

Elective Group: (III) Information Systems

Knowledge Management

Unit 6

KM and Organizational Restructuring.

6.1 The Mystique of Learning

6.2 Outcomes of learning

6.3 Learning and Change

6.4 Innovation

6.5 continuous Improvements

6.6 Corporate Transformation

6.1 The Mystique of Learning: → Peter Senge } - Learning Organization mean

The term "learning organization", not to be confused with organizational learning, was popularized by Peter Senge. It describes an organization with an ideal learning environment, perfectly in tune with the organization's goals. Such an organization is a place "where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole (reality) together."

The nature of a learning organization has continued to remain shrouded in mystery. Studies that have focused on organization learning from the point of view of deriving application oriented managerial guidelines have mostly limited the role of learning to specific areas, like technological learning, developing manufacturing capabilities, strategic reorientation, learning from strategic alliances, organizational development and developing human resources. A few exceptions which have attempted to derive the organizing principles for a learning organization, have focused only on the learning practices, but without defining how the knowledge generated through these practices gives a competitive edge to the firm. Often these studies rely solely on piecemeal examples from different organizations to illustrate how learning takes place in the organization. While such studies provide useful insights, they fail to communicate the totality, the 'flavour', of a learning organization—that is, how its structures, processes, system, and strategies combine to create a radically different competitive advantage. The resultant ambiguity which surrounds the 'how' of a learning organization can be appreciated through the following two comments:

The learning organization is a term currently in vogue. It is, however, less than obvious what it means, except that it is a good thing to strive for.

At the end of the Brussels conference, we all asked—but how? How do you become a learning organization? Though the question is often asked I have, so far, not heard a satisfactory answer. So I have come to the conclusion that the question is wrong—or at least incomplete.[Arvedson, 1993]

The Learning Organization

According to Senge, the learning organization depends upon the mastery of five dimensions:

Systems thinking: The notion of treating the organization as a complex system composed of smaller (often complex) systems. This requires an understanding of the whole, as well as the components, not unlike the way a doctor should understand the human body. Some of the key elements here are recognizing the complexity of the organization and having a long-term focus. Senge advocates the use of system maps that show how systems connect.

Personal mastery: Senge describes this as a process where an individual strives to enhance his vision and focus his energy, and to be in a constant state of learning.

Mental models: "Deeply ingrained assumptions, generalizations, or even pictures and images that influence how we understand the world and how we take action" (Senge 1990). These must be recognized and challenged so as to allow for new ideas and changes.

Building shared vision: Shared vision is a powerful motivator. A leader's vision does not necessarily become shared by those below him. The key here is to pass on a picture of the future. To influence using dialogue, commitment, and enthusiasm, rather than to try to dictate. Storytelling is one possible tool that can be used here.

Team learning: The state where team members think together to achieve common goals. It builds on shared vision, adding the element of collaboration.

Learning Organization

With the decline of some well established firms, the diminishing competitive power of many companies in a burgeoning world market coupled with and the need for organizational renewal and transformation, interest in organizational learning has grown. Senior managers in many organizations are convinced of the importance of improving learning in their organizations. This leads us to two important questions : What is a learning organization and What determines the characteristics of a good learning organization.

Organizational learning is the capacity or processes within an organization to maintain or improve performance based on experience. Learning is a systems level phenomenon, because, it stays within the organization even if individuals change. Learning is as much a task as the production and delivery of goods and services. While companies do not usually regard learning as a function of production, research on successful firms indicates that three learning-related factors are important for their success:

1. Well-developed core competencies that serve as launch points for new products and services.
2. An attitude that supports continuous improvement in business value added chain.
3. The ability to fundamentally renew or revitalize business functions based on need.

These factors identify some of the qualities of an effective learning organization that diligently pursues a constantly enhanced knowledge base. This knowledge allows for the development of competencies and lead to incremental or transformational change. In these instances, there is assimilation and utilization of knowledge and some kind of integrated learning system to support such "actionable learning." Indeed, an organization's ability to

survive and grow is based on advantages that stem from core competencies that represent collective learning. The organizational learning process has identifiable stages. These can be generalized as follows:

Knowledge acquisition : This stage deals with the development or creation of skills, insights, relationships.

Knowledge sharing : This stage involves the dissemination of the learning throughout the organization.

Knowledge utilization : This stage provides the integration of learning so that it is broadly available and can be generalized to new situations.

Organizational learning does not always occur in the linear fashion implied by typical learning models. Learning may take place in planned or informal, often unintended ways. Knowledge and skill acquisition takes place in the sharing and utilization stages. It is not something that occurs simply by organizing an "acquisition effort". The following are some of the commonly employed orientation by organizations in their quest for effective knowledge dissemination.

Knowledge Sources

Organizations need to carefully assess their sources of knowledge, they need to finalize the extent whether new knowledge is to be developed internally or seek inspirations in external ideas. This distinction is seen as the difference between innovation and adaptation or imitation. Both of these approaches have great merit as opposing styles rather than as normative or negative behaviors.

Focus on Products and Processes

Organizations need to decide whether they would prefer to accumulate knowledge about product and service outcomes or about the basic processes underlying various products. One of the factors that contribute to the success of Japanese companies are that they make considerably more investments in process technologies in comparison to companies in other countries.

Documentation

Knowledge is viewed in personal terms as something an individual possesses by virtue of education or experience. This kind of knowledge is lost when a longtime employee leave an organization, processes and insights evaporate because they were not shared or made a part of collective memory. On the other hand, knowledge is defined in more objective, social terms, as being a consensually supported result of information processing. This calls for the development of an organizational memory or a publicly documented body of knowledge.

Knowledge Dissemination

An organization needs to establish an atmosphere in which learning evolves or in which a more structured, controlled approach induces learning. In the more structured approach, the company decides that valuable insights or methods should be shared and used by others across the organization. It uses written communication and formal educational methods or

certifies learning through writing procedures down. In the more informal approach, learning is spread through encounters between role models and gatekeepers who compellingly reinforce learning. In another approach, learning occurs when members of an occupational group or work team share their experiences in ongoing dialogues.

Organizational Learning

Organizational Learning needs to concentrate on methods and tools, to improve what is already being done or on testing the assumptions underlying what is being done. Organizational performance problems are more likely due to a lack of awareness and inability to articulate and check underlying assumptions than to a function of poor efficiency. Generally these learning capabilities reinforce each other.

Value-Chaining

Organizations need to build an index of their core competencies and learning investments that need to be valued and supported. Learning investments include allocations of personnel and money to develop knowledge and skill over time, including training and education, pilot projects, developmental assignments, available resources, and so on. If a particular organization is heavily focused on heavy engineering, it would have a natural bias in favour of substantial learning investments in related areas. The value chain can be classified into two categories: internally directed activities of a "design and make" nature, and those more externally focused of a "sell and deliver" nature. The former include R&D, engineering, and manufacturing. The latter are sales, distribution, and service activities.

Skill Development

An organization needs to develop both individual and group skills. In this way, an organization can assess how it is doing and improve either one of those skills. It can also develop better ways of integrating individual learning programs with team needs by taking a harder look at the value of group development.

1. The presence of strong marketing research functions for effective environmental scanning.
2. Measures to ensure that feedback regarding organizational functions and processes are adequate.
3. Development of metrics to gauge the effectiveness of organizational learning systems.
4. Process for encouraging pilot testing and experimentation.
5. Availability of core subject matter experts to provide leadership to learning activities.
6. Free flow of information within the organization.
7. Continuous learning within the organization.
8. Continuous process and system improvement and re-engineering.

9. Management support.

Organizations tend to view knowledge as a product and pursue KM with the firm conviction, that it will have a significant and direct positive impact on the profitability and viability of the enterprise. This is one of the most comprehensive and enterprise wide approaches and is vital for the long term growth of any organization and ensures its ability to compete in the modern global market. In sustainable competitive advantage, organizations have realized that technology alone cannot be the sole factor that will help them realize their goal. The knowledge embedded within the organization's employee's, processes and experiences would ensure their sustenance in the global knowledge based markets of the future. Innovation and knowledge creation emphasizes the generation of new technology and knowledge through basic and applied research and development.

Organizations are recognizing the fact that innovation is central to growth and that unique knowledge and expertise enhances their competitive value in the marketplace. This necessitates the creation of the learning organization, coupled with the development of collaborative technologies like groupware, which envisages leveraging knowledge and fostering newer and efficient methods of learning to achieve and sustain successful business enterprises. Organizational practices need to be transformed in order to help improve performance at all levels, for knowledge workers, virtual teams, knowledge based enterprises and collaborative networks. In the process, organizations engage in some form of collective learning as part of their development. The creation of culture and the socialization of members in the culture rely on learning processes to ensure an institutionalized reality. The focus of organizations should be on the learning required to make transformational changes, changes in basic assumptions that organizations need in today's fast moving, often chaotic environment. However, all these organizational changes are only possible in the presence of a favorable culture that fosters unhindered knowledge flows.

6.2 Outcomes of learning

Organizational learning is the collective learning of the organization. While it does involve learning of individual employees, it is more than just the sum of the learning of its individual members. Like individuals, organization too have cognitive systems and memories, which are embedded in their rules and procedures, products, norms and values, operating practices, etc. In many ways, these invisible assets are independent of the specific individuals, are owned by the whole organization, and often persist across its history-withstanding changes in its membership, and often even in its leadership.

A firm is an embodiment of knowledge , it can learn, remember, and know things that none of the individuals and teams within it know complex skills and knowledge are embedded in the minds of its members and in the formal and informal social relationships that orchestrate their efforts through the countless, small, daily endeavors in which sales representatives learn about customers, supervisors learn about suppliers, and through endless adjustments to the routines by which all of them coordinate behavior and judgments with each other.

Empirical studies and the stories of successful organizations show that success and effectiveness come from the ability of firms to scan the environment, to update their knowledge, and to learn from potential threats and opportunities. A study of successful and unsuccessful companies has shown that the successful ones were consistently better in their use of information(scanning, analysis, control, communication, decision-making etc) than their counterparts. This difference was apparent across all stages of the organization life-cycle (birth, growth, maturity, revival and decline)

Dodgson(1991) investigated the biotechnology firms that operate in a rapidly developing fields. He found that it was the differential ability of the organizations to learn quickly about technological opportunities which was responsible for changes in the pattern of competitive relationships among the companies. The study showed that corporate learning was essential for retaining and improving these firms productivity, competitiveness, and innovativeness amidst the uncertain technological and market circumstances.

Organizational learning is based on applying knowledge for a purpose and learning from the process and from the outcome. Outcomes of learning are :

- ✓ Apply complex theories and practice of knowledge and intellectual capital management;
 - Apply theories to a wide range of scenarios;
 - Formulate action plans for knowledge intensive organizations;
 - Formulate a framework for thinking about knowledge intensive organizations.
 - Describe and work with intangibles.
- Understand the significance of knowledge in today's economy
- Understand the key theories, concepts, and models of Knowledge Management
- Understand how knowledge is created in social interactions
- Realize one's role and responsibility in a knowledge-based organization or in a learning community.
- Learn about required skills and competences of knowledge managers and knowledge workers.
- Learn how to lead knowledge workers in a knowledge-based organization.
- Improved communication among people, improved communication skill at task level and at organization level .
- Improved productivity and better decision making

ANSWER

6.3. Learning and Change :

The key factors considered for change management are :

i) Leadership : If the organizational leaders support the knowledge management program, it has a much greater chance of success.

ii) Organization design : Organization design must be supportive to engage those who will use the knowledge management system to be a part of the design.

iv) Resource Management : Organization must use the available resources effectively like people, process and technology.

v) Consequences and incentives : This is the cost-benefit analysis before we adopt any change. If knowledge management makes life easier and people have incentives to engage in the knowledge management processes, they are more likely to welcome the change.

vi) Use of technology: Even though most people in today's workforce are computer savvy to some degree, there are still many people who fear new technology. Deploy new technology used in the knowledge management system long before people have to start using it. Give people time to learn and adapt to the new technology.

vii) Training: The most vital element of managing the change associated with implementing any knowledge management program is the training program. Focusing on the user experience and providing ample real-life scenarios will increase the effectiveness of the training.

viii) Ongoing support: Provide ongoing support so that people feel as though they have ready-resource when it comes to training, technical support, or other knowledge management related topics.

In change management situation, organization design is an implementation of strategy. Organization design mainly focuses on team approaches and inter-organizational networking . The key issue in the organization design is how to foster and reward collaboration among individuals, unit and organizations. A learning organization is a particular vision of an enterprise that has the capacity to continually enhance its capabilities to share its future. Change management as the utilization of basic structures and tools to control any organizational change effort. Change management's goal is to minimize the change impacts on workers and avoid distractions.

6.3.1 Steps of Change Management : The seven steps of Change Management are:

- 1) Diagnose the problem.
- 2) Assess the motivation and capacity for change.
- 3) Assess the resources and motivation of the change agent. This includes the change agent's commitment to change, power, and stamina.
- 4) Choose progressive change objects. In this step, action plans are developed and strategies are established.
- 5) The role of the change agents should be selected and clearly understood by all parties, so that expectations are clear. Examples of roles are: cheerleader, facilitator, and expert.
- 6) Maintain the change. Communication, feedback, and group coordination are essential elements in this step of the change process.
- 7) Gradually terminate from the helping relationship. The change agent should gradually withdraw from their role over time. This will occur when the change becomes part of the organization.

6.4 Innovations :

It is necessary to manage innovations in the organization. The process of innovation encompasses the use of knowledge for the generation and practical application of new viable ideas. The basic objective of innovation is to create value for the business. In today's competitive era innovation is a soul to the business, because through innovation organizations produce unique products and services. Innovation is also important because of the rapid change in taste and preferences of the customer of emerging and developed markets.

The ability to stay competitive under the technological, social and commercial conditions depends on its capability to innovate. It considers the ability to anticipate new needs, recognize technological possibilities, to introduce new products, processes and systems. As innovation is essentially about converting ideas into something profitable, encouragement to supply ideas needs to be substantial in order to channel the creative ability of the employees to convert ideas into innovations. Therefore, organizations need to facilitate innovation by creating and maintaining an environment that supports idea generation and creativity. Such enabling conditions include the provision of resources and opportunities as well as minimizing constraints that could impede individual creativity. Through the proper knowledge distribution and sharing,

organizations can bring the innovation.

6.4.1 Types of Innovations : The innovation process involves the acquisition, dissemination, and use of new knowledge. There seems to be wide agreement that knowledge management and firm innovation are highly correlated. Different types of innovations may be in the form of:

- i) New product
- ii) New methods of production
- iii) The exploration of new market of production
- iv) New source of supply
- v) New ways to organize business.

From a firms point of view, innovation may be considered as the product of efforts of many people interacting in a complex process starting with the initiation of the idea and ending with the introduction of the new improved process. Current environment of high business demands a high degree of innovative behavior from all organizational participants to remain healthy and viable in the long term.

6.4.2 Knowledge Management and Innovation :

The foremost purpose of knowledge management is to bring innovation. Organizations can develop the collaborations across the organizational boundaries to bring the innovation and to get the sustainable competitive advantage. This collaboration helps the organization to approach the new knowledge that can be helpful to fill the knowledge gap within the organization and reduce the risk and cost to bring innovation. Organizations that rapidly capture and implement new knowledge across the organization can be able to foster innovation . Furthermore, most important aspect of the innovation is to, increase the innovation capability to identify and capture the tacit knowledge of the organization. Tacit knowledge can be acquired from outside the organization like customers, suppliers and bankers etc. This acquisition of tacit knowledge plays significant role to foster the process of innovation. Tacit knowledge becomes more important in those particular industries where explicit knowledge is scarce. Through knowledge management, organization can identify their tacit knowledge which they usually do not know before.

Knowledge Management also helps the organization to articulate tacit knowledge in the form of explicit knowledge and this is a strong base to bring innovation . Knowledge Management integrates different types of tacit and explicit knowledge. Through integration, organizations can discover what type of tacit and explicit knowledge subsists in the organization. Furthermore, knowledge activities like knowledge gathering, managing, sharing, learning, reuse and retrieval plays an important role in bringing innovation. Through knowledge management activities, organizations find out the distance of knowledge from inside and outside the organizations. Organizations manage this knowledge in the form of data base, so that, they can ensure the availability of right type of knowledge to the right person at the right time.

Following points should be considered for innovation in organization with Knowledge Management :

Table 6.1 : KM Elements and Innovation Mechanism

KM Elements	Innovation Mechanism
Knowledge Creation	Motivational Incentives Introduce change – setting, groups, viewpoints Cultural evaluation – organizational and group Reject underlying values and beliefs (personal and organizational) Encourage experimentation Environmental factors – working conditions, economic means, transfer mechanisms, mentors
Knowledge Acquisition	Encourage education and learning Identify Internal & external sources and user communities Enable storage of non-used or used ideas

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- iii) Knowledge Management facilitates collaboration in the innovation process.
 - iv) Knowledge Management ensures the availability and accessibility of both tacit and explicit knowledge used in the innovation process, using knowledge organization and retrieval skills and tools such as taxonomies.
 - v) Knowledge Management ensures the flow of knowledge used in the innovation process.
 - vi) Knowledge Management provides platforms, tools and processes to ensure integration of an organization's knowledge base.
 - vii) Knowledge Management assists in identifying gaps in the knowledge base and provides processes to fill in the gaps in order to aid innovation.
 - viii) Knowledge Management assists in building competencies required in the innovation process.
 - ix) Knowledge Management provides organizational context to the body of knowledge in the organization.
 - x) Knowledge Management assists in steady growth of the knowledge base through gathering and capturing of explicit and tacit knowledge.
 - xi) Knowledge Management provides a knowledge-driven culture within which innovation can be incubated.

6.6. Corporate Transformation

Corporate transformation deals with collaboration, integration and innovation. Knowledge collaboration is very important for bringing innovation and corporate transformation. There are two types of collaboration

- i) **Internal Collaboration :** Through internal collaboration, organizations come to know about diverse knowledge which exists in the organization in the form of tacit and explicit knowledge. Through strong internal collaboration with the employees, organizations come to know what, where and how much knowledge exists in the organization. This internal collaboration can foster the innovation because when organizations collaborate and integrate with the internal employees , this can lead the organization towards the generation of pool of expertise and creativity which are essential for bringing innovation in the organization and helps for corporate transformation.
- ii) **External Collaboration :** External organizations plays an important role to bring innovation like customers and competitors . If any firm wants to innovate successfully in a highly complex

environment, the innovation process must be supported by the open and flexible structure. Organizations must integrate with external knowledge and capabilities. This integration and collaboration allows the organization to get more innovative ideas which is the sole of innovation.

6.6.1 Role of digitalization in Corporate Transformation :

Digitalization plays an important role in transformation with the help of knowledge management. The digital revolution fundamentally alters the way we live, work, and relate to one another. Digital transformation and technological advances are giving rise to disruptive business models that profoundly impact businesses. Digital technologies, such as cloud computing or data analytics, analyze and convert digitized data available and use them to further refine business activities or processes and enables digital transformation. The usage of cloud computing that houses vast reservoirs of knowledge to seek solutions instantaneously is an example of digitalization. The process of learning, unlearning and relearning, is a necessary component of digital transformation. As organizations increase their knowledge management maturity levels, they are able to develop knowledge management strategies that support digital transformation processes for desired results to be achieved.