biggest gainer from liberalization has been the Indian IT industry. The Indian IT industry has been growing at an average of 40% for the entire decade 1995-2005. But there was a very substantial dip in both turnover as well as profits in the period 2001-2003. But the dip has not been universal across the IT industry, many companies has not only kept up the margins but has consistently performed better while the rest have faltered. Experience suggests that this segment of the industry, i.e medium sized IT companies are weak in marketing, which is also one of the weaknesses of the Industry, in general, as found out by the NASCOM McKinsey study (2002). Knowledge Management (KM) has emerged as an effective tool in improving the effectiveness of the functions of organizations and IT industry is more sensitive to this as it is predominantly knowledge intensive industry.
Marketing challenges in the Indian IT industry
There are several challenge areas in IT products marketing in India. This includes the need to improve alignment between corporate marketing and the product and field marketing disciplines. Secondly, establishment of an overall marketing skill set inventory and improvement program, and lastly, an increased investment of marketing budget that should be earmarked for IT and infrastructure for the marketing function (SDC Report, 2002).

Hunt for the silver bullet
To overcome the challenges for marketing of products in the Indian IT industry many of the IT companies search for one simple solution to their complex problem, i.e. they search for a ‘silver bullet’.
Marketing is one area where the statement ‘knowledge is power’ can be aptly applied. IT products can be characterized by fast changing technology, low shelf life, high attrition rate and continuous marketing investments. Hence IT product marketers need to have characteristics of real-time knowledge of: competitors, market tastes, productive manpower, marketing infrastructure etc. All IT product marketers are in search of that ‘silver bullet’ which can solve all marketing problems with one go. For this they have experimented with many vehicles of marketing like, internet, mobile phones, kiosks, direct marketing with varying degrees of success, but that ‘silver bullet’ is always missing.
Because of its inherent characteristics of fast changing environment, IT companies have to continuously evolve to keep up its market share. The IT companies need to become learning organizations which will make them aware of this continuously changing environment.

What are learning organizations?
Learning organizations are organizations where people continually expand their capacity to create the results they truly desire, where new and expensive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together (Senge, 1990). Learning organizations are characterized by total employee involvement in a process of collaboratively conducted, collectively accountable change directed towards shared values or principles (Watkins and Marsick, 1992). These companies display characteristics like: provide continuous learning opportunities, use learning to reach the goals, link individual performance with organizational performance, foster enquiry and dialogue thereby making it safe for people to share openly and take risks, embrace creative tension as a source of energy and renewal, are continuously aware of and interact with their environment (Kerka, 1995).

**How can Indian IT companies benefit from KM?**

As we see from above for an organization to be successful, it has to be a learning organization. This is especially true for IT companies as the IT environment changes very fast and to market IT products in this environment the company has to change equally fast. One way in which Indian IT companies can develop their cutting-edge tool is by using KM. Knowledge is an organization’s intellectual capital which is now recognized in most organizations as an essential ingredient in their future development and profitability. Hence knowledge management (KM) becomes important due to its contributions to:

a. gaining competitive advantage

b. learning from past successes/mistakes and improving products and services
c. enabling coordination between different functions and divisions thereby improving service and cross-selling

d. reducing costs and time requirements which in turn increases the efficiency and financial of the organization, and

e. most importantly it enables organization’s to adapt and innovate as per the changing market demands

The importance of knowledge in the context of competitive global environment cannot be overemphasized leading to organizations using knowledge to maximize organizational competitiveness and strategic success. Organizations are realizing that their human capital and structural capital are distinguishing elements of their organizations (Liebowitz, 2000) and thereby knowledge management, as a process of creating value from an organization’s intangible assets are being put into place. In this context, the focus has been on developing systems and mechanisms to exploit knowledge for strategic advantage. This has included tapping intra-organization knowledge (Nonaka & Takeuchi, 1995) as well as renting knowledge from expert sources (Davenport & Prusak, 1998); transferring knowledge intra-organizationally (between functional units and management levels) as well as inter-organizationally (between supply chain, joint ventures, strategic alliance partners) (Wenger 1999). In the context of inter-organizational knowledge management either through knowledge renting or knowledge transfers, the basic motive has been on deriving strategic or economic advantage which has influenced the participation of different organizations in this model (figure 2). One of the means by which the power of KM can be harnessed is by pooling of resources (Sikdar and Deb, 2005) from the haves (institutions, research labs) and the have-nots (companies which cannot invest in KM). A basic model of knowledge pooling is as shown in fig.1.
Fig. 1

Fig. 2: Inter-organizational Knowledge Transfer
Organizations can get KM tools by either investing in the same themselves or by acquiring it from third party consultants Fig.2. A second issue in the role of knowledge management for providing strategic advantage is the development of tacit knowledge. It has been recognized that tacit knowledge provides sustainable competitive advantage, as they are less easily replicable than explicit knowledge (Nonaka, 1994). As tacit knowledge by its very nature is located within organizational systems of socialization and internalization, the management of tacit knowledge gives rise to management of intra-organizational knowledge activities such as embedding knowledge in products, business processes and management, creating organizational memory, etc. over inter-organizational knowledge management issues. Even in this context, where management of inter-organizational knowledge is concerned, political and cultural aspects come into play for achieving greater integration between organizations (Nonaka & Taguchi, 1995) so that tacit knowledge could be developed. In this context, inter-organizational knowledge management is influenced by the strategic alignment between the organizations.

As a consequent of the above, knowledge management architecture and process model used for knowledge capture, creation, distribution and sharing complements and enhances other organizational initiatives such as TQM, BPR and organizational learning with the intent of sustaining the competitive position (Gupta et al, 2004). This increases the focus and emphasis of KM systems at the intra-organizational. Even at the inter-organizational level, the focus in on dovetailing KM systems across organizations which is evident in the case of Japanese JV in Indian auto industry where the Japanese auto partner wants their Japanese component suppliers to have JV with the Indian component suppliers.
This focus on systems hide the substantive issues (like alignment of value and cost, role, etc.) related to knowledge management at inter-organizational level.

As is evident from the above, in the traditional model of knowledge management where knowledge is seen as a tool for maximizing competitive and strategic advantage, intra-organizational knowledge management gets increasing emphasis, as knowledge protected within the organizational boundary is seen to provide competitive advantage by the very fact that it is kept away from competitors, both present and potential. Even in the traditional model, when inter-organizational knowledge management is concerned, it is facilitated by the fact where different organizations are seen to be aligned either economically or strategically. Therefore, the traditional model of knowledge management does not provide answer to the context where knowledge transfers between organizations are not driven by economic or strategic goals or where knowledge is seen not as a competitive tool. This would necessitate that a different model of knowledge management is required where the transfer of knowledge takes place in a context where economic or strategic alignment do not exist.

Tacit knowledge in Indian IT companies will mean the knowledge which individual salespeople gather during their time spent in the field. Tacit knowledge can also be the analysis of individual salespeople which if not codified in a correct format can be lost forever. Non-codification of this tacit knowledge can prove damaging to the organization, especially when the salespeople leave the organization for a rival firm carrying with them tacit knowledge about the previous organization.
To overcome this problem the authors suggest a model whereby tacit knowledge of front-line salespeople can be codified and stored within the organization which can prove valuable when training a new recruit or to utilize the same solutions across the organization if a similar problem is faced by any other branch/department.

Fig. 3: Model of Intra-organizational KM
Conclusion
In this paper we have tried to present a model of knowledge management based on the initiative of an Indian IT organization. What we have identified were those mechanisms that were essential to have ensured the success of the initiative. We also saw that in the context of inter-organizational knowledge management initiatives involving multiple parties whose objectives do not match, the above model helps to ensure success than the traditional model of KM.

The issue of haves and have-nots among IT companies and how to bridge the widening gap between them when seen from the perspective of sustainability of Indian IT companies also gets addressed. The KM initiatives show the way of how to improve the quality of marketing in Indian IT companies. This is essential if Indian IT companies has to compete with other IT companies otherwise the fate of these organizations could become like that of other unsuccessful IT companies that have become obsolete due to the ever increasing gap between what the environment needs and what is offered. The knowledge management model provides a learning that could be replicated in other industries which are in the same situation as Indian IT companies.

References


