Creating Organisational Culture
For Knowledge Management

Abstract
Increasingly, ability of an organization to compete in the global village gets defined by its ability to manage its knowledge and knowledge workers. It is most apparent in knowledge-intensive industries such as software, biotechnology, consultancy and pharmaceuticals. However, knowledge management has become an important issue in all types of organisations and industries. It is being said that only those organisations that are able to create a culture for knowledge management will survive and grow. It is in this context that this study was designed to examine and understand some of the problems being experienced in implementing knowledge management systems in Indian organisations. Further, the study also focussed on identifying what needs to be done to manage and institutionalise knowledge management processes and to create organisational culture for managing and motivating knowledge workers.

In the first part of the paper we start with the discussion about context of knowledge organisations and how knowledge facilitates improving performance of traditional as well as knowledge organisations. The paper examines some barriers to knowledge management as experienced in a few Indian organisations that have implemented knowledge management systems. In the second part of the paper, we discuss organisational systems and processes, which can facilitate knowledge generation and knowledge sharing processes. In the last part of the paper, we discuss unique characteristics of knowledge workers and their concept-of-self. Further, we examine how to attract, retain and motivate superior knowledge workers, involve them in defining knowledge needs and facilitate teamwork and cross-functional involvement in knowledge management projects and processes.
Creating Organisational Culture for Knowledge Management
Narendra M Agrawal
Indian Institute of Management Bangalore

World Development Report (1998-99) suggests that the growth in developed as well as developing countries is a function of the quality of knowledge in those countries. Knowledge-based industries such as information technologies, biotechnology, financial and insurance services, and consultancy have become increasingly more important in terms of their share in gross national product and their growth potential, both in developed as well as in developing countries. Knowledge management had origin in these knowledge-based industries and is claimed to be providing competitive advantage to these industries. However, even in traditional industries such as manufacturing, knowledge adds significant value through research and development, process design, product design and other organisational activities (Quinn, 1992).

Zack (1999) argues that knowledge is the fundamental basis of competition. And hence, organisations should either align strategy to what the organisation knows or should develop the knowledge and capabilities needed to support a desired strategy. He further argues that companies having superior knowledge are able to coordinate and combine their traditional resources and capabilities in creative and distinctive ways and provide more value to their customers. The use of knowledge makes an organisation confident about relevance and validity of its existing knowledge and hence the existing knowledge becomes more valuable for the organisation. Existing knowledge makes it easier for an organisation to acquire and adopt additional knowledge as compared to its competitors (Cohen & Leventhal, 1990) It becomes an additional source of competitive advantage. Knowledge being a strategic organisational resource, processes for managing knowledge become strategic business processes (Sarvary, 1999).

Knowledge management (KM) is defined as “management of organisational knowledge for creating business value and generating a competitive advantage” (Tiwana, 2000). It consists of processes that facilitate generating, sharing, using and
storing knowledge. A KM system should facilitate people to think through what kind of knowledge they need to have to improve their role performance and contribute towards vision, mission and goals of the organisation. Further, it should help people to be in touch with what kind of knowledge is available with them individually and collectively as a group. It should motivate people to deposit existing explicit knowledge in knowledge depository and to share existing tacit knowledge with others. Finally, it should motivate people to invest time and resources to acquire and generate relevant and valid knowledge required by them and the organisation.

Information technology facilitates some of the knowledge management processes such as storing and sharing of explicit knowledge and the growth in knowledge management in the recent past has been linked with the growth in information technology. However, knowledge management processes are essentially centered around knowledge workers. Knowledge workers alone can generate knowledge. Knowledge available with knowledge workers can become available to others in an organisation, only when they are willing to share their unique knowledge. Only knowledge workers can use the knowledge available with them either individually or collectively as a team for creating innovative products or services or to improve existing organisational systems and processes. Thus an organisation can use knowledge as a strategic resource only if it knew how to attract, retain and motivate superior knowledge workers.

It is in this context that this study was designed to examine and understand some of the problems being experienced in implementing knowledge management systems in Indian organisations. Further, the study also focussed on identifying what needs to be done to manage and institutionalise knowledge management processes and to create organisational culture for managing and motivating knowledge workers.

**Methodology and Sample Size**

Knowledge management as a discipline is comparatively young and not many organisations have knowledge management systems. Hence, this study was envisaged
as an exploratory study and it was decided to use qualitative research methods, namely, informal interactions and in-depth interviewing to understand the issues involved in managing knowledge and knowledge workers. Data from the study were collected from three sources. I have been helping two organisations for improving effectiveness of their knowledge management system. This gave me useful insights into issues involved in managing knowledge management systems. Secondly, we had conducted a training programme on “Managing Knowledge Organisation”. Interactions in the programme helped me to understand some of the problems being experienced by the organisations to implement knowledge management systems. For understanding the world of knowledge workers, we chose five knowledge organisations from five different fields, namely, academics, biotechnology, consultancy, financial services and software organisations. In each of these organisations, we conducted in-depth interviews with minimum two knowledge workers. In addition, we had interviewed superiors of those knowledge workers and had held discussions with HR Heads. In three organisations, we also got opportunity to have discussions with head of knowledge management. A total of 23 interviews were conducted. Out of 23, ten interviews were conducted by my post-graduate students. For each group of the respondent, namely, knowledge workers, their superiors, HR Heads and heads of knowledge management cell, a semi-structured interview schedule was prepared. However, all the interviews were initiated as open-ended and these interview schedules were used only to check up whether all the important issues got covered in an interview. All the interviews were transcribed. However, only part of the findings relevant to this paper has been discussed and reported in this paper.

Knowledge, Knowledge Management and Knowledge Workers

Relevant knowledge empowers and facilitates performance. It strengthens linkages between effort and performance as shown in Figure 1. For Knowledge to be valuable, it should be relevant to performance, unique, easily sharable and difficult to be copied by others (Tiwana, 2000).
Effective use of knowledge for improving a product, process and performance invariably requires a knowledge worker. A knowledge worker needs to be in touch with users of products or services to know what is performance as perceived by them. A knowledge worker needs to define what kind of knowledge would facilitate improving performance. A knowledge worker needs to reach to a source of knowledge to have access to relevant and valid knowledge. If it were an explicit knowledge, knowledge worker would reach to an in-house or external knowledge depository to have access to relevant knowledge. If it were a tacit knowledge, then knowledge worker should reach to another knowledge worker who possibly has that knowledge. If the required knowledge were not easily available within the organisation or from outside, then the knowledge worker needs to plan to generate the required knowledge. Thus knowledge management is invariably linked with managing knowledge workers and effectiveness of knowledge management system in an organisation will get defined by how knowledge workers are managed in that organisation.

Figure 1
Improving Effort-Performance Linkage Using Knowledge

Knowledge generated within the firm tends to be especially valuable because it tends to be unique, specific, and tacitly held. Tacit knowledge cannot be purchased in the market and it is difficult for the competitor to imitate (Zack, 1999). Highlighting the importance of tacit knowledge, Nonaka & Konno (1998) suggest that knowledge creation involves social processes of socialisation and externalization. Individuals hold certain ‘beliefs’ and in the process of socialisation when they share their beliefs,
it becomes tacit knowledge for the involved people. Similarly, when an individual externalizes one's beliefs and others accept those beliefs, tacit knowledge held by an individual becomes explicit knowledge for the team members.

Von Krogh (1998) suggests that these social processes make the task of knowledge creation a highly fragile process. He argues that untrustworthy behaviour, constant competition, imbalances in giving and receiving information, and 'that’s not my job attitude', are detrimental to sharing of tacit knowledge. According to him, there are four barriers to social processes of public justification of tacit knowledge. Firstly, one needs to share one's beliefs in a language that is considered to be legitimate and acceptable to others and to the company. However, knowledge creation requires creating something new and unfamiliar that needs to be described with new words and statements, which may be unfamiliar to the team members. Stories and habits constitute the second barrier. Stories of past successes as well as failures condition people and they find it difficult to accept new knowledge. Past experiences and successes are imbedded in formal organisational policies and procedures, which define appropriate ways of performance planning, measure and control. These policies and procedures also work against being able to create new knowledge. Finally, company paradigm consists of its vision, mission, values and strategic intent. Individuals may find it difficult to share their personal beliefs, which are against the existing paradigm. Thus knowledge management processes are essentially social processes and hence organisational values and culture would play a significant role in influencing the effectiveness of knowledge management systems.

**Barriers to Knowledge Management**

Based on our study of knowledge management study in Indian organisations, we observed following barriers in implementing and institutionalising knowledge management systems:

1. **Lack of Top Management Involvement**: In a dynamic, turbulent and uncertain environment, members of the top management in an organisation get busy managing and exploiting market opportunities in the global village.
members of the top management do not invest enough time being with and educating organisational members, they can not institutionalise values and norms and create organisational culture. In the absence of any culture building initiatives from the top management, knowledge workers also become market focussed and tries to maximize their payoffs from the market for the knowledge they have

2. Lack of Pull for KM System: An organisation may initiate a KM system without defining what is knowledge for its employees. Having created a KM system, knowledge officer responsible for the KM system experiences the need and the pressure to have contents in KM system. And hence, one tends to deposit whatever knowledge is easily available in the KM system rather than ensuring that only relevant knowledge is incorporated in the KM system. Organisational members, when they use the KM system for initial few times and find that the knowledge held by the KM system is not relevant for them, lose the motivation to further use the KM system

3. Lack of Cross-Functional Ownership: A good KM system should help an organisation to deliver what its markets and its customers require. And hence, KM system should have strong linkages with organisational strategies. It should facilitate creating unique competencies and should facilitate exploiting existing knowledge and competencies of the people in the organisation. HR department should be actively associated with the design and management of KM system. Information and network technology should be effectively utilised for knowledge sharing and knowledge generation. Thus different functional specialists should be involved in designing and managing the KM system. However, organisations being in a hurry, do not appreciate and create processes to institutionalise cross-functional ownership for KM system. In the absence of multi-functional involvement and ownership, KM systems do not deliver what is expected of them.

4. Organisational Structure hindering Learning: In hierarchical organisation, hierarchies hinder information flow from lower levels to higher levels. It limits the contributions of people at lower levels in knowledge creation and knowledge sharing in hierarchical organisations. Interestingly, even in flatter organisations, knowledge sharing did not occur easily. It has been observed that knowledge
workers were reluctant to learn from and share their knowledge with their colleagues.

5. **Reward System focussing only on tangible and Quick Results:** Organisations are increasingly using big discretionary rewards to motivate their employees for excellent performance. Discretionary rewards being big, every person in the organisation becomes observant about the performance criteria being used to decide the discretionary rewards. This leads to organisations using performance criteria that are tangible, visible, involving short duration and which appear to be objective. Some of the KM processes being long-drawn, subjective and not easily measurable, such performance criteria and reward systems become dysfunctional for knowledge generation and knowledge sharing.

Similar findings were reported by other studies on knowledge transfer (Ernst and Young, 1997; KPMG, 1998). Ernst and Young (1997) had found that culture was the biggest barrier to knowledge transfer (54%). The other major factors that were perceived to be barriers to knowledge transfer were top management failure to signal importance (32%), lack of shared understanding of strategy of business model (30%), organisational structure (28%), and lack of ownership of the problem (28%)

In remaining part of the paper we examine how we integrate knowledge management system and knowledge workers to each other and both of them to the knowledge organisation for creating a culture of knowledge management.

**Facilitating Knowledge Generation**

Organisations should facilitate its knowledge workers to acquire skills, capabilities and competencies to generate valid knowledge. Knowledge generation is a discipline in itself and people need to be educated in research methodology. It involves defining the research agenda, examining the existing knowledge and identifying the knowledge gap, defining research objectives, building propositions and hypotheses, collecting and arranging data, analysing the data and validating the hypotheses.
Knowledge generation needs a long-term perspective, commitment and resources. Organisations need to provide time and resources that can facilitate research and knowledge generation. Organisations can specifically provide allowances for purchasing books and journals to its knowledge workers. Similar to academic institutions, organisations can provide sabbatical to its knowledge workers for knowledge generation. 3M is known for its innovations and new product development capabilities. It has a system whereby people can use 15 percent of their time on projects and activities of interest to them.

Knowledge generation is long-drawn, strenuous and full of uncertainties. Hence, people need to get addicted to knowledge generation and should be self-motivated and should enjoy the process. Organisations should give message that knowledge generation is a valued activity and is expected of every knowledge worker. As a part of performance management and review, people need to be asked to share what new knowledge they have acquired and how did they use it. Similarly, they need to be asked what new knowledge they have generated and how it is relevant for the organisation.

Knowledge generation involves uncertainty and risk and people need to learn to live with it. Organisations can reduce risk and the impact of uncertainty by creating a culture of care (Von Krogh, 1998). Von Krogh suggests that care in relationships give rise to mutual trust, active empathy, access to help, leniency in judgement and courage. Trust facilitates people to draw upon each other’s resources and as a consequence people feel empowered and comfortable to take risk and try out sharing themselves and their beliefs. Empathy facilitates active listening and being able to see a situation from other person’s point of view. Leniency in judgement nurtures experimentation and risk taking, which facilitates growth. Finally, caring environment facilitates people to have courage to share their unique viewpoint and be different from others.
Caring behaviour can be encouraged using systems and rewards. However, institutionalising caring would require establishing it as an organisational value. Knowledge workers do not value leadership responsibilities and investing in growth of others gets perceived as an unnecessary administrative responsibility (Agrawal & Mukherji, 1999). Senior members in the organisation should consider mentoring and developing new entrants as a part of their responsibility. While experts should be respected, they must also be held accountable for sharing their expertise across the organisation. People in leadership position may not be willing to perform mentoring and caring of their team members because they may not have those skills. Von Krogh (1998) suggests providing training to people in mentoring and caring. He also recommends outplacing them with a human service organisation to help them acquire skills and competencies but more importantly help them to acquire caring as a value.

Organisations should develop systems and processes whereby people get opportunities to identify themselves with knowledge generated by them. Ownership of knowledge can facilitate developing addiction to knowledge generation process. However, organisations would need to ensure that knowledge ownership does not lead to knowledge hegemony. Organisations should create opportunities for sharing the knowledge generated within the organisation and if possible and appropriate with the outside world. People who generate and use knowledge effectively should be nominated to participate in in-house seminars and conferences. Organisations can selectively decide to share knowledge with outside community. This would help them to position themselves as a benchmark organisation in their respective fields. This would improve their market image and would improve their ability to attract and retain superior knowledge workers. It would further improve their ability to generate new knowledge.

**Facilitate Knowledge Sharing**

Individuals in an organisation tend to hoard knowledge to have unique status in the organisation. They possibly believe that they can grow faster in their careers as compared to their colleagues by having some unique knowledge. Organisations need
to facilitate its knowledge workers to examine their existing beliefs about knowledge sharing. Knowledge workers must realise that their competition is not with their colleagues but with the very best anywhere in the world. They must realise that knowledge sharing increases knowledge resources of the organisation and it empowers the organisation as well as those who share the knowledge. The simple mathematics of knowledge sharing is if two knowledge workers each having one piece of knowledge, share their knowledge with each other, after the sharing, each one of them would have two pieces of knowledge. Both the knowledge workers would be empowered to compete in the global village. However, organisation and individuals would need to invest in creating a culture of caring, trust and openness that would facilitate knowledge sharing.

Knowledge sharing can be nurtured and institutionalised by creating communities of practices. Communities of practices have been in existence in academic institutions as well as in consultancy organisations for long. According to Etienne and Snyder (2000:139), communities of practices are “groups of people informally bound together by shared expertise and passion for a joint enterprise”. Communities of practices are created to develop members’ capabilities by joint learning and to build and exchange knowledge. Members normally select themselves to the community and identify themselves with the group’s expertise. Communities of practices usually come into existence on voluntary basis. However, people in the position of leadership should encourage and nurture formation of communities of practices. Leaders in organisation should identify what kind of unique knowledge the organisation has or what kind of unique knowledge it would like to have and should nurture creation of communities of practices around those subjects.

Quality Circles (QCs), a part of Total Quality Management are excellent example of communities of practices. QCs are considered to be one of the major contributory factors for the knowledge-based competitiveness of the Japanese industries (Ishikawa, 1984). Subsequently, North American, European and other Asian countries have adopted quality circles to create communities of practices to help their
employees learn, share and create knowledge (Gryna, 1981, Dale, 1984, Agrawal, 1988). Employees, who form a quality circle, belong to the same work area, doing similar work and hence have common learning needs. While people become members of quality circles on a voluntary basis, quality circles need to be actively supported by the formal organisation by involvement of immediate superior. Opportunities for team to learn together techniques of problem-solving, company-wide QC competitions and opportunities to participate in national and international competitions. Involvement of top management and immediate superior, systematic training, infrastructure and facilities are some of the factors which contribute towards success of quality circles (Agrawal, 1988). These factors communicate to members of a quality circle that they as a community and activities of the community are perceived to be relevant and significant by the management. Thus quality circles get integrated in the formal organisation as communities of practices and provide continuity to the culture of learning and knowledge management.

**Managing Knowledge Workers**

In this section of the paper, we discuss our findings about unique characteristics of knowledge workers, their concept-of-self and how organisations attract, retain, motivate and manage their knowledge workers.

**Unique Characteristics of Knowledge Workers**

- Knowledge workers invest substantial time efforts and resources to acquire relevant and valid knowledge. Over time, the knowledge acquired by them becomes part of their self-concept.
- Knowledge workers look forward to use their existing knowledge and prefer to work in those areas, which provide opportunities for acquiring new knowledge in their area of interest.
- Knowledge workers, who invest substantial time in knowledge generation, are inspired by their personal preferences and liking for selecting the field of knowledge generation. However, in some cases, their choice of subject for knowledge generation is influenced by what is perceived to be current in the field.
• Knowledge workers tend to be high achievers and hence they expect periodical and tangible feedback and recognition for their performance. Academicians perceived reputation of the journal in which their papers were published as a part of the recognition for their performance. Consultants and academicians who were in consultancy in a major way perceived their billing rate as recognition of their capabilities. Software professionals expected periodical review of their pay and perks particularly after completion of a project.

• Knowledge workers tend to be more committed to their profession than the organisation they work for.

• Due to existing demand and supply situation, knowledge workers are able to move from their existing organisations to new organisations in India or abroad rather fast.

• Knowledge professionals value autonomy, professionalism and innovativeness and organisations practicing these values are in a better position to retain knowledge workers.

Based on the above characteristics of knowledge workers, we have identified factors that contribute to the concept-of-self of a knowledge worker. As shown in Figure 2,

Figure 2
Factors Contributing to Concept-of-Self of A Knowledge Worker
concept-of-self of a knowledge worker consists of knowledge generated, acquired and used. Concept-of-self of a knowledge worker also includes organisational image and reputation as a knowledge organisation, reference group, access to technology and resources and the kind of role one is expected to play. Thus knowledge generation, acquisition and usage are highly important and relevant for a knowledge worker.

Attracting and Retaining Superior Knowledge Workers
Knowledge organisations interested in attracting and retaining superior knowledge workers would need to ensure that they offer excellent opportunities for knowledge generation, acquisition and usage to its knowledge workers. Organisations aspiring to attract superior knowledge workers should position themselves as organisations, which value knowledge generation and knowledge sharing. Further, they should be respected and valued by the society for their unique knowledge and its contributions for betterment of the society. Organisations should provide opportunities for continuous learning to their knowledge workers. Organisations should develop highly professional work culture and should treat knowledge workers as professional giving them necessary autonomy and freedom.

Organisations should spend considerable time and resources to recruit superior knowledge workers. Organisations should select knowledge workers based on excellent learning capabilities and evidences for desire to learn. Organisations desirous of positioning themselves as knowledge generating organisations should select only those knowledge workers who have credentials and capabilities, and have demonstrated commitment for knowledge generation.

Organisations should actively involve existing knowledge workers in selection process. Existing knowledge workers are in a better position to talk about current organisational projects and future plans. They are also better placed to share the
excitement of working for the organisation. This helps in attracting superior knowledge workers.

Vision, mission and organisational goals define knowledge needs of an organisation. As against that, knowledge needs of a knowledge worker gets defined by one's personal vision and concept-of-self. As shown in Figure 3, an organisation should ensure congruence in organisational vision and vision of its knowledge workers. It

Figure 3
Linkages between Vision, Values, Concept-of-Self, and Organisational and Individual Learning Needs

![Diagram showing linkages between organisational vision, mission, goals, knowledge worker's vision, values, concept-of-self, and individual learning needs.]

can be best achieved at the time of recruitment and selection of knowledge workers. However, subsequently also, an organisation should actively involve its knowledge workers in (re)defining organisational vision and should ensure that it becomes a shared vision. By creating a shared vision, an organisation can ensure common learning needs across the organisation and facilitate knowledge management and create a learning organisation (Senge, 1990).

Involvement of Knowledge Workers: Defining Knowledge Needs

Knowledge workers should be actively involved in designing KM system and defining organisational knowledge needs. Knowledge workers from different functional areas and at different levels should be invited for a dialogue. Knowledge workers should be encouraged to think through what kind of knowledge they would like to have which would help them to improve their performance and would help the
organisation to achieve its vision, mission and goals. Common knowledge needs across the organisation should be identified and prioritised. This would help in getting commitment of knowledge workers at multiple levels for design and implementation of knowledge management system. Subsequently, KM system could also cater to specific and specialised knowledge need. In the absence of clearly defined purpose for knowledge management, knowledge initiatives, projects and programmes become an end in themselves (Fahey and Prusak, 1998).

Some of the questions, which I have been using in KM System design workshop to help knowledge workers to get in touch with knowledge relevant for the organisation, are:

- What key changes are required in functioning of the organisation that would help the organisation to achieve its stated vision, mission and goals?
- What are key mitigating factors that are holding back the organisation from achieving the above-identified changes?
- What kind of knowledge/learning is required by the organisation to achieve the above stated changes?
- What kind of knowledge/learning is required by employees to help the organisation to achieve the above stated objectives?

Another set of questions which help a knowledge worker to define one's knowledge needs from one's role perspective are:

- What kind of contributions is expected from you in your existing role?
- What are some of the difficulties experienced by you to perform your role effectively?
- In context of your role and difficulties experienced by you, what are some of your knowledge/learning needs?
- What is your concept-of-self? How would you like to describe yourself?
- What kind of new knowledge you would like to acquire/generate that would enhance your concept-of-self?
Teamwork and Cross-Functional Involvement for Knowledge Management

A knowledge management system is expected to facilitate inventions and innovations and provide competitive advantage to an organisation. If knowledge were to provide competitive advantage to an organisation, knowledge workers from different functional areas should individually and collectively contribute towards knowledge management. People from corporate strategy have to think through what kind of unique knowledge organisation has or requires to achieve its vision, mission and business goals (Hansen et al., 1999). Marketing and services people remain in touch with customers on a regular basis and they have valid knowledge about customers and what customers are likely to perceive as innovations in products and services being offered by the organisation.

HR people need to keep track of unique knowledge, skills and competencies of organisational members and should put it in the knowledge depository. HR people need to ensure that induction, mentoring and other organisational processes, which facilitate sharing of tacit knowledge, get institutionalised. They should also make certain that unique knowledge not available in the organisation becomes available to people through training or benchmarking processes. Alternatively, people need to be encouraged to generate required knowledge internally or in collaboration with some external agencies. IT group facilitates codification and sharing of explicit knowledge. Thus different functional departments need to actively participate and own knowledge management projects and processes to make them effective.

Discussion with knowledge workers, their superiors and HR people suggested that knowledge workers did not very much enjoy working in teams. Working in teams requires that the team members should be willing to share their unique knowledge with each other. Also, they should be willing to learn from each other. Knowledge workers seem to enjoy working by themselves because it gives them greater freedom to work with their own ideas. They also enjoy the joy of exploration and excitement
of finding out something by oneself. One of the important reasons for lack of team working and sharing is knowledge workers seem to be reluctant to accept their ignorance in front of their colleagues and superiors. Temporary project team structures also contribute to team leaders and team members being reluctant to invest in sharing and educating their colleagues (Agrawal, 2000). However, many of them do not realise that by working in teams they can improve quality of their knowledge and contributions to the goals of the organisation. And more significantly, by working in teams, knowledge workers can reduce the level of stress experienced by them related to knowledge work.

Many knowledge organisations have started using outbound training to help their knowledge workers to learn skills and importance of teamwork. Some organisations have implemented 360 degrees performance appraisal, covering mostly top and senior management. Organisations have also started giving big team rewards for encouraging teamwork. It is expected that knowledge management projects and experience of learning together would further strengthen teamwork culture in knowledge organisations.

Designing A Reward System for Knowledge Management

A good reward system should help an organisation to manage a balance between knowledge generation and knowledge usage. Knowledge generation and knowledge usage can be compared to basic versus applied research. Knowledge generation, like basic research, when successful, offers an organisation superior comparative advantage vis-à-vis its competitors. But it requires much longer time period and a much greater investment of resources. Outcomes from a knowledge generation project similar to basic research are also comparatively uncertain. As against that knowledge usage like applied research usually has a shorter cycle time, requires lesser commitment of resources and more importantly outcomes from it are less risky and less uncertain. Hence, organisations and individual tend to give greater importance and priority to knowledge usage over knowledge generation. The reward
system for knowledge management should strive to maintain a balance between knowledge generation and knowledge usage.

Some organisations have a practice of giving extrinsic rewards for knowledge management related activities. Typically organisations keep a track of how often people have accessed knowledge depository. They also keep a track of what kind of knowledge is deposited in knowledge depository. Based on some predefined norms, those who use knowledge from and deposit knowledge in knowledge depository are given knowledge currency that can subsequently be exchanged for money or some other extrinsic rewards. Those who had deposited the knowledge are also rewarded based on how frequently their knowledge has been referred. Such a system rewards sharing and usage of explicit knowledge. The system also has the potential to motivate people to convert their tacit knowledge to explicit knowledge and deposit it in the knowledge depository. However, such a system does not keep a track of tacit knowledge sharing amongst people. It is also difficult to assess whether when people accessed knowledge depository, they really used the knowledge. Thus while extrinsic rewards may facilitate creating awareness about knowledge depository, organisations should not expect extrinsic rewards to institutionalise knowledge management processes.

Conclusion:
Knowledge generating, knowledge acquisition and knowledge usage activities are intrinsically motivating and satisfying for a knowledge worker. These processes contribute towards evolving concept-of-self of a knowledge worker. Hence, organisations should invest substantial time and resources to recruit superior knowledge workers. Further, organisational induction processes should be effectively used to communicate organisational values about knowledge generation and knowledge sharing. Knowledge workers value their reference groups and what their reference groups value. As discussed earlier, organisation should nurture communities of practices, which would become reference groups for their knowledge workers. Organisations should encourage its knowledge workers to benchmark and
selectively share knowledge with other organisations and professional bodies. Performance management system should facilitate and demand from people to generate and share knowledge. Reward system should nurture and facilitate teamwork. All these organisational systems and processes would facilitate creating a culture for knowledge management.

Acknowledgements: My sincere thanks are due to Center for Software Management, Indian Institute of Management Bangalore for providing financial support for the field work. I am thankful to the organisations and the individuals who participated in the study. I acknowledge with thanks assistant of my postgraduate students for conducting some of the interviews for the study. I wish to thank my colleagues Prof. Ganesh Prabhu, Prof. Madanmohan and Prof. Rishikesh T. Krishnan for their useful comments and suggestions and Ms. Sarita Mishra for research assistance.
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