CHAPTER 1: INTRODUCTION TO KNOWLEDGE MANAGEMENT

1.1 Introduction

The basic economic resource is no longer capital, nor natural resources..., nor ‘labor’....it is and will be Knowledge. (Drucker 1993, 7 emphasis in original)

There are three key themes in Knowledge literature:

a. Knowledge is of central importance to advanced economies

b. Knowledge is key to organizational performance

c. Organizations and work have become more Knowledge intensive

The extent to which Knowledge Management has become a topic of significance can be easily substantiated. A casual survey will show the extent of engagement which several countries and companies have with Knowledge Management.

According to Jensen the amount of information inside companies’ increases by 2% every month and every 1,100 days there is twice as much information and everyone’s ability to transform information into work will become twice as important and twice as complicated. To maintain competitiveness in such an environment, astute management of Knowledge is imperative (PInelli & Barclay, 1998)
Hislop states that in the late 1990s there has been an exponential increase in the number of academic books and articles that deal with Knowledge Management issues.

Governments and policy-makers have engaged passionately with this topic. In 2005 the Government of India set up the National Knowledge Commission which made its recommendations regarding reforms in the education sector.

The Committee to Advise on Renovation and Rejuvenation of Higher Education popularly known as the Yashpal Committee submitted its report to the HRD minister on 24 June 2009. This report has stated with alarm the dire state of higher education in India and the need for meaningful reforms for quality education.

“You would notice that we are placing supreme importance on the character of universities. They must create new Knowledge. Besides making people capable of creating wealth they have a deep role in the overall thinking of society and the world as a whole. This job cannot be performed in secluded corners of information and Knowledge. ....Indeed, speaking more seriously, one could almost say that most serious problems of the world today arise from the fact that we are dominated by striations of expertise with deep chasms in between.”
The Governments of many other countries also have social and educational policies that are predicated in this future vision of a mature Knowledge society. Knowledge Management literature is typically based on an analysis which suggests that economies and societies have become more Knowledge intensive since 1970s since the traditional manufacturing industries were replaced by Knowledge-intensive companies as the key wealth generators (Neef 1999).

The three top business challenges today have been identified as:
Intensifying Competition
Accelerating Change
Knowledge Leveling
And for all the above Knowledge Management is the only answer.

Even so, Knowledge is a poorly understood and thus undervalued economic resource. (Burton-Jones 1999 quoted in Hislop, Donald, Knowledge Management In Organizations- A Critical Introduction, Oxford University Press, 2005)

Bell appears to have introduced the concept of ‘post industrial societies and Knowledge society’. Bell’s analysis is based on the typology of societies characterized by their predominant mode of employment (Webster 1996).
1.2 Knowledge: Definition and Concept

Knowledge is defined as the capacity to act (Sveiby, 1997:37). Sveiby further identified Knowledge to have four characteristics:

a. Tacit
b. Action oriented
c. Supported by rules
d. Constantly changing

In the context of business as any Knowledge has to be applied for profit, competence—the manifestation of individual Knowledge, best describes the application or expression of Knowledge.

Competence in an individual consists of five mutually dependent elements—tacit: Knowledge, skill, experience, value judgments and social network. (Shukla, Archana, Srinivasan R.)

Prusak, 1997 defines Organizational Knowledge as, ‘What an organization knows, how it uses what it knows and how fast it can know something new.’

Bloom's Taxonomy is a classification of learning objectives within education.

It refers to a classification of the different objectives that educators set for students (learning objectives).
The taxonomy was first presented in 1956 through the publication *The Taxonomy of Educational Objectives, The Classification of Educational Goals, Handbook I: Cognitive Domain*, by Benjamin Bloom (editor), M. D. Englehart, E. J. Furst, W. H. Hill, and David Krathwohl. It is considered to be a foundational and essential element within the education community.

A great mythology has grown around the taxonomy, possibly due to many people learning about the taxonomy through second hand information. Bloom himself considered the Handbook, "one of the most widely cited yet least read books in American education".

Bloom's Taxonomy divides educational objectives into three "domains:" Affective, Psychomotor, and Cognitive. Within the taxonomy learning at the higher levels is dependent on having attained prerequisite Knowledge and skills at lower levels (Orlich, et al. 2004). A goal of Bloom's Taxonomy is to motivate educators to focus on all three domains, creating a more holistic form of education.

Skills in the cognitive domain revolve around Knowledge, comprehension, and critical thinking of a particular topic. Traditional education tends to emphasize the skills in this domain, particularly the lower-order objectives. There are six levels in the taxonomy, moving through the lowest order processes to the highest:
Knowledge – comprises of:

Exhibit memory of previously-learned materials by recalling facts, terms, basic concepts and answers

- Knowledge of specifics - terminology, specific facts
- Knowledge of ways and means of dealing with specifics - conventions, trends and sequences, classifications and categories, criteria, methodology
- Knowledge of the universals and abstractions in a field - principles and generalizations, theories and structures

One of the most basic references to the concept of Knowledge is that of the hierarchy of data, information, Knowledge and wisdom.
Data is the raw number, images, words and sounds which can be derived from observation or measurement. When data is organized in a meaningful pattern and some intellectual input has been added it becomes Information.

A useful differentiator as described by John Seely Brown is that, ‘information is fundamentally dis-embeddable and therefore transportable and re-embeddable’. Knowledge is not. Knowledge lives in its context. Knowledge can be understood to emerge from the application, analysis and productive use of data and information. In other words Knowledge can be seen as data and or information with a further layer of intellectual analysis added, where it is interpreted, meaning is attached and is structured and linked with existing systems of beliefs and bodies of Knowledge. Knowledge therefore provides the means to analyze and understand data/information, provides beliefs about the causality of events/actions, and provides the basis to guide meaningful action/thought.’ (Hislop, Donald, 2005)
The character of Knowledge from an objectivist perspective is summarized as:

Knowledge is an entity or object; Knowledge is regarded as an entity or commodity that people possess but can exist independently of people in a codifiable form.

Based on a positivistic philosophy: Knowledge is regarded as objective ‘facts’, free from individual subjectivity and which can lend itself to measurement, to being framed as rules and principles.

Explicit Knowledge (objective) privileged over tacit Knowledge (subjective) is derived from an intellectual process.
Nonaka et al view Knowledge as a dynamic rather than a static, with new Knowledge constantly being created through a dialogue between tacit and explicit through four different methods of Knowledge conversion.

<table>
<thead>
<tr>
<th>FROM</th>
<th>Tacit Knowledge</th>
<th>Explicit Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tacit Knowledge</td>
<td>Socialization</td>
<td>Externalization</td>
</tr>
<tr>
<td>Explicit Knowledge</td>
<td>Internalization</td>
<td>Combination</td>
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**Four Modes of Knowledge Conversion**


The vast majority of Knowledge Management literature differentiates between fundamentally different types of Knowledge by developing typologies. The most common distinctions are between Tacit and Explicit Knowledge and Individual and Collective Knowledge. Tacit Knowledge is inexpressible in a codifiable form, subjective, personal, context specific and difficult to share. Explicit Knowledge on the other hand is codifiable, objective, impersonal, context independent, easy to share.

Typically, this polarized dichotomy is argued based on the work of Michael Polanyi (1958, 1983). Polyani (1966) recognizes three dimensions of tacit Knowledge- functional (What is to be done?), phenomenal (Why?) and semantic (What happens and How?).
Shukla and Srinivasan have added another dimension-application (What happens now and how?)

Nonaka argues that Knowledge can exist at the level of the individual only; many authors argue that Knowledge can reside in social groups. Spender (1966) combined the Tacit-Explicit and the Individual - Group dichotomy to produce a two by two matrix with four generic types of Knowledge.

<table>
<thead>
<tr>
<th>INDIVIDUAL</th>
<th>SOCIAL</th>
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<tr>
<td>Explicit</td>
<td>Conscious</td>
</tr>
<tr>
<td>Tacit</td>
<td>Automatic</td>
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Table 1.2i Generic Types of Knowledge

Szulanski (1996) and Glazer (1998) view Knowledge as a commodity or entity based on an economic analysis.

1.3 Knowledge Management (KM): Definition and Concept

Knowledge Management ('KM') comprises a range of practices used by organizations to identify, create, represent, distribute and enable implementation of what the organization knows, and how the organization knows it. It has been an established discipline since 1995. Academic courses and professional and academic journals are dedicated to it. Companies have resources committed to Knowledge Management, either as a part of 'Information Technology' or 'Human Resource Management' departments.
Knowledge Management programs are naturally tied to organizational objectives such as competitive advantage, innovation, enhanced performance, developmental processes, learnings transfer (for example between projects) and the general development of collaborative practices.

Knowledge Management is commonly associated with the Learning Organization, Lifelong Learning, Continuous Improvement and Innovation.

Knowledge Management may be distinguished from Organizational Learning by a greater focus on the management of Knowledge as an asset and the development and cultivation of the channels through which Knowledge flows.

A learning organization is an organization skilled at creating, acquiring and transferring Knowledge, and at modifying its behavior to reflect new Knowledge and insights. Without accompanying changes in the way that work gets done, only the potential for improvement exists. According to Garvin, ‘this is a surprisingly stringent test for it rules out a number of obvious candidates for learning organizations. Many universities fail to qualify, as do many consulting firms. Even General Motors, despite its recent efforts to improve performance, is found wanting. All of these organizations have been effective at creating or acquiring new Knowledge but notably less successful in applying that Knowledge to their own activities.”
Total Quality Management is taught at many business schools, yet the number using it to guide their own decisions is small. Organizations that pass the definitional test-Honda, Corning and General Electric and come quickly to mind have by contrast become adept at translating new Knowledge into new ways of behaving. These companies actively manage the learning process to ensure that it occurs by design rather than by chance.‘(Garvin, David A., Harvard Business Review,  Building a Learning Organization July-August 1993)

The origins of the development of the concept of Learning Organization can be traced to Chris Argyris. His seminal work, Organizational Learning (1978), which he co-wrote with Massachusetts Institute of Technology’s (MIT) Donald Schon, developed the concept of single and double looped learning. Argyris explained the idea that learning may be defined as occurring under two conditions:

First, learning occurs when an organization achieves what is intended; that there is a match between the design for action and the actual outcome which he termed Single Looped Learning. Underlying assumptions are not questioned in the process of single looped learning.

Second, learning occurs when there is a mismatch between intention and outcome and the mismatch is identified and corrected. Argyris termed this Double Looped Learning. Double looped learning questions basic
assumptions and beliefs and in the process first principles are questioned and could be reestablished.

All organizations do not organically develop into Learning Organizations; there are usually factors prompting their change. As organizations grow, the natural capacity to learn may vane. Often company structures and individual thinking stratifies or stymies the evolution of solutions.

Whenever problems arise in the company, solutions that are proposed often are mere short term (single loop learning) and recur. To remain competitive, many organizations restructure, which results in fewer people in the company.

This means those who remain need to work more effectively. To create a competitive advantage, companies need to be able to learn faster than their competitors and also develop a customer responsive culture. Argyris identified that in light of these pressures, modern organizations need to maintain Knowledge about new products and processes, understand what is happening in the outside environment and produce creative solutions using the collective Knowledge and skills of all employed within the organization. This requires co-operation, teamwork, free and responsible communication, and a culture of trust.

Senges’s book *The Fifth Discipline* (1990) propelled ‘the Learning Organization to the fore front of corporate literature and agendas. In the
Fifth Discipline, Senge uses examples to describe how organizations suffer from learning disabilities that prevent them from recognizing threats and opportunities and describes the disciplines that individuals and organizations need in order to turn disabled organizations into Learning Organizations. Argyris emphasizes ‘thinking systemically’.

A Learning Organization exhibits five main characteristics:

**Systems Thinking**
Systems measure the performance of both the organization as a whole and of its various components.

**Personal Mastery**
Personal mastery is individual commitment to the process of learning. Organizations whose workforce can learn quicker than the workforce of other organizations have a competitive advantage. Individual learning is acquired through training; however learning cannot be forced upon an individual if he or she is not receptive to learning.

Research has shown that most learning in the workplace is incidental, rather than the product of formal training; therefore it is important to develop a culture where personal mastery is practiced daily.

**Mental models**
Mental models are ingrained assumptions held by individuals and organizations. In Learning Organizations, these limiting mental models are challenged. Individuals tend to espouse theories, which they intend to follow, and theories-in-use, which is what they actually do. Organizations have ‘memories’ which preserve certain behaviors, norms and values. In
the creation of a learning environment it is important to replace confrontational attitudes with an open culture conducive to inquiry.

To achieve this, the Learning Organization may have mechanisms for locating and assessing theories of action. Unwanted values held by the organization; need to be discarded in an ‘unlearning’ process. Wang and Ahmed refer to this as ‘triple loop learning.’

**Shared vision**

A shared vision creates a common identity that can provide focus and energy for learning.

**Team learning**

Team learning is the accumulation of individual learning. Individuals engage in dialogue and discussion and it is important that team members develop open communication, shared meaning and understanding. Learning Organizations also have excellent Knowledge management structures, which allow creation, acquisition, dissemination, and implementation of this Knowledge throughout the organization.

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<th>Table 1.3i: Fifth Discipline: Cornerstones and Obstacles</th>
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<tr>
<td><strong>Cornerstones</strong></td>
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<tr>
<td>Systems Thinking: idea of systems archetypes that help managers to spot repetitive systemic problems</td>
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<tr>
<td>Personal Mastery: learning to perceive current reality and recognize the vision</td>
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</tbody>
</table>
- reality gap producing creative tension from which learning emerges

<table>
<thead>
<tr>
<th>Mental Models: basic organizational assumptions into which there could be enhancing non-defensive enquiry</th>
<th>Uncertainty: managers must learn to manage under a more nebulous and less easily understood environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Vision: when the task that follows vision is no longer seen by team members as separate from self</td>
<td>Responsibility: Individuals must take responsibility for their own learning.</td>
</tr>
<tr>
<td>Team Learning: exploratory dialogue and discussion by the opposite process of narrowing down the best alternatives available. The two processes complement each other when they are separated.</td>
<td>Skills: new skills are required particularly listening and being able to act as facilitators</td>
</tr>
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The Knowledge Management process in organizations is conceptualized in four stages:

Stage I Knowledge Capture: identify the Knowledge domains in alignment with the organization’s Knowledge Management Strategy, locate sources of Knowledge both internal and external to the organization and generate or acquire the Knowledge.
Stage II Knowledge Collation: document and create Knowledge bases, identify target groups for different Knowledge objects, represent and adapt Knowledge for impending use.

Stage III Share: put into operation and maintain Knowledge sharing systems (like groupware, emails, bulletin boards, meetings, etc.) and broadcast to target groups.

Stage IV Capitalize: monitor and embed Knowledge into usage, assess /measure the benefits of Knowledge management in terms of the specified Knowledge goals, get feedback, review and renew the Knowledge bases and embed Knowledge intro the organization’s value creation activities.

Knowledge Management in practice most often encompasses identifying and mapping intellectual assets within the organization, generating new Knowledge for competitive advantage within the organization, making vast amounts of corporate information accessible, sharing of best practices, and technology that enables all of the above — including groupware and intranets. It includes change management, best practices, risk management and benchmarking.

There is an enormous body of literature on organizational learning. The precise relationship between learning and Knowledge is unclear but their relatedness is unquestionable. Berthoin Antal et al. 2001, Crossan et al. 1999 comment on the lack of consensus.
1.4 Why Knowledge Management? : Current Importance

"In an economy where the only certainty is uncertainty, the one sure source of lasting competitive advantage is Knowledge." Nonaka, (1991).

It is a fundamental law of ecology that for any organism to survive, its rate of learning must be equal to, or greater than, the rate of change in its environment (Garratt, 1987).

The global business scenario is far more turbulent than even before. The rate of change has to be that much more dynamic and complex and non-linear. Knowledge and competencies remain the most viable basis for establishing a competitive edge. Wealth creation varies as the creation of Knowledge. Knowledge about the latest regulations, emerging technologies, new global markets, etc are the core of corporate strategy and therefore continuous learning is imperative.

Internationally known strategy guru Garry Hamel is known for his advocacy of Innovation Management. In Hamel’s view, “We have reached the end of progress. Incrementalism is no longer enough. In the new economy, the companies that create new wealth are truly revolutionaries: they upend long-held industry conventions, they fearlessly challenge the old guard, and they amaze their customers with products and services that could scarcely have been imagined a few years earlier. In doing so, they render existing business models obsolete. In this environment the most fearsome threat to
continued success is not inefficiency but irrelevancy. Any company that is not an industrial revolutionary is already on the road to insignificance.

Hamel has further advocated that all innovation is not equal. He chose to divide innovation into four classes: Business Processes, Products and Services, Business Model and Industry Architecture. The real winners reshape the Business Model itself or reshape the Industry Architecture itself.

There is a worldwide realization that for the intelligent enterprise of the future, Knowledge management can be a source of competitive advantage and even a necessity for survival. The digital economy both enables and requires organizations to continually learn new Knowledge and systematically deploy it for value creation (Pinchot and Pinchot, 1994; Quinn, 1992; Nonanka and Takeuchi, 1995).

The digital economy prioritizes the centrality of information and Knowledge for all organizations. This makes Knowledge Management a strategic issue (Linstone and Mitroff, 1994; Negroponte 1995; Tapscott 1997).

Dr Paul Shrivastava points out that the second reason for Knowledge Managements being a strategic issue is that it holds a high potential for gaining efficiencies and creating value.
Knowledge based companies are human based companies. In any Knowledge based economy smart professionals will work for the best company. The really successful company is the one which creates an environment that appeals to these professionals and makes them want to stay on.

In time companies will realize that they will have to turn from shareholder focused companies to societal value oriented which bring value to the world. Some companies become so powerful that they can challenge governments. This means that companies can no longer ignore the impact that they are having on the world around them.

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Research literature shows a strong link between Knowledge management and the creation of a sustainable competitive advantage, because of the tacit nature of an organization’s Knowledge (Gupta & McDaniel, 2002).

Among the many drivers which promote the management of Knowledge in companies are the competitive advantage that companies have with enhanced Knowledge of products, processes and services, achievement of shorter new-product development cycles, enabling organizational learning, leveraging of expertise company-wise through increased employee networking across the layers, management of the ever proliferating complex data and information and facilitating employee access and management of intellectual capital and assets within the workforce.

Some authorities point out that in fact KM has evolved into three unique and distinct business varieties (KM3), each with their own operational issues and opportunities. The three types of KM are:

a. Personally-based Knowledge Management or Personal Knowledge Management (Personal KM).

b. Community-based Knowledge Management.

c. Organizationally-based or Corporate Knowledge Management.
1.5 Aim of this Study

Business schools have so much to do with Knowledge. Business schools service companies through their Knowledge. Industries and (in some cases even companies) in turn have a huge impact on governments and societies. It is therefore important that business schools manage and leverage Knowledge as a resource to create wealth and talent.

However, there is a dearth of information and research about how Knowledge at business schools may be managed.

Keeping this in mind, the overall aim of this research is to discover the perceptions of the relevant stakeholders in Business Schools—faculty, students, alumni, industry, organizations like NGOs, Government organizations about business schools and applicability of Knowledge Management to business schools and to explore the efforts of industry and the best business schools in Knowledge Management through a survey. Further to investigate how Business Schools can better document, disseminate and capitalize on Knowledge. To find out the returns of the implementation of Knowledge Management to Business Schools and to suggest an improved paradigm for Business Schools based on Knowledge Management applications.
1.6 Motivation for this Study and Problem Statement

This researcher spent over 15 years in industry in the field of human resource management and over 13 years in a business school teaching human resource management. The very sincere feeling that the Knowledge in business school is not harnessed to the optimum extent but can be to the advantage of all stakeholders was the motivation in choosing this topic for study.

The researcher’s experience with human resource interventions in bringing out change in the culture of companies, in establishing policies in regard to performance management, employee engagement and reward management would help in the research process.

Further, the experience gained in business schools gave a perception of possibilities for business schools for both Knowledge advancement and revenue generation.

The above three reasons were the motivations for the current theme being selected.

The researcher felt from personal observation that if business schools could develop a more substantial culture of documentation and shared learning it would be possible for the business schools to leverage the captured Knowledge to its advantage. Thus from the current principal role of
teaching MBA students, it might be feasible to extend the role of business schools to that of Knowledge storehouses and innovation centers offering consulting services, research, writing and publishing. Knowledge Management could make the following possible for business schools:

- Making available increased Knowledge content in the development and provision of curricula, lectures, training, research and facilities.
- Achieving shorter new product development cycles for all the above activities
- Facilitating and managing innovation and organizational learning
- Leveraging the expertise of people across the organization
- Increasing network connectivity between internal and external individuals, students and teachers, clients and the business school
- Managing business environments and allowing employees to obtain relevant insights and ideas appropriate to their work
- Solving intractable problems
- Managing intellectual capital and intellectual assets in the workforce (such as the expertise and know-how possessed by key individuals)

The matter was discussed with learned colleagues and managers from industry who had expertise in Knowledge Management by virtue of their own experience. Literature, theories and concepts and available empirical literature consisting of similar researches was studied to better understand
the context of the research problem. The problem was then rephrased and recast in terms as specific as possible.

1.7 National Implications and Response

60 years after India got independence, India has felt acutely the shortage of globally competent trained manpower to man industry.

India spends about 3.8% of its GDP, around 8.6 million USD on education which is grossly inadequate, especially if one takes into consideration the predictable inefficiencies which undoubtedly creep in.

India has the third largest education system in the world annually producing more than five times the engineering graduates produced in USA. McKinsey estimates that only 25% of India’s engineering graduates (engineering graduates most often constitute approximately 70% of a typical Indian Business school) are globally competitive. The number of citations per faculty over a 5 year period was 2 to 3 for a typical IIT (India’s best exemplar of a global quality higher educational institution), whereas the corresponding number for Stanford Engineering was 52 and 45 for MIT Engineering. India ranks 119 among 149 countries in the citations index. A McKinsey study found that a typical IIT was granted 3-6 patents in a year as against 64 for Stanford Engineering and 102 for MIT Engineering. There has not been a single major invention from India for over 50 years.
Mr. Kiran Karnik, former president of NASSCOM (The National Association of Software and Services Companies), noted strategy and policy analyst, wrote in the Economic Times, with reference to the growth in the education sector, ‘Quality (of education) has suffered, and the match between the capabilities of the graduating students and the needs of employers is woefully inadequate. In fact just a quarter of the engineering graduates are ‘job-ready’ according to the IT industry. As a result, students and employers have to spend time and a large amount of money on training. This wasteful expenditure quantifies, in some sense, the failure of the education system.’

The thrust through governmental policies, the oft expressed views of industry, India’s capability to provide necessary IT support, the competition that India faces given its advantageous population age-composition and challenging population size all point to the fact that India stands at a most interesting make or break cross roads in history. How India creates, disseminates and leverages Knowledge for trade and business, in essence manages its Knowledge, will determine the destiny of future generations.

Trade and Industry contributes 86% to India’s GDP. Business schools ultimately service these segments through the talent they create. It is clearly imperative that business schools must manage Knowledge in order to better the contribution of industry to the development and competitiveness of the economy.
India has become the source of many new business models; it also needs to cultivate a mental climate for break through innovations.

Knowledge Management is becoming an increasingly strategic issue in business sectors. The competitive environment is neither linear nor predictable. Software, telecommunications and consulting services may emphasize it more than manufacturing sector. Several authorities, notably Gary Hammel have underscored that intelligent enterprises of the future require Knowledge to be managed as an asset, a source of wealth creation and a competitive advantage.

The digital economy prioritizes the centrality of information and Knowledge for all organizations. It makes Knowledge Management a strategic issue (Linstone and Mitroff, 1994; Negroponte, 1995; Tapscott, 1997).

A second reason why Knowledge Management is a strategic issue is the potential for gaining efficiencies and creating value.

Thirdly, as Gary Hammel posits that business in the new globalized order requires new principles based on high-order innovation. Embracing these principles can achieve true engagement with human talent. Human talent in industry has to contend with Intensifying Competition, Accelerating Change and Knowledge Leveling.
Thus the industry justification for Knowledge Management is based on business demands.

The management of Knowledge is a complex activity involving a number of functions. Kings et al made a study of the most important issues in Knowledge Management. The study shows the multitude of issues the organization has to deal with in the present context.

**Knowledge Management Issues**

**Executive and Strategic Management**
1. Providing for Strategic Advantage
2. Top Management Support
4. Motivation to participate
9. Sustainability
15. Evaluating the CKO
16. Creativity & Innovation
17. Effect on Organizational Processes
19. Organizational Responsibility

**Operational Management**
3. Knowledge Currency
5. Identification of Organizational Knowledge
7. Verification of Knowledge Contributions
8. System Design
11. Methodologies

**Costs, Benefits & Risks**
6. Financial Cost and Benefit
10. Security
13. Non-financial Cost and Benefit
18. Investment

**Standards**
12. Development of Technical Standards
14. Operational Definition
20. Fit with IT Infrastructure

**Figure 1.3.i**

Organizations face an investment choice as they consider Knowledge Management applications not so much in the technology that they use but
in the kind of talent they attract and retain. The social factors that impact the sharing and creation of Knowledge are by far the most difficult to orchestrate.

An organization’s Social capital which includes the personal relationships that bind together members of the organization as well as relationships that bind organizational members to other external sources of human capital and its Reputational Capital are integral to the management of its Knowledge.

1.8 Human Resource Management Implications

While the key assumptions of pre-1990 literature were:

- Knowledge Management is information systems based
- Knowledge can be codified for transmission
- Employees are willing to share their Knowledge and expertise
- Perspective was objectivist based

Post 1990 literature:

- Focuses on the practice based perspective
- Social and cultural factors were given importance
- Realization that employees are not willing to share their Knowledge and expertise by nature

Human motivation is of fundamental importance to Knowledge-sharing processes. People’s willingness to share Knowledge cannot be taken for granted.
Human motivation and willingness are important to Knowledge management because:

- Much of Knowledge is by nature embodied/personal/tacit
- The innate nature of the employment relationship
- The potential for conflict is embedded in intra-organizational relationships

**The Personal and Embodied Nature of Knowledge:**

Kim and Mauborgne (1998) suggest that Knowledge is resource locked in the human mind and therefore interaction is the medium of exchange. Because the medium is interaction there is an implicit condition of willingness to give and willingness receive on the two parties to a Knowledge exchange transaction.

Further despite perfect willingness of both parties to give and receive information, the Knowledge given will be limited in several aspects or in the assumptions and values on which it is based. Differently stated, there are limits to the codification of Knowledge, in any Knowledge transfer, individual unique perspective, insights or experiences are extremely difficult to transfer entirely due to the inherently socially and individually embodied nature of Knowledge.

**The Nature of the Employment Relationship:**
Knowledge is an economic asset owned by organizations, which they have the power to manage, like any other resource. However, Knowledge that employees have, belongs to them. The potential tension between workers and organizations they work for over ownership and control of Knowledge always exists. ‘Willingness’ of Employees to share and apply their Knowledge is the crucial precipitating factor that makes Knowledge application possible and efficient.

Succinctly stated by Scarbrough (1999), ‘*knowing*’ as an active lived experience, is in a constant state of tension with Knowledge as a commodity within firms and markets.

The need of the company for the Knowledge and the need of the employee to share the Knowledge may not coincide; at least it may not be taken for granted. Jaffee (2001) points out that one of the fundamental aims of Taylorism was to dispossess craft workers of their Knowledge, and embody it in a system of explicit managerial principles. Hislop comments that since approximately the mid 1970s the structures of organizations have become flatter, more flexible and less hierarchical; permanent and secure jobs with easier opportunities for promotion have reduced; flexible working hours and contract work has become more apparent therefore the levels of commitment and loyalty among workers has reduced and consequently potential for conflict over the workers application of Knowledge and the employers right over the Knowledge has increased. (Guest 1998; Gallie et al., 2001; Scase 2001; Smithson and Lewis 1999).
Intra-organizational Relations: the potential for conflicts Knowledge sharing:

- Studies have shown how people are concerned about the effect of what they have said or done in electronic media to each other and this affected their attitudes to Knowledge sharing. Hayes and Walsham (2000) Ciborra and Patriotta (1998)

- Inter-group conflicts and rivalries create a reluctance to share Knowledge. Newell et al (2000) and Empson (2001)


- Politicality of the social context such as whom Knowledge is visible to or real potential or perceived sanctions to sharing Knowledge. Hayes and Walsham (2000)
What Motivates People to Hoard or Share Knowledge? A range of diverse factors are found to be relevant

Table: Factors Affecting People’s Willingness To Share Knowledge

<table>
<thead>
<tr>
<th>Factors affecting people’s willingness to share knowledge</th>
<th>Case study examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerns over whether status/expertise is affected</td>
<td>Morris 2001; Willman et al 2001; Andrews and Delhaye 2001</td>
</tr>
<tr>
<td>Sense of equity/fairness in organizational processes</td>
<td>Kim &amp; Mauborgne 1998</td>
</tr>
<tr>
<td>Interpersonal trust</td>
<td>Andrews and Delahaye 2001; Morris &amp; Empson 1998; Roberts 2000</td>
</tr>
<tr>
<td>Organizational commitment?</td>
<td>Storey and Quintas 2001; Guest and Patch 2000; Byrne 2001</td>
</tr>
<tr>
<td>General organizational culture</td>
<td>De Long &amp; Fahey 2000; McDermott &amp; O’Dell 2001; Pan &amp; Scarbrough 1999; Ribiere 2001; Robertson &amp; O’Malley Hammersley 2000; Robertson &amp; Swan 2003</td>
</tr>
<tr>
<td>Visibility of knowledge, attitudes and values to senior level of organizational hierarchy</td>
<td>Ciborra &amp; Patriotta 1998; Hayes &amp; Walsham 2000</td>
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</table>


Table 1.8i

Inter-group and Inter-personal Conflict:

Conflicts over a wide range of issues such as historical antagonisms and rivalries, doubts during mergers and takeovers, reward and recognition concerns, promotion opportunities, ownership issues, legitimacy issues, changes in status, attempts to control Knowledge Management initiatives are some of the examples that underscore the importance of Knowledge
as a source of power over which there are intra and intra corporate struggles.

**Equity and Fairness:**

The willingness of workers to share their Knowledge was hinged on the perception of procedural justice in the company. Procedural justice represents the extent to which organizational decision making is fair, fairness being related to how much people are involved in decision making, the clarity of communication regarding why certain decisions are made as well as the clarity of expectations. Kim and Mauborgne (1998) who worked on a group of managers in select companies, suggest that when workers, feel valued, it can have a positive effect on their attitude to sharing Knowledge.

**Interpersonal trust:**

A lack of trust between individuals is likely to inhibit the extent to which people are willing to share Knowledge with each other. Lack of trust creates uncertainty, risk or perception of risk, that all parties may not participate or benefit equally and that due to opportunistic behavior someone may lose out from sharing their Knowledge.

**Level of Organizational Commitment:**
Developing commitment can be seen as a part of an organization’s Knowledge Management strategy as it can prevent the loss of valuable Knowledge through increasing staff retention levels.

A number of articles suggest that the level of commitment of workers to their organization may affect both their Knowledge sharing attitudes and behaviors as well as their level of loyalty (Byrne 2001; Guest and Patch 2000; Storey and Quintas 2001; Scarbrough and Carter 2000). While there is some empirical evidence that shows that loyalty levels are affected by organizational commitment (Buck and Watson 2002; Chen and Francesco 2000; Sturges and Guest 2001), there is no empirical evidence which shows how Knowledge-sharing attitudes and behaviors are connected to commitment levels.

**Human Resource Management and Culture Management:**

Human Resource Management practices such as pay and recognition, training, working conditions; hiring policies impact Knowledge management initiatives (Hansen et al 1999; Hislop 1999; Hunter and Beaumont 2002; McDermott and O’Dell 2001; Pan and Scarborough 1999; Robertson and O’Malley Hammersley 2000). These can impact sharing attitudes and behaviors as well as retention.
Culture aspects include openness, informality, absence of bureaucracy, trust, mutual respect for talent and expectation of high performance from fellow workers.

**Concerns over the Visibility of Interactions:**
Hayes and Walsham and Ciborra and Patriotta (1998) showed how concerns by workers over the visibility of their opinions to senior managers inhibited their participation in electronic exchange forums. These concerns were related to how this information/Knowledge may be used by senior managers. Both studies showed that workers were loath to express opinions which may not be seen as complying with managerial perspectives in transparent and widely used forums.

**Concerns over Power, Status and Expertise:**
How people perceive or experience that their power, status and expertise is affected by participating in Knowledge sharing activities affects their behavior.

**Communities of Practice:**
Communities of practice have been defined as informal groups that have some work activities in common. As a consequence these communities develop:

- A shared body of common Knowledge
- A shared collective identity
- Some overlapping values

Mainstream Knowledge management literature portrays communities of practice as being effective vehicles for Knowledge Sharing and Knowledge creation.
The effectiveness is because of:

The existence of shared Knowledge and a shared system of values makes sharing tacit Knowledge easier, as group members have insights into the implicit assumptions and values embedded in each other’s Knowledge.

The shared Knowledge, values and identity which exist also facilitate the development of trust-based relations which create ‘conducive to Knowledge-sharing’ social conditions.

![Diagram of Communities of Practice Underpin Knowledge Processes]

**EFFECTIVE KNOWLEDGE PROCESSES**
- Sharing
- Creation
- Utilization
Some Real Life Examples of Intercommunity Knowledge Processes:

A joint technology development project involving close collaboration between the United Kingdom (UK) and Japanese electronics companies (Lam 1997)

A large-scale interuniversity research project involving staff from three United Kingdom whose disciplinary backgrounds encompass engineering, operation management, organization behavior and marketing (Newell and Swan)

The consolidation of Knowledge base in accounting and consulting companies following Mergers and Acquisitions. (Empson 2001)

Inter-organization product development efforts in the biotechnology sector (Powell et al 1996)

The Indian Space Research Organisation’s (ISRO) 2nd moon mission Chandrayaan-2 is to be launched in 2013. Russia's Federal Space Agency (Roskosmos) is joining with ISRO for development of Chandrayaan-2 Lander/Rover. (www.chandrayaan-i.com)

These diverse examples have commonality in joint utilization of and development of Knowledge among people who normally do not work together and have substantially different Knowledge Bases. The use of project-based working methods and utilization of interpersonal and inter-organizational networks has become widespread.
Brown and Duguid (1993) refer to an organization as being a community of communities. The diverse Knowledge bases of organizations are a diverse localized community which has some common Knowledge overlap but also some specialized Knowledge. This perspective is closely associated with the practice based perspective on Knowledge, the specialized and localized nature of much organizational Knowledge is related to the particular tasks and activities that different groups of workers undertake.

**Knowledge Processes, Power and Conflict:**

Power in organizations needs to be accounted for in Knowledge sharing processes. Power and Knowledge are extremely closely related. Power is fundamentally inherent in the persona of individuals and groups. Power is
structurally embedded in the employment relationship. Due to power, there is an inherent potential for conflict in organizations.

Hales (1993) defines power resources as, ‘those things which bestow the means whereby the behavior of others can be influenced and power relations can arise out of the uneven distribution of these resources.’

**Properties of Knowledge that make it a Power Source**

<table>
<thead>
<tr>
<th>Property</th>
<th>Knowledge-power</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scarcity</strong></td>
<td>Specialist Knowledge or expertise which only a limited number of people posses. Knowledge which may be highly tacit and requires to be developed through experience.</td>
</tr>
<tr>
<td><strong>Satisfy Wants</strong></td>
<td>Knowledge which may satisfy individual wants through its possession or use (such as status or rewards) or Knowledge which satisfies the organizational goals and objectives through its possession or use (such as providing organizations with status, profits, market share, or product/market innovations).</td>
</tr>
<tr>
<td><strong>No Alternatives</strong></td>
<td>Where the wants which are satisfied (see above) are only achievable through the possession or use of specific types of Knowledge.</td>
</tr>
</tbody>
</table>

*Table 1.8ii Reproduced from Hislop, Donald, Knowledge Management in Organizations: A Critical Introduction, Oxford University Press, 2005 Chapter: Power, Conflict and Knowledge Processes, page95*
McKinlay and Starkey (1998) suggest that,’ behind the façade of efficiency, humanity or equity which surrounds formal organizations of all kinds, lie distinct concentrations of power/Knowledge.’ From this perspective, there are fundamental inequities in the distribution of power and Knowledge or Knowledge power in organizations, which can be explained at least in part by examining the nature of the employment relationship in detail.

For Knowledge workers, two factors imbuing them with power are

- The importance of their Knowledge to the organization they work for and
- The general scarcity of their skills in labor markets.

Marshal and Brady (2001) refer to the , ’frequent organizational reality of divergent interests, political struggles and power relations’ This divergence of interests may come from individuals/groups competing with each other for scarce organizational resources or through clashes between the personal objectives and strategies that individual employees may pursue in order to sustain and develop their careers, such as receiving recognition for particular efforts/Knowledge, receiving financial rewards or gaining promotions.

In an interesting case of The Surat Transformation by the exceptional Indian Administrative Service officer S. R. Rao who took over Surat in Gujarat as municipal commissioner when the city was in the grip of a plague epidemic. Mr. Rao covered the whole of Surat on foot in the first month to understand the problems of the city.
The fundamental problems recorded by him are:

Turfism and compartmentalization with each functionary operating like a mini Turk

Knowledge hoarding. Because Knowledge was power it was not being shared.

Organizational politics and war

Centralization of power with no delegation of responsibility

Schisms between core and non-core functions

When Mr. Rao addressed these areas at a core level he was able to achieve success.

The potential for conflict within organizations is due to the interest laden nature of human behavior, the diversity of interests that individuals/groups can pursue, and the competing rationalities that underpin their actions.

Empirically, evidence suggests that the implementation of Knowledge management initiatives or the participation in Knowledge processes is a common battleground, where such conflicts are played out, as a growing body of case study evidence suggests that such inter-personal and inter-group tensions and conflicts are common in organizational Knowledge processes (Empson 2001; Marshall and Brady 2001; Newell et al 2000; Ward 2000; Willman et al 2001.)

Storey and Barnett (2000) analyze a single company case study of a failed Knowledge Management project. One of the main reasons for the failure of
the project was there was a lot of inter-functional conflict over the ownership of the project, with different functional groups attempting to use the Knowledge management project as a political tool to pursue a broader agenda related to shaping the future of the company’s Information Technology infrastructure. These attempts were resisted and challenged by other individuals and groups within the organization producing micro-political battles, where each interest group utilized particular political tactics and modes of influence drawing upon the different resources that they had. Thus not only was the Knowledge Management in initiative itself shaped by and subject to power struggles, political battles and conflict, but ownership of the initiative itself was used as a political tactic to pursue a broader agenda.

Hislop has cited ‘a deep rooted and historically embedded attitude of mutual suspicion, mistrust and antagonism’ between groups in one company. There was a concern between the groups that sharing Knowledge would result in loss of power and status by giving away their power. On the other hand, it is suggested that sharing Knowledge may also be driven by a desire to be seen as contributing to get rewards or status.
Social Capital: Hales has not taken into account the role of Social Capital which has been increasingly acknowledged since the 1990s e.g. by Naphiet and Ghoshal 1998; Adler and Kwon 2002; YliRenko 2001

Social Capital relates to the network of acquaintance networks of people. Naphiet and Ghoshal 1998 define Social Capital as ‘the sum of the actual and potential resources embedded within, available through and derived from the network of relations possessed by an individual.’

Hislop believes that Social Capital can be conceptualized as a potential power resource and can be added to Hales model as a fifth dimension of Knowledge power.

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Table 1.8iii Power Resources and Modes of Influence from Hales 1993

<table>
<thead>
<tr>
<th>Power Resource</th>
<th>Personal</th>
<th>Positional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>Individual strength, means of violence</td>
<td>Access/control over means to violence</td>
</tr>
<tr>
<td>Economic</td>
<td>Individual wealth</td>
<td>Access/control over economic resources</td>
</tr>
<tr>
<td>Knowledge (administrative)</td>
<td>Individual expertise</td>
<td>Access/control over relevant Knowledge</td>
</tr>
<tr>
<td>Knowledge (technical)</td>
<td>Individual expertise</td>
<td>Access/control over relevant Knowledge</td>
</tr>
<tr>
<td>Normative</td>
<td>Individual beliefs/values, personal qualities</td>
<td>Access/control over ideas and values</td>
</tr>
</tbody>
</table>

Table 1.7 Reproduced from Hislop, Donald, Knowledge Management in Organizations: A Critical Introduction, Oxford University Press, 2005 Chapter: Power, Conflict and Knowledge Processes, page95
The use of power is shaped by the response of those subject to it. People are more likely to yield or comply with legitimate power than comply with power of dubious legitimacy. The legitimacy of Knowledge-power resources are typically ambiguous with legitimacy being evaluated contextually.

The politics of Knowledge power potentially involves negotiations and conflicts regarding the legitimacy of competing and diverse Knowledge claims.

McKinlay (2002) comments that Knowledge Management can be regarded as ‘a brake on corporate forgetting.’ Knowledge Management is also about actively marginalizing, discarding Knowledge not deemed legitimate or current which can be a highly political process.

French philosopher Michael Foucault’s conceptualization of the power-Knowledge relationship is different from that of Hales. Foucault, in his work on Discipline and Punishment defines power as, ‘the power exercised on the body is conceived not as a property but as a strategy …this power is exercised rather than possessed; it is not the privilege acquired or preserved of the dominant class, but the overall effect of its strategic positions—an effect that is effected and sometimes extended by the position of those who are dominated.’
Foucault suggests that power is not a discrete resource ready to utilize but is something which is produced and reproduced within and through the dynamics of evolving social relationships.

Foucault coined the expression ‘power/Knowledge’ to symbolize the inextricable and fundamentally inseparable interrelationship of Knowledge and power.

Foucault says, ‘Power produces Knowledge...power and Knowledge directly imply one another; that there is no power relation without the correlative field of Knowledge, nor any Knowledge that does not presuppose and constitute at the same time the power relations.’ (Foucault in ‘Discipline and Punishment.’)

Hislop says that the objective of disciplinary power is to define the parameters of acceptability and non-acceptability, to penalize those who transgress and ultimately to produce docile, self-disciplining behavior. For Foucault, the social transformation from feudalism to capitalism saw a change in the way discipline was achieved. According to Clegg (1998), within capitalism the use of Knowledge/power and surveillance via panopticians represent two key disciplinary practices. Expert Knowledge/power can provide a disciplining role through providing an ideologically based justification for what behaviors are appropriate. A panoptician is a surveillance instrument, a tool which has the potential to monitor behavior continuously, but where the person is invisible to the
person being observed. With such a mechanism, the threat of surveillance can be adequate to produce self-disciplining behavior by the subject of the panoptician, as they can never be sure when or even if they are being observed.

Lyons (1994) in his numerous books on surveillance in contemporary society has illustrated how Information Communication Technologies (ICTs) can be tools of surveillance. The idea of ICTs as panoptician has been applied to the understanding of ICT-mediated Knowledge processes by both McKinlay (2000, 2002) and Hayes and Walsham (2000). Bain and Taylor (2000), Ball and Wilson (2000), Taylor (1998), Taylor and Bain (1999) have contributed to ICT surveillance studies in call centers.

Hayes and Walsham (2000) developed an analysis of a company’s use of a groupware technology (Lotus Notes) and concluded that ICTs did represent panopticians and had a significant employee disciplining effect. In their study worker concern was that what they said on Lotus Notes would be visible to senior management, which made some workers reluctant to articulate views not felt to be compatible with senior management perspectives thus typically resembled a public façade where workers censored themselves to present management with a particular impression. This would lead to a process of homogenization where diversity, Knowledge and attitudes are impacted negatively.
McKinlay presents an alternative analysis (2000, 2002) which suggests that the disciplinary power of ICT-based Knowledge management systems has been exaggerated and ICT systems have but a limited ability to capture highly tacit Knowledge. Workers resist the disciplinary gaze of such systems through creating and communicating within ‘unregulated social processes ‘. (2002).

Deetz (1998) examined the behavior of consultants as Knowledge workers who he described as being largely regarded as highly educated, highly compensated, and had good career prospects and high-status jobs with a high degree of work autonomy. However these consultants were not totally free from organizational control systems. Normative control systems were used through an extensive system of culture management (Kunda 1992). This operated through vision statements and socialization programs and shaped what was regarded as acceptable /desirable behaviors, values and attitudes.

Deetze points out that there was a ‘dark side’ experienced by consultants and they submitted to this willingly. The Faustian pact they negotiated included subordinating themselves to the organization in exchange for attractive levels of pay, status and job security that working as a consultant provided. Self-discipline or subordination involved controlling themselves in order to further the organization’s objectives to the extent of accepting clients’ unreasonable demands for example demands that required working long and unreasonable time, compromising on personal time. Thus when
the body (through illness or tiredness) or non-work commitments (such as family), conflicted with work objectives they were negatively regarded, as they inhibited the achievement of work-related objectives.

Part of the reason for this willing sub-ordination, where workers placed stressful work demands on their bodies and their families was due to a perception that while working conditions were good, a climate of fear wasn’t far below the surface, where if they had not committed the hours required or achieved the results required then negative consequences may have ensued. Thus even for high-status, Knowledge intensive workers issues of power and conflict are not absent.

**Culture, Human Resource Management (HRM) Policies:**
Culture and Human Resource policies are largely connected with 2 aspects:

a. Attempting to produce appropriate Knowledge behaviors and attitudes
b. Securing employee commitment and loyalty to the company

A number of questions have been raised regarding the inter-linkages between the business strategy, HRM strategy and Knowledge Management strategy of a company.

Hislop opines that the Knowledge management-strategy relationship as articulated in Knowledge management literature has ‘idealistic and rationalistic overtones’. There are assumptions that business strategies are made on the basis of through and objective analysis and that the implications of these business strategies are then used in a logical and
structured fashion to organizational practices and policies such as HRM policy and IT strategy. Mintzberg et al (1998) has written about the extent to which strategy is ad hoc, emergent and based on limited searches and hunches; business strategies are as much the result of political battles as careful market analyses. Zack (1999) comments that the issue of strategy has received inadequate attention in Knowledge Management literature and as a consequence strategy models are relatively basic and unsophisticated.

Hansel 1999; Hunter et al 2000; McDermott and O’Dell 2001; Pan and Scarbrough 1999; Skyrme and Amidon 1997 suggest that the Knowledge management initiatives link to business strategy is fundamentally important.

The criticality of the link between Strategy and Knowledge Management was pointed out by Dr R. A. Mashelkar while talking on the turnaround of Council of Scientific and Industrial Research in the early 2000s where the Knowledge Management policies supported clearly defined strategy and measurable goals and the Council of Scientific and Industrial Research consisting of 40 Government laboratories became wealth creating institutions doing relevant research for industries in India and overseas, with several patents to the credit of scientists.

The diversity of Knowledge Management strategies that organizations pursue in a variety of ways have been characterized by many authors.
Hansen (1999) in one of the best known frameworks differentiates between broad Knowledge strategies codification and personalization as indicated in the table 1.8iv below.

Codification strategy is significant for companies whose competitive advantage is derived from the reuse of codified Knowledge and is centrally concerned with creating searchable repositories for the storage and retrieval of codified Knowledge.

The personalization strategy, by contrast, is most relevant for companies whose competitive advantage is derived from processes of Knowledge creation. This strategy focuses on ways to improve the face-to-face sharing of tacit Knowledge between workers who possess relevant Knowledge.

Table 1.8iv: Hansen et al. 1999 Knowledge Management Strategies

<table>
<thead>
<tr>
<th>Knowledge Strategy</th>
<th>Codification</th>
<th>Personalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business-Knowledge Link</td>
<td>Competitive advantage through Knowledge re-use</td>
<td>Competitive advantage through Knowledge creation</td>
</tr>
<tr>
<td>Relevant Knowledge Process</td>
<td>Transferring Knowledge from people to documents</td>
<td>Improving social processes to facilitate sharing of tacit Knowledge between people</td>
</tr>
</tbody>
</table>
| HRM Implications | • Motivate people to codify their Knowledge  
• Training should emphasize the development of IT skills  
• Reward people for codifying their Knowledge | • Motivate people to share their Knowledge with others  
• Training should emphasize the development of interpersonal skills  
• Reward people for sharing their Knowledge with others |
Hunter’s alternative framework (Hunter et al., 2002) has 4 specific Knowledge strategies.

Strategies that focus on Human Capital are generally those that build and leverage Human Capital.

On the other hand Human Process strategies focus on deepening and spreading the utilization of Knowledge.

Human Resource Management policies and practices thus need to be directed towards the achievement of these quite different objectives. For example people who are recruited for firms which are engaged in jobs involving Knowledge reuse would be different from people whose jobs centre around Knowledge creation. The HRM implications in terms of training and development, performance management and appraisals and reward management would be very different for the two firms.

Table 1.8v: Hunter et al. 2002 Knowledge Management Strategies

<table>
<thead>
<tr>
<th>Focus</th>
<th>Knowledge Strategy</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Capital</td>
<td>Building Human Capital</td>
<td>Increase the amount of Knowledge capital possessed by the organization through the recruitment and retention of staff</td>
</tr>
<tr>
<td></td>
<td>Leveraging Human Capital</td>
<td>More effectively utilizing existing Knowledge capital, for example through use of ICT-based Knowledge sharing systems</td>
</tr>
<tr>
<td>Human Processes</td>
<td>Deepening Knowledge Utilization</td>
<td>Improving the quality of interaction between staff to improve the level of (tacit ) Knowledge sharing and perspective making or taking</td>
</tr>
<tr>
<td></td>
<td>Knowledge Diffusion</td>
<td>Improve extent to which key Knowledge is diffused and made accessible to all relevant workers</td>
</tr>
</tbody>
</table>

Organizational Culture: there seem to be two inter-related concerns as regards to the relevance of culture to Knowledge management in literature:
A. Importance of conducive culture - there is a general unanimity as regards this

B. Creation of cultures conducive to Knowledge management through deliberate management efforts - there is a debate whether cultures can be created

Huczynski and Buchanan (2001) define organizational culture as ‘the collection of relatively uniform and enduring values, beliefs, customs, traditions, and practices that are shared by an organization’s members.’ The definition suggests that culture exists both at the level of ideas and behavior.

McDermott and O’Dell (2001) suggest that prominent reasons for the failure of Knowledge management initiatives are often cultural issues.

Table 1.8vi: Obstacles to the Success of Knowledge Management Initiatives

<table>
<thead>
<tr>
<th>Author</th>
<th>Survey Details</th>
<th>Survey Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ruggles (1998)</td>
<td>431 respondents in USA and Europe. Conducted in 1997</td>
<td>• Biggest problem in managing Knowledge is changing people’s behavior</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Biggest impediment to Knowledge transfer is ‘Culture’</td>
</tr>
<tr>
<td>Management Review</td>
<td>1600 respondents in the USA. Conducted in 1998/9</td>
<td>Three most common problems:</td>
</tr>
<tr>
<td>(1999)</td>
<td></td>
<td>• Getting people to seek best practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Measuring results</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Getting people to share their Knowledge</td>
</tr>
<tr>
<td>KPMG (2000)</td>
<td>423 large organizations from USA, UK, France and Germany</td>
<td>Two most important reasons for the failure of Knowledge Management initiatives to meet expectations:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Lack of user uptake due to insufficient communication (20% of respondents)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Everyday use did not</td>
</tr>
</tbody>
</table>
Table 1.8vi: Obstacles to the Success of Knowledge Management Initiatives. Source: Reproduced from Hislop, Donald, Knowledge Management in Organizations: A Critical Introduction, Oxford University Press, 2005 Chapter: Social and Cultural Issues Related To Managing and Sharing Knowledge, page42.

McDermott and O’Dell suggest that organizations successful with their Knowledge management initiatives fit their Knowledge management approach to suit their organizational culture.

This is because an organization’s culture is more resilient to change than Knowledge management initiatives and attempts to change the culture to suit the Knowledge management initiatives are likely to be unsuccessful. The initiatives must be linked and aligned to both the visible and invisible elements of prevalent culture. The Knowledge management initiatives should reflect existing core values, link into existing networks of social relations and be congruent with existing work practices to succeed.

De Long and Fahey (2000) have worked on the impact of subcultures that inevitably exist in organizations, on Knowledge sharing initiatives, but by and large such literature is conspicuous by its absence. One classical case study that is often quoted in Knowledge Management Literature is that of Buckman Laboratories. A pioneer in Knowledge
Management, Buckman Laboratories was one of the first to organize and manage its Knowledge to improve business performance and create a culture of trust encouraging active Knowledge sharing across time and space among all employees around the world. Pan and Scarbrough argue that the key to the success of this program was the role played by the organization’s leader Paul Buckman, who initiated and championed the idea of a Knowledge-sharing culture. The skills which closely fit the typical characteristics of charismatic leaders are attributed to Paul Buckman by Pan and Scarbrough and include:

A clear vision

A strong commitment to its implementation,

A strong ability to communicate it to others

**Human Resource Management Policies and Practices:**

The level of commitment that employees feel towards their employing organizations is likely to shape their attitudes and behaviors towards Knowledge Processes.

Equally, the level of commitment that workers have for their employers shapes the extent to which they are likely to continue working for them. Attracting and retaining valuable talent and motivating people to contribute to Knowledge sharing are of paramount importance. Staff turnover means an inevitable leakage of Knowledge.

The unwritten expectations and/or obligations that exist between a worker and the employing organization constitute the psychological contract.
The strength of this contract determines the level of attitudes and behaviors of employees.  

A common distinction is made between transactional and relational contracts (Rousseau 1990; McDonald and Makin 2000; Morrison and Robinson 1997). Transactional contracts are where the level of organizational commitment and loyalty is limited and where there may be a limited sense of goal alignment between employees and their employer, and where the employment relationship is regarded primarily in economic terms. Relational contracts, by contrast, exist where there is a sense of goal alignment between employees and their employers, where loyalty and commitment levels are significant and there is an emotional as well as economic component to the employment relationship. The wide range of organizational attitudes and behaviors affected by the psychological contract include that are cited in literature are:

Controllable absences which are in an inverse variance with the strength of the psychological contract

‘In- role’ behaviors, that is tasks and duties which are part of a worker’s formal responsibilities. Quality and time lines of work are likely to be positively related to commitment levels (Kim and Mauborgne1993; Meyer et al 1993)
Citizenship behaviors i.e. behavior beyond a worker’s formal responsibilities, such behavior is positively related to commitment levels (Coyle-Shapiro and Kessler 2000; Organ and Ryan 1995.)

HRM literature has instances of severe debate on the archetypal content of a psychological contract. Doubts exist about its specific inclusions such as job security, career prospects etc. Are elements of the contract undergoing change such as are expectations of job security going down as a general rule and have contemporary changes in the employment relationship given rise to a contract culture where ‘transactional psychological contracts’ are typical is an area that been debated (Smithson and Lewis 2000; Beaumont and Harris 2002.

Developing high commitment levels through organizational management is not straightforward or easy (Myers and Allen 1997). Some of the factors that do impact worker commitment are:

- Levels of worker participation in organizational decision making (Gallie et al 1998)
- Recruitment practices which attempt to achieve a fit between employee and organization (Iverson and Buttigeig 1999)
- A general sense of equality (Burchell et al 2000)
- Providing workers high levels of work autonomy (Robertson and O’Malley Hammersley 2000)
- Providing workers high levels of autonomy over their training needs (Robertson and O’Malley Hammersley 2000)
• Creating a culture of trust through open and participative decision making (Robertson and O’Malley Hammersley 2000)

• Encouraging extensive communication (Robertson and O’Malley Hammersley 2000)

• Having a flat organization structure (Robertson and O’Malley Hammersley 2000)

Human Resource Management Policies and Knowledge Attitudes and Behaviors:
Garvey and Williamson (2002) have given a brilliant study of effective culture of Knowledge sharing and learning and the Human Resource Management Policies that encourage and facilitate these in an organization in their book Beyond Knowledge Management. (Beyond Knowledge Management, Dialogue, Creativity & the Corporate Curriculum By Bob Garvey & Bill Williamson, Financial Times/Pearson Education July 2002)

Garvey & Williamson emphasized two key concepts which emphasize an effective corporate culture which supports learning:
Corporate curriculum: an organization level climate and framework of values which shape both attitudes to learning and new ideas as well as new Knowledge. For Garvey & Williamson, a corporate curriculum which is necessary to support learning and Knowledge development is one which is respectful of existing Knowledge but which is simultaneously accepting of new ideas, Knowledge and frameworks.
Knowledge productivity: an individual level ability to produce new insights/Knowledge, through openness to new ideas, and through integrating them with existing Knowledge and experience.

Relatively, high levels of Knowledge productivity are likely when people are able to modify, update and transform existing Knowledge through a process of critical reflection, dialogue and experimentation. This involves not a rejection of existing Knowledge but a reflection on it without either rectifying it (an overemphasis on tradition which creates a blindness to the new) or rejecting it (an inability to properly learn from the past).

Thus, Knowledge productivity and learning are achieved as much through action, experimentation and risk taking as through a process of abstract reflection and formal education or training. Learning is most likely to occur when the corporate curriculum is egalitarian and respectful of all Knowledge and experience. This requires circumstances where people are able to openly express their opinions without fear or sanctions. Such circumstances create the potential for open dialogue through which perspective making is likely to occur and which provides circumstances favorable to deep rooted Knowledge sharing and learning. The power embedded in the employment relationship combined with the inherent potential for conflict that exists within organizations means that creating the organizational circumstances is not a straightforward task.

Since to be Knowledge productive requires a certain mode of thinking and is thus to some extent the responsibility of the individual and as a first step in Knowledge production individuals must develop a critical sense of self awareness. A accommodating Knowledge curriculum supports modes of
thinking, learning and working. The pay and appraisal systems could also be geared to be similarly accommodating. Staff is supposed to provide evidence of undertaking self development activities. Garvey and Williamson have emphasized how the training should not be narrowly skills based but related to developing social skills of self-reflexivity, learning through experimentation and self learning and conducting critical dialogues with others.

**Work Place Competencies:**

Pressures to increase the role of information and Knowledge in national economies have provoked a wide-ranging debate about what kinds of competencies young people and adults now need.

A literature review reveals that the different types of workplace competencies that are most agreed upon by different analysts, surveys and country reports are Stasz (2000):

1. Inter-personal skills:
   - Team work and the ability to collaborate in pursuit of a common objective.
   - Leadership capabilities.
2. Intra-personal skills:
   - Motivation and attitude.
   - The ability to learn.
   - Problem-solving skills.
   - Effective communication with colleagues and clients.
Analytical skills

3. Technological or ICT skills.

**Knowledge Management and Leadership:**

Leadership is a relationship between the leader and the led. Wheatley points out that Knowledge management, is a process that requires investment and relationship to exist on a deeper level of motivation (Trompenaars & Hampden-Turner, 2004).

To effectively understand how to lead learning organizations the leader must understand what Garvin (1993) calls the three M’s. They are:

- Management
- Meaning
- Measurement

“Leaders are idea brokers that enable the exchange of ideas to benefit their organization” (Cummings, Trompenaars & Hampden-Turner, 2004). This exchange of ideas is part of meaning and measurement, the ability to procure new Knowledge and then integrate that into the framework of the organization. The overall mission of a leader in the world of KM is to learn how to guide the internal marketplace within their organization. By doing this, the leader creates an organization that is a learning team dedicated to meaning, management, and measurement within Knowledge management.

Brontis (2002) states that the most important thing leadership can do in ensuring the success of Knowledge management in their organization is selecting a Chief Knowledge Officer (CKO). The CKO is the organization's
expert on Knowledge management and integration. According to Bontis, CKOs are responsible for:

- Promoting stability in an ever-changing environment.
- Providing the timely delivery of products/services.
- Fostering organizational synergy by sharing resources and Knowledge.
- Ensuring the feasibility of specialization.

In addition, in order for CKOs to be effective, they must understand:

- How to implement technology which is an enabler for capturing, storing, and sharing Knowledge,
- Aligning it with the values of the organization.

According to Northouse (2004), “leadership is inextricably related to the application and implementation of problem-solving skills in organizations”. Mumford, Zaccaro, and Harding, et al. (2000), as cited by Northouse, state that Knowledge impacts a leader’s ability to determine complex organizational problems and to develop a solution. "Knowledge refers to the accumulation of information and the mental structures used to organize that information". This type of mental structure is called a schema, simply a mental diagram used to assimilate information into useable Knowledge. Once a leader formulates information into Knowledge, individuals are more inclined to follow based the leader’s expertise.

According to Greenberg and Baron (2003), information power has become a lesser power due to technology and the availability of information to
more people. In a culture saturated with information/Knowledge, it is imperative that leaders use information/Knowledge for the benefit of followers and the organization as a whole and not for power accumulation. Kluge et al. (2001) tell us that Knowledge management presents unique leadership challenges. “From a leadership perspective, Knowledge management has been viewed more like a craft and less like a science. Because of the very nature of Knowledge, it is difficult for managers to predict what measures can really improve performance, and how to encourage and guide Knowledge flows within an organization.

People being led desire a person who not only frames a compelling vision, but also can provide evidence that they have the Knowledge and insight from which the vision is derived. In short, Knowledge and learning have become part and parcel to ‘leadership’.

Bolt and Brassard (2004) identify those characteristics of effective CEOs that support their learning and Knowledge management.

- They have a desire to learn: They integrate learning in all that they do and try to pull Knowledge from every situation.
- They have an open and curious mind: They seek out people who think differently or might provide a different perspective.
- They show humility: They are willing, in fact eager, to learn from their mistakes. They do not have to ‘know it all’ and respect people who share that value.
• They make their learning public: Feedback is important. Taking the time to publicly seek input and letting people know that they are working on learning more about an issue or topic.

• They tolerate risk: Mistakes are important as learning tools. People need to learn from their mistakes, but must not shy away from risk for fear of making a mistake. They also understand that learning absolutely needs to occur at a faster rate than the rate of change within the organization.

• They walk the talk: They pay it more than lip service; they fund and dedicate resources to learning, through good times and bad.

Heil & Alepin (2004) state that it will require most leaders to “rethink their leadership...in order to lead authentically...not only to build more effective, more human organizations, but...to enrich the lives of every person...” (Goldsmith, 2004, pp. 158-159).

According to John Kotter (2003) there are eight steps to transform an organization through leadership.

1. Establish a sense of urgency
2. Form a powerful guiding coalition
3. Create a vision
4. Communicate the vision
5. Empower others to act on the vision
6. Plan and create short-term wins
7. Consolidate improvements and produce still more change
8. Institutionalize new approaches"

Goldsmith, et al. (2004) suggest, "Nothing is more important to the success of Knowledge management initiative than the support of leaders and the visibility of KM role models. Generally speaking, the higher up in the organization these role models are the better".

Yogesh Malhotra says, "Knowledge Management refers to the critical issues of organizational adaptation, survival and competence against discontinuous environmental change. Essentially it embodies organizational processes that seek synergistic combination of data and information processing capacity of information technologies, and the creative and innovative capacity of human beings." (Taken from http://www.brint.org/managementfirst.html.)

Patricia Wallington (2002) poses the thought that leadership skills can be found at all levels of an organization. Lower level employees can—and should—exhibit leadership to influence those at the top of the organization. Before doing so, however, the individual should consider how to be most effective when attempting to lead from below.
Wallington (2002) lays out the following steps in determining the right time and place to lead from below:

1. Cultural Permission – Assess what your corporate culture supports or allows.

2. Prepare the Way – Develop a relationship with key senior leaders.

3. Pick Your Spots – Not every issue is a candidate for leadership from below.

4. Judge Not – Try not to be judgmental about leadership.

5. Grow Your Own Leadership – While you work on influencing the senior leadership of your company, set the stage for your own development
1.9 Research Objectives

1. To find out the perspectives of the salient stake-holders in Business Schools faculty, students, alumni, industry, and other organizations like NGOs, Government organizations about business schools and applicability of Knowledge Management to business schools.

2. To document and explore the efforts of industry and other business schools learning in Knowledge management

3. To explore how Business Schools can better capture, create, disseminate and capitalize on Knowledge.

4. To find out the advantages of the implementation of Knowledge Management to business schools.

5. To suggest a new improved model for business schools based on Knowledge Management applications.
1.10 Research Approach

The research is Qualitative and Descriptive or Ex Post Facto Research. It involves survey, fact finding enquiries and a description of the state of affairs as it exists. The research is concerned with the subjective assessment of attitudes, opinions and behavior of the business school stakeholder population. This type of research is a function of the researcher’s insights and impressions and generates results in non-quantitative form or in the form which is not subjected to rigorous quantitative analysis. The technique of face to face depth interview using a structured questionnaire as a guide was used.

The sample sought to be surveyed was that of business schools which have an MBA program and are located in Pune for convenience of obtaining data. The chosen business schools were All India Council for Technical Education (AICTE) recognized. This provided equivalence, adherence to standard norms and an assured quality standard.

Information regarding success with KM and best practices was sought from industry. The industry respondents were chosen from 5 different sectors. The 25 chosen companies from these sectors were large companies (not SMEs). The companies were those that had offices in Pune.
SMEs, NGOs, SHGs and GOs were selected from Pune. These respondents were only asked if they felt that business schools could offer them any service by way of training, research or consulting.

1.11 Research Design:

The goal of this research is to find information regarding Knowledge Management for business schools. Research of this nature requires the following:

a) A study of what business schools currently do as regards management of Knowledge.

b) A study of applicability of KM to business schools.

c) A study of KM experiences and best practices in industry.

d) An investigation into what is expected by stakeholders and what is needed.

e) An understanding of the applications and benefits of Knowledge management to conceptualize a new business school model

Therefore this research takes three forms based on goals:

a. Exploratory: an identification of a new problem i.e. is there a gap between potential and delivery by business schools? Can the gap be bridged by managing Knowledge? This enquiry is based on mature observation, reflection, opinion and insights.
b. Empirical: this part of the research is based on findings on direct or indirect observation of relevance and application of KM to business schools and industry.

c. Constructive: a new contribution or solution was to be developed which is the specific Knowledge Management applications to business schools and developing a new model or ‘construct’.

This research comprises both primary research and secondary research through published material.

**RM-Schematic Presentation**

- **Industry**
  - Survey part I
  - Perception Analysis
  - *Exploratory Phase*
- **B Schools**
  - Survey part I
  - Perception Analysis
  - *Exploratory Phase*
- **Gap Analysis**
  - KM Applications
  - Best Practices
  - Benefits-Readiness
- **Industry**
  - Survey part II
  - Best Practices
  - Benefits Analysis
  - *Empirical Phase*
- **Improved B School Model**
  - *Constructivist Phase*

1.1.1i Research Methodology: Schematic Presentation
1.12i Chapter Scheme

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Table 1.12i Chapter Scheme

1.13 Summary

This chapter covers the basic concepts, the work of major authorities on the subject. It gives the background for the research, the motivations and need for the research, the research approach and research objectives finally it lays down the chapter scheme.