

# Knowledge Management: Leveraging Competitive Advantage & Organizational Competence – A Study of Indian Organisations in General

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## ABSTRACT

*Today the concept of knowledge management is studied as a “competitive advantage of the firm” and human resource as “knowledge capital”. Knowledge Management (KM) has made its entry in both public and private sectors of India. There has been advent of information technology in the last decade and the emergence of knowledge worker and the knowledge economy. There is focus on effectiveness of the organization through internal collaborations and process of knowledge Management and knowledge management systems. Information and communication technologies and human capital congruence is playing an important part in leveraging knowledge for individual’s personal growth and organizations competitive advantage which helps in economic development. The paper aims to review the latest knowledge management developments and practices of KMS.*

**Keywords:** *knowledge management, competitive advantage, organizational competence*

## INTRODUCTION

Today, knowledge is the heart of business. In the age of information and knowledge, knowledge plays an important part in the long-term growth and success of both an individual and organization. It is a source if used effectively provides competitive advantage for organizations. Knowledge organizations are working towards development, concentration, distribution and flow of knowledge. Information technology connectivity has paved way to compete globally. It has helped in developing and disseminating knowledge across teams, geography and business units. Knowledge management portals are used as tools, which focus on sharing information and making internal collaboration between employees that are geographically dispersed. This generation, designing and making the information available for sharing among individuals is managed by team of experts called knowledge mangers.

Knowledge Management (KM) is a structured practice that translates information into knowledge by applying a set of predefined rules and theory. KM is more a concept than a technology (Arun O. Gupta, 200, Senior Director Business Technology, Pfizer Ltd). Knowledge has two approaches/forms: *tacit knowledge* and *explicit knowledge*. ‘Tacit’ knowledge is the skills, practices, special know-how, intuitions, an individual has and that cannot be expressed, formalized or documented. It is personal knowledge, which can be transferred by traditions and shared experiences. In other words it is implicit in nature. ‘Explicit’ knowledge is visible in the sense that it can be expressed through communication forms for dissemination. Thus, we can interpret tacit information can not take the shape of real knowledge until it is shared in the form in which the disseminator wants it to share. The organizations need to promote conversion of tacit knowledge into explicit knowledge to increase the skill and creative capacity of its employees and take advantage of the

available knowledge to maximize efficiency and operational expertise.

Indian organizations as a result of felt importance of knowledge and knowledge sharing for the competitive advantage, have attempted to develop in-house knowledge management systems through which they can more effectively leverage their existing knowledge through knowledge sharing, transfer and reuse. Once an organization integrates its intellectual capital with other complementary resources like technology and processes it creates and leverages organizational capabilities. In the current economic scenario, human capital is viewed to be valued for intellect, social skills, reputation and learning capacity. Acquiring human capital is not enough, there is a necessity to develop structures, systems, and strategies that allow the organizations to exploit these knowledge resources and gain competitive advantage. Hence, arise the need to create an active Knowledge Management System, which integrates both tangible and intangible resources.

## **DISCUSSION**

### **Why Knowledge Management Practices?**

Organizations today compete on knowledge levels, directly or indirectly. This is due to the fact that intangible resources like human capital and knowledge is the only asset and idea which cannot be copied unlike products and services, which are easy to imitate, and are in abundance in the market for customer to choose from. Knowledge has become the only aspect in which business problems can be identified. Also, organizations are working towards continuous improvement (seeking to improve existing products and services), innovation (competitive strategy building), Total Quality Management and

Business Process Reengineering. As a consequence, managing knowledge becomes imperative for achieving significant improvements in both human and organization performance, and competitive advantage. The nature of work has been changing over the past several decades, jobs require people to think, plan, or make decisions which requires both tacit and explicit knowledge and the ability to apply that knowledge to work processes. Thus, organizations are requiring new ways to leverage this knowledge to gain competitive advantage.

Understanding competitive dynamics and achieving competitive advantage is possible by Knowledge-based view of the organizations. Accordingly this view, gives the explanation for why some firms ultimately succeed and others fail in their lack of understanding their knowledge resources and capabilities. Knowledge resources influence both the strategic choices the managers make and the implementation of those chosen strategies for leveraging the opportunities of competitive advantage. Hence, organizations need to be conscious towards effective implementation of knowledge management systems. This includes creating a linkage between the archived organizational 'best practices' and the actions taken by organizational members, knowledge workers and knowledge experts (*communities of practice*) based on that information.

In the modern age, applications of KM practices supported by IT based tools have become important to pursue societal, developmental goals of both the individuals and organizations with success. Organizations consist of knowledge workers whose behaviors are determined by personal knowledge embedded in the systems, procedures and technologies. The knowledge system help adapting to economic, technological and

social demands and therefore is important for maintenance in the modern, competitive society.

**Utility of the Study**

This paper aims to provide strategic insights and practical thinking that have influenced some of the leading Indian organizations to implement Knowledge Management Processes and systems. It reviews the latest Knowledge Management developments and their implication in the Indian companies. The effectiveness of the organization through internal collaborations and processes of Knowledge Management and Knowledge Management Systems. To have an understanding of the ‘‘critical gaps’’ between technology inputs, related knowledge processes, human capability and business performance outcomes and solutions to bridge this gap.

**Knowledge Management Systems: Focus Areas**

Often the focus of organizations knowledge management strategies and systems is on areas of: Information Technology (IT), Enterprise effectiveness, people and intellectual assets. These focal areas are always under micro and macro driving forces. The

macro forces include globalization, international competition, customers, and technology whereas micro forces include suppliers, domestic competitors, and stakeholders to name a few.

**Enterprise effectiveness** stands for improvement in the enterprise’s operational and overall effectiveness, enhancement in enterprise’s economic value, ensuring competitive viability & quality and successful application of knowledge assets. **Intellectual assets** are the educators, experts and leaders who work for strategizing and implementing knowledge systems and solutions. **Information Technology**, a network of system that converts data to information and disseminates this information through interweaved connection of tangible network of information viz, Internet, Intranet, extranet, data warehouse, document management etc. **People** are the most valued asset. Beliefs and acceptance to the use of knowledge by the people largely affects any organization’s knowledge management strategy. Effectiveness of knowledge transfer depends largely on two key factors: (1) the willingness of individuals to contribute their knowledge to the system; and (2) the rate at which individuals access and reuse knowledge within the system.

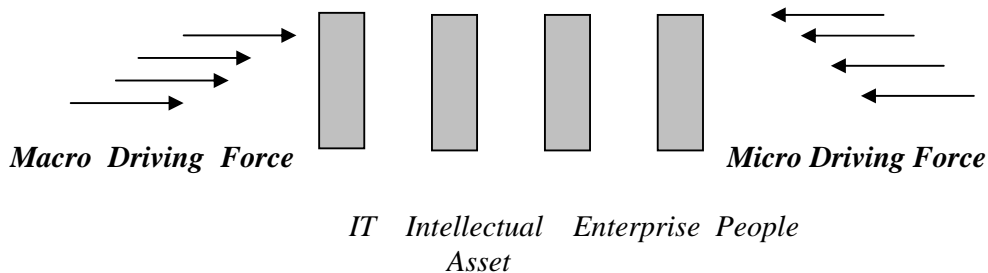


Fig. 1. KMS Focal Areas & Driving Forces

## **Knowledge Management in Indian Organizations**

"The most important contribution management needs to make in the 21st century is to increase the productivity of knowledge work and the knowledge worker in every field" (Drucker, 1949).

India has in recent past proved that it has a definite competitive advantage in developing sophisticated and innovative systems, which have been appreciated worldwide. In order to be a strong and global player, India companies need to consolidate their human knowledge. KM is nothing but a common knowledge-sharing platform. In India KM practices have taken a leap in industry sectors like BPO, software, healthcare and pharmaceutical. Sharing of knowledge has become essential for the growth of every organization in the world of globalization. For companies like TCS and Infosys that operate in dozens of countries, KM has given them an edge in the competitive software services market.

Satish Joshi, Senior VP, Patni Computer Systems Limited says "For us, KM is a set of processes and tools which give us the ability to leverage and combine the collective abilities of our knowledge workers." To show impressive gains in the future, Indian companies need to innovate and work upon processes for promoting efficiency. Although Indian companies have made breakthrough innovations there is still a need to improvise and overcome certain hurdles. These are creating (a) learning organization (b) encouraging breakthrough innovation (constant innovation is core of knowledge creation) and (c) sharing and collaboration across the organization at all levels.

Future strategic advantage and competitive performance is possible in global scenario with emphasis on smart minds using smart technologies, hence the need of KM practices. Therefore, a key responsibility and challenge for

corporate executives is to provide sustainable competitive edge. As in a world characterized by continuous, radical and unpredictable change, there is hardly any competitive advantage or core competence that is sustainable. Due to IT and information becoming more easily accessible and also availability of affordable global commodities, the real competitive advantage is for those who can continuously devise and exploit knowledge-based advantages.

Patni Computer Systems, India's sixth largest software services exporter through its extensive use of Knowledge Management system (knowledge center) has led to a reduction in training time and a boost in productivity due to better sharing of knowledge among its employees. Their KMS allows its employees to learn about new technologies, have discussions, get technical queries answered and even draft quick sales proposals. Tata Steel started its journey of KM programmes to systematically and formally share and transfer learning concepts, best practices and other implicit knowledge and to facilitate its usage at right place and in right time. Employees vividly shared their learning obtained through failures, successful experimentations involving a change in process or input materials etc. to develop new ideas and their implementation.

(Source: <http://www.tatasteel.com/technologyupdate>)

In India Professional service firms are leveraging their knowledge capital by forming project teams led by senior experienced professionals, knowledge experts, change agents and so on. This exercise helps in transfer of tacit knowledge to explicit for further usage. KM systems has encouraged companies to manage and measure intellectual capital. There is a need to understand both the "internal knowledge market" (sharing culture of the organization) as

well as “external knowledge market” (existence of buyers and sellers of knowledge) for proper implementation of knowledge processes and system. Knowledge works across networks and communities of practice, and companies need to nourish and facilitate their functioning to manage knowledge.

### Dimensions of Knowledge Management Practices

Rapid and continuous Business environments force businesses to go for continuous innovations in order to deliver sustainable and competitively viable customer value propositions. Thus, the need to design a KMS that could ensure adaptation and innovation of business

performance outcomes in alignment with changing dynamics of the business environment. The design of Knowledge Management System depends upon

- Organization variables (OV) such as people learning, organization structure & culture.
- Market variables (MV) such as changing market conditions, consumer preferences, competitive offerings, and, changing business models, & industry structures.
- Behavioral and sociological variables (BV) such as attention, motivation, commitment, creativity, and, innovation.

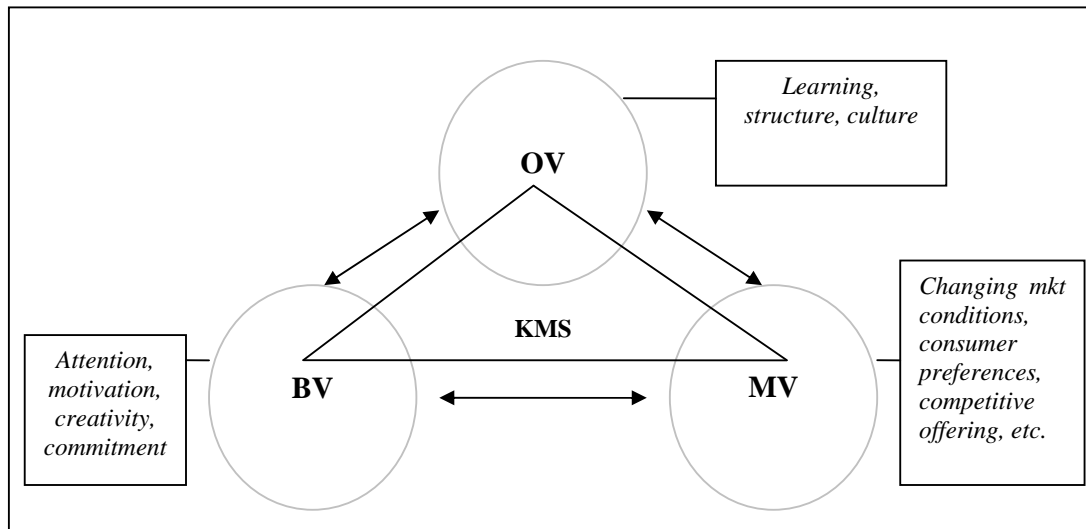


Fig 2. Representation of Inter Related Components of Knowledge Management System

### Designing knowledge based capabilities

Designing knowledge companies in today’s highly competitive knowledge economy, in order to improve the productivity of knowledge workers has become vital. Knowledge-Based Capabilities refer to those systems or processes that an organization creates to leverage its knowledge resources. Effective leveraging of knowledge

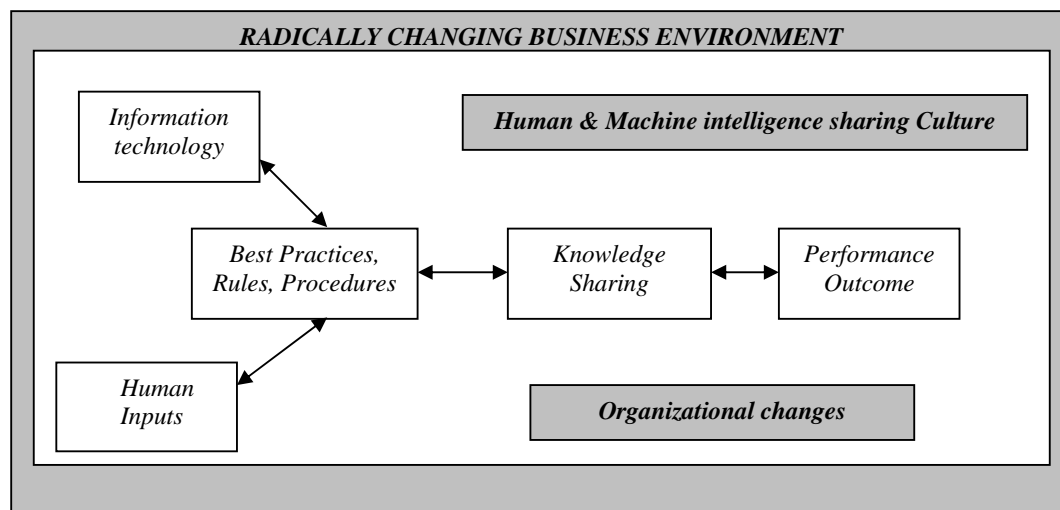
resources through the transfer and reuse of existing knowledge is an important aspect of most knowledge management systems. One of the common approaches in designing of effective knowledge capabilities is an **Electronic Information System** that works for storing and distributing knowledge with the help of human capability. Once there is proper functioning on a human level then you can start applying technology to ease the

capture and sharing of knowledge across a network. The congruence of Information technology and human inputs in KMS reduce the risk of obsolescence and help system get adapted to changing business environment. Organizations for effectiveness in using knowledge work upon

- **Knowledge work Processes;** which help identify best knowledge practices so that customers can have information, choice and control over the delivery of knowledge.
- **Economies of knowledge;** creating economies of knowledge, refers to concentrating expertise to work upon a topic and requires well-defined organization structures and processes. It also
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includes the concept of “virtual center of expertise”.

- **Communities of practice;** informal networks of people who share knowledge about a topic, connect with each other, and create common approaches to the way they do their work and solve problems.
- **Knowledge sharing culture;** whereby people share knowledge and expertise through interactions.
- **Organizational change;** bringing and implementing improvements in knowledge organizations for continuous up gradation.
- **Peers;** brings in information sharing at informal end



**Fig3.** Representation of Congruence of IT and Human Capital for Knowledge Management System

Other approaches focus on knowledge creation through research and development, continuous change & social interactions, and organizational learning that reflects new knowledge and effectiveness. **Research & Development** is about developing and discovering about products, processes, and services

by converting the existing tacit and explicit form of knowledge into ideas, which could be applied at discovering solutions to problems, creating new goods and knowledge. In other words, the ability to combine existing knowledge. **Organizational learning** is the acquisition of knowledge by individuals

and groups, supplement and organize this knowledge around the activities to adapt and develop organizational efficiency. OL focuses on developing the latest updated knowledge and improving the use of skills of the workforce in all the domains of competitive advantage. **Social interactions** help share, learn and imitate

tacit knowledge, as transfer of such knowledge is a slow and complex process (Teece et al., 1997). This social interaction can take place between peers, subordinates and experienced professionals, or between experienced professionals also.

Approach	What?	Knowledge sharing
<i>Electronic Information System</i>	<i>Storing &amp; distributing knowledge</i>	<i>Explicit → Explicit</i>
<i>Research &amp; Development</i>	<i>Creating knowledge</i>	<i>Tacit → Explicit Explicit → Tacit</i>
<i>Organizational learning</i>	<i>Acquiring knowledge</i>	<i>Tacit → Tacit</i>
<i>Social interactions</i>	<i>Share, learn &amp; imitate knowledge</i>	<i>Tacit → Tacit</i>

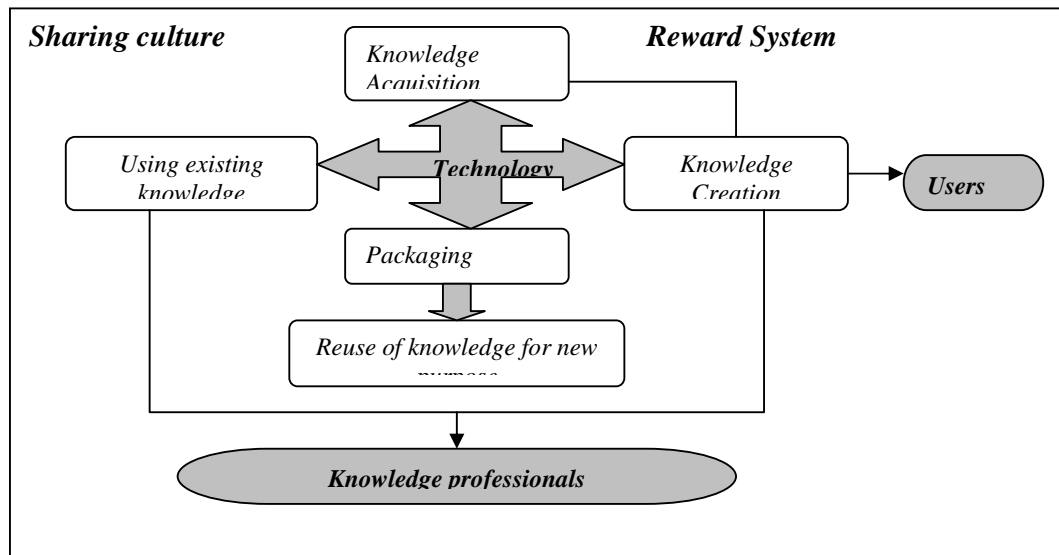
**Fig 4.** Approaches to Design Knowledge Management System

### The Knowledge Management Implementation

Any organizations knowledge strategy success is based on how successfully they manage transformation process viz, transforming combining, organizing, simplifying, delivering the knowledge for a distinctive competitive advantage. There is a need to understand the nature of knowledge, how it is resourced and transformed into product and services, and how people who use it think and connect. Implementation of KM is possible by use of various practices and procedures rather than pure technology through active support of employees. Effective implementation of KM is possible by working together of groups of experts, which include: users, knowledge professionals and technology experts.

**Users** are the individuals in the organization who create and use knowledge. Users, include the

professionals, technologists, managers, who possess and apply the tacit knowledge to make it available as explicit knowledge. **Knowledge professionals** are the individuals who have the skills, training and know-how to organize knowledge into systems and structures that facilitate the productive use of knowledge resources. Their tasks include the representation of the various kinds of organizational knowledge; developing methods and systems of structuring and accessing knowledge; knowledge distribution and delivery; packaging, knowledge storage, retrieval; and so on. The **technology experts** are the individuals who create knowledge infrastructure of the organization. These include the system analysts, system designers, software engineers, programmers, data administrators, network managers, and other specialists who develop knowledge based systems and networks.



**Fig 5.** Representation of Knowledge Management System

In order to implement the Knowledge practices there also arises the need to enhance effectiveness of the individuals, teams and organizations as a whole with the programmes of **proper training, organization structures rewards**. Implementation also largely depends upon acquiring and aggregating valued knowledge resources too. There is a need for **effective communications** in addition to use of technology for encouraging employees to come up with new ideas. For this organizations have to work for creating a climate of support, creativity and innovation. Cultures and climates that believe in the value of knowledge sharing contribute more to a firm's ability to leverage its knowledge-based resources.

A perspective view of implementation of KMS depends upon firm's understanding of the knowledge base of their employees too. Employees contribute to a firm's competitive advantage based on the knowledge they possess and the jobs they perform. Types of knowledge that individual employees hold depends upon the mobility and

retention of these employees (*Lepak and Snell; 2001*). **Hence, arises the need to retain knowledge assets by proper training, reward and motivation systems.**

## CONCLUSION

To leverage the knowledge production and benefits in the emerging economy, Indian organizations needs to foster collaboration among its employees to have insights in knowledge base repositories for self and organizations growth & development. Leading firms consider their knowledge to be a strategic asset and actively and explicitly manage it by combining Knowledge management practices with information management and a culture of organizational learning, in order to improve business performance. It is a management philosophy, which adds value, gives a competitive edge, create new opportunities and improve profit, organizations, teams and individuals to transform information and knowledge into actions.



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