## Knowledge Management Basics for Emerging Economies

Dr. Kalpana, SRM University, Chennai, India, *Email:kalpax4@yahoo.com* Mr. B.Premkumar, SRM University, Chennai, India, *Email: prkbala@yahoo.co.in* 

#### Abstract

In this fast moving world of Globalisation, the World economy is getting much more service driven and knowledge oriented one. Compared to the previous era of imperialistic and localised economic growth orientation, the current trend in Global economic growth is a Trans - national one. The national barriers are reduced, supported by liberal economic policies of developing nations in South America, Asia – Pacific and the like. Especially in an IT driven economic development, Knowledge management is the need of the hour to safeguard the organisations to give themselves the Competitive edge. The paper discusses on the fundamentals of Knowledge management (KM), KM models, KM strategies, the Knowledge management life cycle, Knowledge capture techniques, Knowledge transfer, Motivation and Knowledge sharing and KM ethical issues.

#### Introduction

In this fast moving world of Globalisation, the World economy is getting much more service driven and knowledge oriented one. Compared to the previous era of imperialistic and localised economic growth orientation, the current trend in Global economic growth is a Trans - national one. The national barriers are reduced, supported by liberal economic policies of developing nations in South America, Asia – Pacific and the like. Especially in an IT driven economic development, Knowledge management (KM) is the need of the hour to safeguard the organisations to give themselves the Competitive edge.

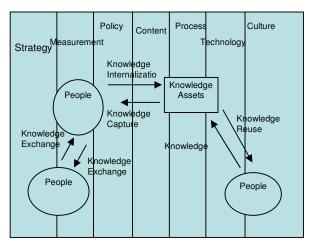
#### **Definitions of Knowledge Management**

"Knowledge management is the discipline of capturing knowledge based competencies and then storing and diffusing that knowledge into business. It is also the systematic and organisational attempt to use knowledge within an organisation to improve performance (KPMG 2000)"

"KM is a conscious strategy of getting the right knowledge to the right people at the right time; it is also helping people share and put information into action in ways that strive to improve organisational performance (O'Dell et al, 2000)"

"KM is a discipline of identifying, capturing, retrieving, sharing and evaluating an enterprise's information assets (Bair 2001)"

The ideal knowledge organisation is one where people exchange knowledge across functional areas of the business by using technology and established processes. People exchange ideas for policy formulation and strategy. Knowledge is also internalized within the culture of the organisation. All the knowledge workers are in an environment where they can freely exchange and produce knowledge assets by using various technologies.



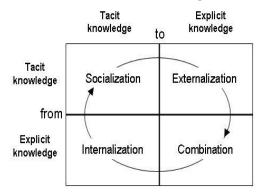
**Fig.1 Knowledge Management Framework SOURCE:** Gravallese, Julie, "Knowledge Management", The Mitre Advanced Technology Newsletter, April, vol.4, No.1, 2000.

#### Why KM?

KM has already demonstrated a number of benefits and has offered justification for further implementation. Based on a number of published studies KM has had a positive impact on business processes. The goal is to capture the tacit knowledge required by a business process and encourage knowledge workers to share and communicate knowledge with peers. With such knowledge it is easier to determine which processes are more effective or less effective than others. Another benefit of KM is the intangible return on knowledge sharing rather than knowledge hoarding. Too often employees in one part of a business start from "scratch" on a project because the knowledge needed is somewhere else but not known to them. KM enables the organisation to position itself for responding quickly to customers, creating new markets, developing new products and dominating emerging technologies

#### **KM Models**

Some discussion on Knowledge classification models would make the discussion easier before getting into the intricacies of KM. The most widely accepted and widely quoted approaches to classifying knowledge from a KM perspective is the "knowledge matrix" of Nonaka & Takeuchi. This matrix classifies knowledge as either explicit or tacit, and either individual or collective. Nonaka & Takeuchi also propose corresponding knowledge processes that transform knowledge from one form to another: socialisation (from tacit to tacit, whereby an individual acquires tacit knowledge directly from others through shared experience, observation, imitation and so on); externalisation (from tacit to explicit, through articulation of tacit knowledge into explicit concepts); combination (from explicit to explicit, through a systematisation of concepts drawing on different bodies of explicit knowledge); and internalisation (from explicit to tacit, through a process of "learning by doing" and through a verbalisation and documentation of experiences).



#### Fig.2 Nonaka & Takeuchi KM model

**SOURCE:** Nonaka I, Takeuchi H., "The knowledge-creating company", Oxford, UK: University Press, 1995.

Nonaka & Takeuchi model the process of "organisational knowledge creation" as a spiral in which knowledge is "amplified" through these four modes of knowledge conversion. It is also considered that the knowledge becomes "crystallized" within the organisation at higher levels moving from the individual through the group to organisational and even inter-organisational levels.

Boisot (1998) proposes a model of knowledge asset development along similar lines to that of Nonaka and Takeuchi. However, Boisot's model introduces an extra dimension (abstraction, in the sense that knowledge can become generalised to different situations). This produces a richer scheme allowing the flow and transformation of knowledge to be analysed in greater detail. In Boisot's scheme, knowledge assets can be located within a three dimensional space defined by axes from "uncodified" to "codified", from "concrete" to "abstract" and from "undiffused" to "diffused". He then proposes a "Social Learning Cycle" (SLC) that uses the I-Space to model the dynamic flow of knowledge through a series of six phases:

1. Scanning: Insights are gained from generally available (diffused) data

2. Problem-Solving: Problems are solved giving structure and coherence to these insights (knowledge becomes 'codified')

3. Abstraction: The newly codified insights are generalised to a wide range of situations (knowledge becomes more 'abstract')

4. Diffusion: The new insights are shared with a target population in a codified and abstract form (knowledge becomes 'diffused')

5. Absorption: The newly codified insights are applied to a variety of situations producing new learning experiences (knowledge is absorbed and produces learnt behaviour and so becomes 'uncodified', or 'tacit')

6. Impacting: Abstract knowledge becomes embedded in concrete practices, for example in artefacts, rules or behaviour patterns (knowledge becomes 'concrete')

What is needed is a classification that proposes a spectrum of knowledge management approaches. If this spectrum can accommodate the various approaches suggested in the previous section then it can be considered to be sufficiently comprehensive to be useful. Derek Binney (Binney, 2001) provides a framework, The KM Spectrum, to help organisations make sense of the large diversity of material appearing under the heading of KM, and to help them assess where they are in KM terms. His focus is on the KM activities that are being carried out, grouped into six categories:

1. *Transactional KM:* Knowledge is embedded in technology.

2. *Analytical KM:* Knowledge is derived from external data sources, typically focussing on customer-related information.

3. Asset Management KM: Explicit management of knowledge assets (often created as a by-product of the business) which can be reused in different ways. 4. *Process-based KM:* The codification and improvement of business practice and the sharing of

these improved processes within the organisation.

5. *Developmental KM:* Building up the capabilities of the organisation's knowledge workers through training and staff development.

6. *Innovation/Creation KM:* Fostering an environment which promotes the creation of new knowledge, for example through R & D and through forming teams of people from different disciplines.

For each of these categories of KM, Binney lists several examples of KM Systems or approaches that support them.

Transactional	Analytical	Asset	Process	Develop- mental	Innovation and
		Management			Creation
Case Based	Data	Intellectual	TQM	Skills	Communities
Reasoning (CBR)	Warehousing	Property		Development	
	-	· ·	Benchmarking	-	Collaboration
Help Desk	Data Mining	Document		Staff	
Applications		Management	Best Practices	Competencies	Discussion
	Business	-		_	Forums
Customer Service	Intelligence	Knowledge	Quality	Learning	
Applications		Valuation	Management	-	Networking
	Management		-	Teaching	-
	-	Knowledge	Business Process	č	Virtual Teams
Applications	Systems	Repositories	(Re) Engineering	Training	
**	-	-		-	Research and
Service Agent	Decision Support	Content	Process		Development
Support	Systems	Management	Automation		-
Applications	-	-			Multi-Disciplined
	Customer		Lessons Learned		Teams
	Relationship				
	Management		Methodology		
	(CRM)				
			SIE/CMM,		
	Competitive		ISO9xxx, Six		
	Intelligence		Sigma		
	-		-		

Table 1. KM Spectrum and Applications (Binney, 2001)

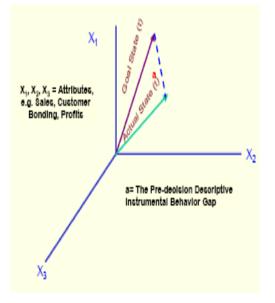
**SOURCE:** Knox Haggie, John Kingston, "Choosing Your Knowledge Management Strategy", Journal of Knowledge Management Practice, June ed., 2003.

# Corporate Goals, Business Processes and KM Initiatives

Corporate Goals are one category of global property of corporations. Corporate goal-strivings are pre-dispositions to perform actions calculated to create or maintain certain intrinsically valued states of the world, either internal or external to a corporation. Corporate goals are no more than these valued states - the targets of goal-strivings. We distinguish between corporate goals and corporate objectives by defining objectives as states that are valued instrumentally for the contribution they make toward achieving corporate goals. So there is, in this conception, a cause and effect relation between goals and objectives. Objectives cause an agent to move closer to its goal. Goals may or may not reinforce objectives. This distinction between goals and objectives is conceptually precise, but actual states of the world may be both goals and objectives. This is true because they can be simultaneously valued in themselves, and for their instrumental value. Corporate goals can be highly abstract, or very concrete. They can also be general in their geographic or temporal focus, or very specific. Of course, highly abstract goals also tend to be very general in scope, while highly concrete goals tend to be very specific. The same variations of abstractness and concreteness and generality and specificity apply to corporate objectives. Both goals and objectives are often expressed in generalized and vague form in corporate discussions of them. "Our goal is to be the most competitive corporation in our industry." "Our goal is to be an ethical and socially responsible member of the community." "Our goal is bring the vision of the integrated desktop to all consumers." These are three examples of vague statements of goals one might find in marketing literature. But, there are also precise ways to express corporate goals. Since goals are states of the world, we can also look at them as sets of ordered attribute values describing the corporation or its environment. Imagine a row in a database table, or a row vector in an algebraic matrix, recording a set of values for a corporate entity. This row might define the actual state of the corporation at a particular time. Now imagine that this row was made up not of actual values, but of desired values intrinsically valued by a corporation. The row now defines a multi-attribute goal-state of the corporation at the particular time.

The conceptual "distance" between the goal-state and the actual state is the pre - decision descriptive instrumental behaviour gap. It is the gap that must be closed for the corporation to get to its

goal. Figure below illustrates the ideas of the multi attribute goal and actual states of a corporation through a geometrical interpretation. The geometric space defined by the component attributes of the goal and actual states will call Corporate Reality Space. The goal and actual states are represented by line vectors drawn from the origin to the points in corporate reality space defined by the attribute values of the components of the vectors. The predecision, descriptive, instrumental behaviour gap is represented by the distance vector: "a."



**Fig.3 Corporate Reality Space** 

**SOURCE:** Joseph M. Firestone, "Estimating Benefits of Knowledge Management Initiatives: Concepts, Methodology, and Tools", Knowledge Management Consortium Int'l Inc., Vol.1, No.3, April 2001.

Business process activities may be viewed as sequentially linked and as governed by validated rule sets of agents, i.e. their knowledge. A linked sequence of activities performed by one or more agents sharing at least one corporate objective or goal, is a Task. A linked sequence of tasks governed by validated rule sets of the agents performing them, and producing results of measurable value to these agents is a Task Pattern. A cluster of task patterns, not necessarily performed sequentially, often performed iteratively, and incrementally, is a Task Cluster. Finally, a hierarchical network of interrelated, purposive, activities of intelligent agents that transforms inputs into valued outcomes, a cluster of task clusters, is a Business Process. This activity to business process hierarchy is illustrated below,

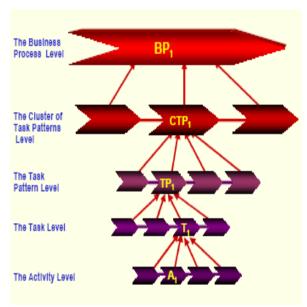


Fig.4 The Activity to Business Process Hierarchy SOURCE: Joseph M. Firestone, "Estimating Benefits of Knowledge Management Initiatives: Concepts, Methodology, and Tools", Knowledge Management Consortium Int'l Inc., Vol.1, No.3, April 2001

KM, like other business processes, helps or harms corporations in attaining goals and producing benefits. In order to measure its impact, it is necessary to view it as one of a corporation's business processes, making an impact on other business processes, and, through them, on movement toward or away from corporate goals and/or objectives. In attempting to measure, analyze, or forecast its likely benefits, we need to trace the impact or forecasted impact of the introduction and operation of KM initiatives on knowledge processes. We then need to trace this impact through knowledge outcomes and other business processes, to its further impact on corporate goals and benefits. Assessments of this kind are not easy or straightforward. But they are necessary if a claim about the likely benefits of a KM project is to amount to more than nonsense or hyperbole.

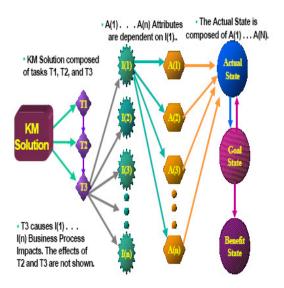


Fig.5 The Path from KM Introduction to Benefit SOURCE: Joseph M. Firestone, "Estimating Benefits of Knowledge Management Initiatives: Concepts, Methodology, and Tools", Knowledge Management Consortium Int'l Inc., Vol.1, No.3, April 2001

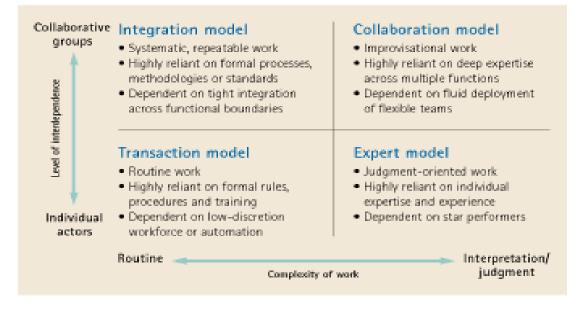
#### **KM Strategies**

To help executives, the Accenture Strategic Institute has developed a framework that associates specific knowledge-management strategies with specific challenges that companies face. This Knowledge Management Framework is based on the premise that the focus should be placed on the way knowledge is used to build the critical capabilities a company needs in order to succeed—on the core processes and activities that enable it to compete. Enhancing a bank's know-how in evaluating credit risk, for example, should result in reduced loan losses; improving a consumer product company's understanding of customer preferences should increase its percentage of successful new products.

The framework begins by assessing and categorizing the way work is done in the core process. Work can be evaluated along two dimensions. First is the level of interdependence involved—that is, the degree to which individuals and organizations need to collaborate and interact. Second is the complexity of work involved—the degree to which employees need to apply their judgment and interpret a variety of information. Using these two factors, the Institute has identified four distinct categories of work, or "work models".

## Knowledge Management Framework: Work models

The characteristics of the type of work will help determine which model works best.



#### Fig.6 KM Framework: Work Models

**SOURCE:** Leigh P. Donoghue, Jeanne G. Harris and Bruce E. Weitzman, "Knowledge management strategies that create value", Andersen Consulting's Outlook Magazine, 1999.

*Transaction model*, in which there is a low degree of both interdependence and complexity. Work is typically routine, highly reliant on formal rules,

procedures and training, and depends on a workforce that exercises little discretion.

Communications of the IBIMA Volume 5, 2008 *Integration model*, in which there is a high degree of interdependence and a low degree of complexity. Work is systematic and repeatable, relies on formal processes, methodologies and standards, and depends on tight integration across functional boundaries.

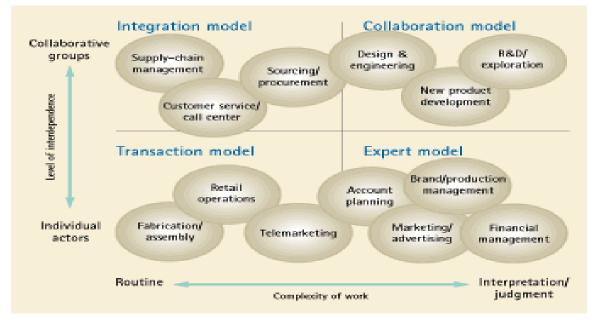
*Expert model,* in which there is low interdependence and high complexity. Work requires judgment and is dependent on "star performers."

*Collaboration model*, in which there is a high degree of both interdependence and complexity. Work involves improvisation and learning by doing, and relies on deep expertise across functions and the use of flexible teams.

#### Key to Understanding

In general, a given core process can be mapped to one of these four categories. For example, supply-chain management and procurement tend to fit into the integration model; the work in these processes is often routine, and activities generally span multiple functions and organizations. In comparison, marketing and financial management tend to be expert model work, requiring individuals in one functional area to apply their judgment to solve unanticipated problems.

## Knowledge Management Framework: Process mapping



Each work process can be aligned with a specific model.

#### Fig. 7 KM Framework: Process Mapping

**SOURCE:** Leigh P. Donoghue, Jeanne G. Harris and Bruce E. Weitzman, "Knowledge management strategies that create value", Andersen Consulting's Outlook Magazine, 1999.

In addition to guiding improvements in today's core processes, the framework can also be used to help companies evolve and adapt to new conditions. Markets, customers, technology and competition are always changing. To thrive, companies must change over time as well, or their core capabilities may well become core rigidities that lead to obsolescence. As they strive to move in new directions, executives can use the framework to understand the knowledge-management systems that new capabilities will require.

## Knowledge Management Framework: Challenges

The barriers to success will vary with each model.

Collaborativ	Integration model	Collaboration model
groups	"Orchestrating	"Achieving
+	across functions"	breakthrough innovation"
	<ul> <li>Creating a common big picture</li> </ul>	<ul> <li>Learning through trial and error</li> </ul>
	<ul> <li>Driving toward standard methods</li> </ul>	<ul> <li>Knowledge linking across</li> </ul>
8	based on best practices	complex disciplines
-inge	<ul> <li>Balancing functional objectives</li> </ul>	<ul> <li>Sense making and decision mak- ing under extreme uncertainty</li> </ul>
entep	against the good of the whole	ing under extreme uncertainty
evel of intentependence	Transaction model	Expert model
E	"Consistent,	"Getting results
		5
	low-cost performance"	from stars"
	<ul> <li>Standardizing the inputs (people),</li> </ul>	<ul> <li>Attracting and motivating stars</li> </ul>
+	outputs and processes	<ul> <li>Decreasing individual learning</li> </ul>
	<ul> <li>Creating clear operating</li> </ul>	curves
Individual		<ul> <li>Reducing vulnerability to turnover</li> </ul>
actors	<ul> <li>Overcoming low worker morale</li> </ul>	Overcoming expert tunnel vision
	Routine	Interpretation/
	Complexity o	f work judgment

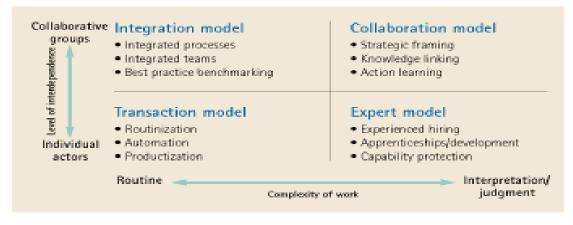
#### Fig.8 KM Framework: Challenges

**SOURCE:** Leigh P. Donoghue, Jeanne G. Harris and Bruce E. Weitzman, "Knowledge management strategies that create value", Andersen Consulting's Outlook Magazine, 1999.

In the silicon-chip industry, for example, the design of new microchip manufacturing processes has always been considered something of an art—a collaborative model type of effort involving a small cadre of experts, extensive experimentation and rapid learning to get it right. Now, however, with most personal computers selling for less than \$1,000, chip makers need to move to lower-cost approaches—and to an integration model of knowledge management, where the focus is on standardization, repeatable work and continuous improvement. The framework can help companies envision what their new knowledgemanagement approach should look like under their new strategy, and plot out a path that will take them there.

## Knowledge Management Framework: Strategies

Each model suggests specific strategies to follow to help achieve success.



#### Fig.9 KM Framework: Strategies

**SOURCE:** Leigh P. Donoghue, Jeanne G. Harris and Bruce E. Weitzman, "Knowledge management strategies that create value", Andersen Consulting's Outlook Magazine, 1999.

#### Knowledge Life Cycle (KLC)

Organizational knowledge is held both 'subjectively' in the minds of individuals and groups and 'objectively' in recorded or expressed form. This is the Distributed Organizational Knowledge Base (DOKB) of an enterprise. Knowledge use in the Business Processing Environment results in outcomes that either satisfy expectations (Matches) or fail to do so (Mismatches).Matches reinforce knowledge previously used, thereby leading to its re-use. Mismatches initially lead to adjustments in Business Processing behaviour based on choices made from within a range of pre-existing knowledge in the DOKB -this is Single-Loop Learning (Argyris and Schon). Successive failures from single-loop learning to produce matches in expected or desired outcomes leads to doubt about and/or rejection of pre-existing knowledge (problem detection), thereby triggering Knowledge Processing efforts to produce and integrate new knowledge -this is Double-Loop Learning (Argyris and Schon). Problem Claim Formulation, an attempt to learn and state the specific nature of the detected knowledge gap (or "problem"), is a precursor to Knowledge Production. New Knowledge Claim Formulation follows in response to validated problem claims, with input via Information Acquisition and

Individual and Group Learning, all under the influence of content contained in the current DOKB. New knowledge claims are tested and evaluated via Knowledge Claim Evaluation using a variety of criteria. Knowledge Claim Evaluation leads to: (1) Knowledge Claims (i.e., Surviving new Organizational Knowledge), Falsified Knowledge Claims, or Undecided Knowledge Claims, and also produces information about each of these outcomes, or Metaclaims (altogether, 6 types of outcomes). The record of all such outcomes, both the claims themselves and their corresponding metaclaims, become part of the DOKB via several means of Knowledge Integration, a mix of 'push' and 'pull' methods, along with the active response of agents to Knowledge Integration communications and activities. Once integrated into the DOKB, claims and metaclaims become subject to use in Business Processing. Experience gained from the use of knowledge contained in the DOKB gives rise to new claims and metaclaims regarding knowledge validity and value. The resulting Beliefs and Claims about Business Processing Outcomes, in turn, change the DOKB's content and determine its growth. The cycle repeats itself endlessly.

## The Knowledge Life Cycle (KLC)

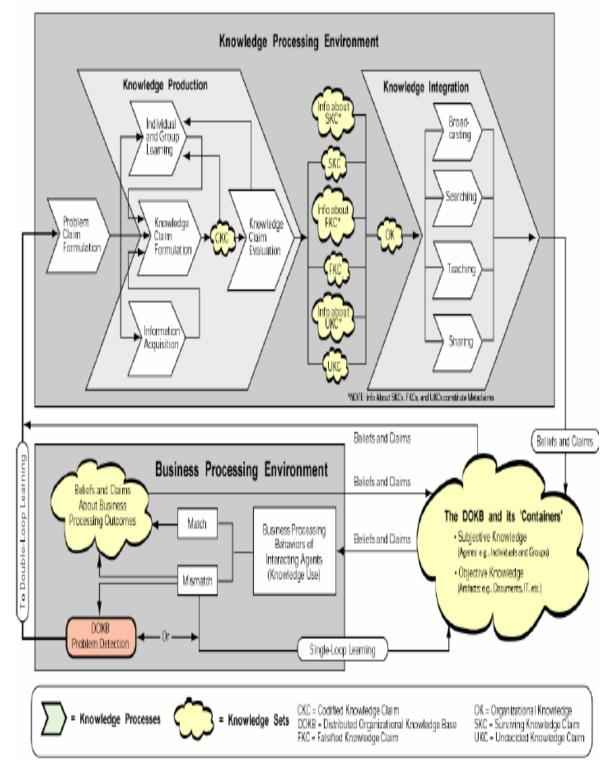


Fig.10 Knowledge Life Cycle

SOURCE: Joseph M. Firestone, "Origin of Knowledge Life cycle", Executive Information Systems, Inc., 2002.

#### **Knowledge Capture Techniques**

*Onsite observation* or action protocol is a process of observing, interpreting and recording an expert's problem solving behaviour while it takes place. It requires concentration on overall steps that a domain expert takes as well as the more subtle details of the process.

Brainstorming is an unstructured approach to generating ideas about a problem. Brainstorming is an ideation technique that is suitable for divergent idea generation. It has been used extensively by organizations to create solutions to those problems that required specifics in a non-critical environment. It is typically necessary that the information required be known although the specific idea may not yet be formulated. The technique is rather basic and involves a few simple steps. The brainstorming process engages all members of the team equally and presents a non-hostile environment for the generation and collection of ideas. It also allows for the verbal interaction between the team members and their ideas thus creating the opportunity for the generation of hybrid concepts.

*Electronic Brainstorming* is a computer aided approach to deal with multiple experts. The experts participating in the Brainstorming session are connected by an E – Brainstorming software. The experts login into the software from across the Globe, and start discussing on the agenda after prior intimation of the Brainstorming session. The experts gain leverage from anonymity, focus on content (not personalities), and engage in parallel and simultaneous communication.

The Repertory Grid is another tool used in knowledge capture. The domain expert is viewed as a scientist who classifies and categorizes a problem domain using his or her own model. The grid is used to capture and evaluate the expert's model or the way the expert works through the solution. Two experts in the same problem domain will produce different sets of results that are personal and subjective. Experts see problems based on reasoning that has stood the test of time and are able to use this deep knowledge in the problem solving process.

*Delphi method:* The usual problems of group dynamics are bypassed. Fowles (1978) describes the following ten steps for the Delphi method for Knowledge capture.

Formation of a team to undertake and monitor a Delphi on a given subject.

Selection of one or more panels to participate in the exercise. Customarily, the panellists are experts in the area to be investigated.

> Development of the first round Delphi questionnaire

Testing the questionnaire for proper wording (e.g., ambiguities, vagueness)

> Transmission of the first questionnaires to the panellists

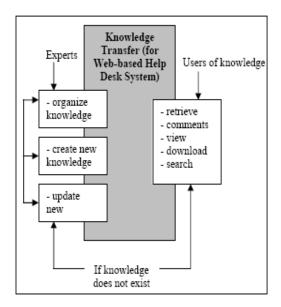
Analysis of the first round responses

- Preparation of the second round questionnaires (and possible testing)
- Transmission of the second round questionnaires to the panellists
- Analysis of the second round responses (Steps 7 to 9 are reiterated as long as desired or necessary to achieve stability in the results.)
- Preparation of a report by the analysis team to present the conclusions of the exercise

*Concept mapping* is a structured process, focused on a topic or construct of interest, involving input from one or more participants, that produces an interpretable pictorial view (concept map) of their ideas and concepts and how these are interrelated. Concept mapping helps people to think more effectively as a group without losing their individuality.

#### **Knowledge Transfer**

Knowledge Transfer (KT) is a part of the KM process it self. Unlike to knowledge sharing, knowledge can be transferred from an expert to the novice user when the novice user is having problem. It means no actual transfer or exchange of knowledge between the concerned individuals. The knowledge being transfer is without transferring to that person the knowledge underlying the direction which means, the experts can preserves the advantages of the specialization and avoids the difficulties inherent in the transfer of the knowledge. In order to effectively transfer the knowledge to the users, Information and Communication Technology (ICT) is used as the medium of communication. ICT makes the knowledge capture, shared and transferred easily where it allows the knowledge to be accessible to the users anywhere and anytime when the users need it. Effective knowledge transfer strategies rely on the capacity of institutions to shape their knowledge transfer approaches and activities in partnership with their various communities, and to respond creatively to the distinctive needs of those communities. From this perspective, several Help Desk System of Knowledge Transfer are being created which demonstrate considerable diversity in knowledge transfer approaches and activities, both within and across institutions and across disciplines and national research priorities.



#### Fig. 11 Knowledge Transfer System

**SOURCE:** Mazeyanti M. Ariffin, Noreen Izza Arshad, Ainol Rahmah Shaarani, and Syed Uzair Shah, "Implementing Knowledge Transfer Solution through Web-based Help Desk System", Proceedings of World Academy on Sceince, Engineering and Technology, Vol.21, May ed., 2007.

#### Motivation Vs Knowledge sharing

Recent work on the functional approach (Snyder & Cantor, 1998) suggests that people's motivation for engaging in a particular behaviour can be classified in terms of whether it fulfils individual-, interpersonal-, relational-, or group-level agendas. It should be noted, however, that these categories are not always distinct and may overlap. Individual-level agendas concern goals that primarily involve a single person, interpersonal-level agendas focus on immediate transactions between individuals, relationship-level agendas focus on the collective entities to which one belongs (e.g., one's country, one's university).

#### Hypotheses

This section offers a functional approach to organize the extant knowledge-transfer literature and, presents the hypotheses investigated in the study about how employees' willingness to share and seek knowledge across units may be influenced by motives at these different levels.

#### Individual-Level Motives

*Extrinsic rewards:* Because time is a scarce resource in organizations, extrinsic rewards signal to employees that time spent sharing knowledge is deemed important by the organization (Huber, 1991; Kogut & Zander, 1992; Pan & Scarbrough, 1998). Although practitioners and researchers have

identified "nontrivial" extrinsic rewards for knowledge sharing as an important motivator (e.g., Davenport & Prusak, 1998; Gupta & Govindarajan, 2000a KPMG, 2000), surveys have found that the majority of managers and executives do not believe that their organization adequately rewards or recognizes knowledge sharing (KPMG, 2000; Ruggles, 1998). Nonetheless, companies that have been identified as leaders in knowledge management have utilized extrinsic rewards (Davenport & Prusak, 1998). For example, consultants at Ernst and Young and McKinsey are evaluated, in part, based on knowledge they contribute. Taking a different approach, Buckman Laboratories created a high profile event to recognize the top 150 "knowledge sharers," who were rewarded with a laptop computer and a company trip to a resort. Extrinsic rewards also have been demonstrated to increase knowledge sharing across work units (Irmer, Bordia, & Abusah, 2002). Therefore, it is hypothesized that,

#### Hypothesis 1:

Employees will share more to the extent that they perceive that the organization gives credit for doing so.

**SOURCE:** Burgess, Diana, "What motivates employees to transfer knowledge outside their work unit?", The Journal of Business Communication, October ed., 2005.

Fear of punishment: Research has found that employees are less likely to exchange information in the absence of openness, psychological safety, and trust (e.g., Orlikowski, 1993; Pfeffer & Sutton, 2000; Pan & Scarbrough, 1998; Ruppel & Harrington, 2000). For example, Ruppel and Harrington (2000) found that employees were less likely to share knowledge through company intranets when they perceived a lack of mutual confidence and trust in their organizational culture. Pfeffer and Sutton (2000) argue that fear is pervasive in the workplace and reduces the extent to which knowledge is shared and acted upon. For example, in a 1994 survey, 16% of workers reported having withheld a suggestion for improving work performance because they feared for their jobs (Princeton Survey Research Associates, 1994). Likewise, Orlikowski (1993) observed that people were reluctant to share information on a groupware system because they were fearful that the information could be used against them. Hence, it was hypothesized,

#### Hypothesis 2:

Employees will share less to the extent that they perceive knowledge sharing to be potentially risky. **SOURCE:** Burgess, Diana, "What motivates employees to transfer knowledge outside their work unit?", The Journal of Business Communication, October ed., 2005.

Interpersonal Level Motives

A number of interpersonal transactions in organizations are motivated by impression management concerns, or the desire to influence the image others have of oneself (e.g., Cady & Fandt, 2001; Gardner & Martinko, 1988). Impression management motives can be grouped into those that serve acquisitive functions (i.e., behaviors aimed at attaining something from others) and self-protective functions (i.e., behaviors aimed at avoiding negative consequences such disapproval as or embarrassment; Cady & Fandt, 2001; Gangstead & Snyder, 2000). The idea of using knowledge as a means of enhancing one's organizational influence and reputation is consistent with a strategic contingency view of power that argues that organizational members who maintain control over valued resources and are able to reduce uncertainty will enjoy more power (e.g., Hickson, Hinings, Lee, Schenck, & Pennings, 1971). For example, Pettigrew (1972) observed how a manager influenced his firm's decision to purchase a computer system by controlling the flow of information. Managing the dissemination of knowledge therefore, can help individuals gain influence in the organization (Feldman & March, 1981), although it is also likely to result in strategies in which information is shared selectively and strategically, rather than freely, and where a great deal of effort is put into seeking information, in order to acquire this important resource. Consequently, it was hypothesized that,

#### Hypothesis 3:

The extent to which employees viewed knowledge as a way to achieve organizational influence within the organization will be associated with less sharing (H3a) and more seeking (H3b).

**SOURCE:** Burgess, Diana, "What motivates employees to transfer knowledge outside their work unit?", The Journal of Business Communication, October ed., 2005.

# Ethical Issues in Knowledge / Information Management

In this context of discussion let's finally give an insight into the ethical issues confronting IT managers today and conclude the basics on KM. The ten most ethical issues according to the CIO of the Millennium Challenge Corporation (MCC), a federal government agency located in Washington, DC are as below,

#1: PRIVACY: Does information's availability justify its use?

#2: PRIVACY: How much effort and expense should managers incur in considering questions of data access and privacy?

#3: OWNERSHIP: What can employers expect from employees with regard to nondisclosure when going to work for another firm?

#4: OWNERSHIP: What part of an information asset belongs to an organization and what is simply part of an employee's general knowledge?

#5: CONTROL: Do employees know the degree to which behaviour is monitored?

#6: CONTROL: Does data gathered violate employee privacy rights?

#7: ACCURACY: Is accuracy an explicit part of someone's responsibility?

#8: ACCURACY: Have the implications of potential error been anticipated?

**#9:** SECURITY: Have systems been reviewed for the most likely sources of security breach?

#10: SECURITY: What's the liability exposure of managers and the organization?

SOURCE: www.techrepublic.com

#### **References:**

- 1. Abell A. and N. Oxbrow, "Competing with Knowledge", Library Association Publishing, London, 2001..
- Binney D., "The knowledge management spectrum - understanding the KM landscape", Journal of Knowledge Management, 5, 1, 33-42, 2001.
- Beckman T.J., "The Current State of Knowledge Management", Knowledge Management Handbook, ed. J. Liebowitz, CRC Press, 1999.
- Boisot M.H., "Knowledge Assets: Securing Competitive Advantage in the Information Economy", Oxford University Press, 1998.
- Day J.D. and J.C. Wendler, "Best Practice and Beyond: Knowledge Strategies", McKinsey Quarterly, 1, 19-25, Winter 1998..
- Feigenbaum E.A., P. McCorduck and P. Nii, "The Rise of the Expert Company: How Visionary Companies are Using Artificial Intelligence to Achieve Higher Productivity and Profits", Times Books, New York, 1998..
- Hansen M.T., N. Nohria and T. Tierney, "What's Your Strategy for Managing Knowledge?", Harvard Business Review, March-April 1999.
- Manasco B., "Leading Firms Develop Knowledge Strategies", Knowledge Inc., October.1996.
- Nickols F., "The Knowledge in Knowledge Management", The Knowledge Management Yearbook 2000-2001, ed. J.W. Cortada and J.A. Woods, Butterworth-Heinemann, 12-21, 2001..

- Nonaka I. and H. Takeuchi, "The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation", Oxford University Press, 1995.
- 11. O'Dell C. and C. J. Grayson, Jr, "If Only We Knew What We Know", The Free Press, New York, 1998.
- 12. Scarbrough H. and J. Swan (eds), Case Studies in Knowledge Management, Institute of Personnel and Development, 1999.
- Schreiber G., H. Akkermans, A. Anjewierden, R. de Hoog, N. Shadbolt, W. Van de Velde and B. Wielinga, "Knowledge Engineering and Management: The CommonKADS Methodology", MIT Press, 2000.
- Seemann P., D. De Long, S. Stucky and E. Guthrie, "Building Intangible Assets: A Strategic Framework for Investing in Intellectual Capital, Second International Conference on the Practical Applications of Knowledge Management (PAKeM99)", p.21-23, 1999.
- Treacy M. and F. Wiersema, "Customer Intimacy and Other Value Disciplines", Harvard Business Review, January-February, 1993..
- K. M. Wiig, "Knowledge Management: Where Did It Come From and Where Will It Go?", Expert Systems with Applications, 13, 1, 1-14, 1997.
- Zack M.H., "Developing a Knowledge Strategy", California Management Review, 41, 3, 125-145, Spring 1999.
- R.M Grant, "Prospering in Dynamicallycompetitive organization", Organization Science, Vol. 7, No. 4, July 1996.
- 19. Gravallese, Julie, "Knowledge Management", The Mitre Advanced Technology Newsletter, April, vol.4, No.1, 2000.
- Knox Haggie, John Kingston, "Choosing Your Knowledge Management Strategy", Journal of Knowledge Management Practice, June 2003.
- 21. Burgess, Diana, "What motivates employees to transfer knowledge outside

their work unit?", The Journal of Business Communication, October ed., 2005.

- 22. Joseph M. Firestone, "Estimating Benefits of Knowledge Management Initiatives: Concepts, Methodology, and Tools", Knowledge Management Consortium Int'l Inc., Vol.1, No.3, April 2001.
- Leigh P. Donoghue, Jeanne G. Harris and Bruce E. Weitzman, "Knowledge management strategies that create value", Andersen Consulting's Outlook Magazine, 1999.
- 24. Joseph M. Firestone. "Origin of cycle", Knowledge Life Executive Information Systems, Inc. Mazeyanti M. Ariffin, Noreen Izza Arshad, Ainol Rahmah Shaarani, and Syed Uzair Shah, "Implementing Knowledge Transfer Solution through Web-based Help Desk System", Proceedings of World Academy on Sceince, Engineering and Technology, Vol.21, May ed, 2007.
- 25. <u>http://www.hcklab.org/research/knowledge</u> management/tacit-explicit-knowledge.htm
- 26. <u>www.macroinnovation.com</u>
- 27. www.accenture.com
- 28. <u>www.kmnetwork.com</u>
- 29. www.techrepublic.com

Copyright © 2008 by the International Business Information Management Association (IBIMA). All rights reserved. Authors retain copyright for their manuscripts and provide this journal with a publication permission agreement as a part of IBIMA copyright agreement. IBIMA may not necessarily agree with the content of the manuscript. The content and proofreading of this manuscript as well as and any errors are the sole responsibility of its author(s). No part or all of this work should be copied or reproduced in digital, hard, or any other format for commercial use without written permission. To purchase reprints of this article please e-mail: admin@ibima.org.