



An ontological review on the role of knowledge management in learning organizations

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Abstract

In the present age, that is called the age of knowledge, organizations are engaged in environments that are becoming more dynamic and challenging day by day. Change is an integral part of today's world, in other words, it is the only fixed component of change. Today, intangible and spiritual assets, called knowledge, are seen as an important and vital factor.

In addition, those organizations are successful in terms of evolution that can improve and develop their intangible and spiritual capacity (knowledge). However, in the meantime, the remarkable point is that organizational knowledge achievement is not possible without learning. Learning is the key to achieve knowledge assets and thus increasing intangible capital. Therefore, the organizations need to become learning institutions has increased. The learning organization needs knowledge management and vice versa. To survive, they will need each other.

To become a learning institutions, each organization must consider the principles relevant to the learning organization and the management of information. Both of them, thus, emphasized here. In a systemic approach, this paper attempts to connect these two problems and introducing a conceptual model. The information management method requires the development of knowledge, knowledge documentation, delivery and distribution and releasing of knowledge, and eventually the implementation of knowledge.

Keywords: knowledge management, learning organization, organizational learning

Introduction:

Experts agree that the most enduring strategic edge is the potential to learn more than rivals. Today, the organizations need to learn and evolution has grown. It is deemed to failure if an institution tends to learn more slowly than its surrounding environment. Therefore, all organizations must be learners. Therefore, the concept of learner refers only to organizations with strong organizational learning. The learning organization emphasizes the organization as an independent entity and a special form of the organization. Organizational learning refers to the learning processes and activities in that institution.

The learning organization and knowledge management both have common ideas and are related to the process of acquiring and retaining information, data interpretation, knowledge development, and learning improvement. The organization's approach to manage its knowledge is crucial for organizational development (1-3).

Knowledge management refers to the knowledge administration method. Knowledge management includes the activities of creating, organizing, sharing and applying the knowledge. Information technology is a basis for effectiveness of knowledge management. This means that IT support for knowledge management is an important part of knowledge management. (1)

All organizations learn to be compatible with their surrounding environment, but some learn more effectively, and will be more successful in today's highly competitive environment. These organizations are those that are moving towards achieving the characteristics of a learning institution and shaping their organizational structure in accordance with the structure of a learning organization (4,5).

Learning organization and knowledge management cannot exist without each other. The organization that aims to become a learner must pay equal attention to both aspects. This requires understanding different priorities, goals, and their relationships. This article's objective is to express and examine this important issue and its purpose is to depict the knowledge management of the learning organization in the framework of a theoretical conceptual model in order to provide a basis for strategic development on introducing knowledge management and strive to transform into a learning organization (1).

Researchers and scholars such as Nonaka and Takeuchi believe that there are two types of knowledge in the field of organizations: explicit knowledge and implicit knowledge. They figured out that insights, intuitions, assumptions, subconscious, values, perceptions, metaphors and comparisons are often being forgotten in organizations (6,7).

Knowledge management

The concept of knowledge management is the explicit and systematic management of «basic knowledge» and the processes of creating, collecting, organizing, releasing and compiling it that require the transfer of personal knowledge to the knowledge of the company that can be widely shared and applied in the entire of organization. (8)

Another definition is: Knowledge management is applying a systematic method to create an environment where knowledge can be easily shared and accessible to all and includes a series of dynamic activities, including: creating, recognizing, reviewing and validating, Sharing, adapting and using knowledge.

If the circuit is well managed, individual knowledge becomes group and collective knowledge and then converts to organizational knowledge; As a result, the organization has implementing knowledge (9,10).

Learning organization

The «organization as a learning system» approach was introduced in the early twentieth century. Frederick Winslow Taylor believes that when managerial facts are told to a manager, he can easily pass on his learning to others, thereby lead to increasing the effectiveness of the organization. As you know, one of the principles of Taylor's scientific management and his followers was to support employees through job planning and their training.

Later, the learning organization approach was revised by theorists such as Richard Sirte, James March and Herbert Simon, who saw experiential learning ability as one of the central mechanisms for maintaining organizational performance. To do this, organizations need to establish a cause-and-effect relationship by information gathering from past experiences, between action and outcome (5).

But according to most researchers, since late twentieth century the concept of learning organization has attracted a lot of attention from organization researchers and leaders. Everyone agrees that the publication of the book «Principle Five: The Art and Practice of the Learning Organization» by Peter Singh is the most important thought process of this paradigm and it has been the cornerstone of the scientific thinking of the learning organization during the past years (11)..

What is a learning organization?

Each organization is made up of a group of people. Each group contributes to the growth and dynamism of a culture. The stability of culture depends on the duration of the group, membership stability in group and the intensity of their common emotional emotions. Therefore developing a new culture, for example a learning-based culture, takes time. A learning organization has a culture that supports innovation and learning of individuals and the organization.

The environment promotes learning culture, ensuring that individuals' learning leads to the development and enrichment of the entire organization. The learning process should ultimately be considered as part of the culture, not the solution to a particular problem.

A learning organization needs a new perspective on leadership; Leader as a designer. Culture begins with leadership, but because this culture is the result of the group's accumulated learning, as a result, the culture itself determines the desired leadership. Taking the first step in building a learning organization requires a leadership style that inspires the learning organization. The learning organization is not valuable by itself, it must still fulfill the organization's larger purposes. Common attitudes in the organization arise from individual attitudes.

The learning organization is based on a culture that considers the people's demands in the organization. In the learning organization, people know why for needs and in other organizations, attention is paid to how to meet these needs. Organizing a learning organization is such that while exploring the information in the environment, it creates new information and encourages people to share knowledge within team members.

This important issue should be guided by the structure and attitude of the organization's

strategic leadership. Employees must spend time to learn, management must pay attention to learning as a real task. In an organization work processes learner, should pay special attention to all aspects of knowledge. Processes should provide field for knowledge dissemination and culture should encourage knowledge sharing. Learning occurs when there are changes in the level of individual knowledge. Most of the time learning and storing new knowledge begins from the individual.

Individual learning does not imply the need to change the level of organizational knowledge. Organizational knowledge is the independent knowledge of specific members in an organization; Such as the knowledge contained in scientific sources and also the knowledge that exists at the heart of policies and work procedures.

Organizational learning is: a set of cognitive processes of organization's people. Individuals can be considered as a subsystem in the organization. The concept of learning organization considers the organization as an independent entity and focuses on characteristics that encourage members to learn. Organizational learning, on the other hand, focuses on how to develop learning in an organization; the kind of learning that changes strategies but leaves values unchanged is one-loop learning, and the kind of learning that results in a change in values is two-loop learning (1).

General pattern of knowledge

Newman provides the general model of knowledge. In this model, knowledge is organized in four areas; the following areas are:

Knowledge creation: Behaviors related to the entry of new knowledge into the human or social system that has a wide range, such as: discovery, acquisition, recall, development, which is closely related to the behavior called innovation. The second step after acquiring or learning knowledge is to retain it.

Knowledge retention: All activities that lead to the survival and maintenance of knowledge after entering the system. Preserving activities include a variety of behaviors, such as: activities related to knowledge validation, updating, and... .

Knowledge transfer: includes a variety of behaviors such as: communication, translation, interpretation, refinement and presentation of knowledge.

Application of Knowledge: Using existing knowledge to make decisions, actions and achieve goals. (1.12)

Elements of creating a learning organization

There is no sure way to become a learning organization. Every organization must develop a structure that best fits its human resources, background, skills, technology, mission, and organizational culture, and then expand the appropriate learning style and structure. Watkins and Marsick (1993) look at this process as the embodiment of a learning organization that is the best way to unleash its internal capabilities in technology, manpower, and resources (13). Extensive research by Wake Valley shows that at least five factors or elements are essential for creating a learning organization for institution. In general, these elements form the formula for creating a learning organization. By detailed examination of the elements of this formula, managers can evaluate the amount of learning in their organizations and increase it. Every element is absolutely essential. If it is not an element, the organization either learns incorrectly or learns with the least speed to its full potential. These elements are:

1. Existence of a leader with insight
2. Existence of program and measurement system
3. Information
4. Initiative and innovation
5. Execution

Knowledge management plays a vital role in supporting organizational learning because it facilitates the effective sharing of the organization's collective knowledge. Knowledge management is a coherent systematic process that employs the right combination of information technology and human interaction to identify, manage, and share an organization's information assets. These assets include databases, documents, policies and procedures. In addition, both explicit and implicit knowledge involve employees and use a wide variety of methods to capture, store, and knowledge sharing within an organization (5). By creating a group-oriented, Circuit team and flexible structure, the learning organization has

enabled the flow of effective and useful learning, which will result in the creation of knowledge, increasing it and, therefore, growing, better development and more successful adaptation to changing environment. The learning organization is the place where organizational learning flows. In this organization, learning and knowledge are two basic and intertwined elements; this means that learning leads to the creation of new knowledge, and re-learning of new knowledge will lead to the creation of newer knowledge.

Knowledge management with an organizational learning approach is: simplifying the process of creating and sharing knowledge, along with providing positive work environments and an effective reward system. If an organization has a strong learning motivation, it creates structures and processes that with balanced and complementary efforts, moves towards acquiring and combining knowledge. In addition to moving inside, it also moves outside the organization (5).

Nowadays, success in the job market is directly related to the knowledge that can be generated by the organization, the speed of this knowledge, and the amount of accumulated knowledge. Besides, organizations that have developed a strong learning culture are effective in creating, acquiring, and transferring knowledge, as well as in modifying behavior to reflect new knowledge.

In a learning organization, the organization learns, changes and its functions change during the time. A learning organization is one whose performance is improved and refined through better awareness and understanding. We can claim to be a learning organization that can change and improves the scope of its potential behaviors through the communication process. Organizations are learners and creators when they draw inferences from their history and experiences and use them to guide their behaviors practically. In a learning organization, organizational learning occurs, which is: the process of finding errors and mistakes and correcting them. (14) .

In general, we can consider the learning organization as an organization that is skilled in creating, acquiring, and transferring knowledge and acts to change and modify its behaviors with the help of newly acquired knowledge. In this definition of a learning organization, the creation of knowledge and innovation and creativity is the basic element. But creating and acquiring knowledge alone is not enough to be considered a learning organization, but it must be able to apply that knowledge in its behaviors and actions and improve and modify its activities with their aid (14).

Our current successful organizations are the ones that have created or acquired new knowledge and turned it into practical ways to improve their operations. They have used new and creative methods to improve their structure and performance, so they can be a role model for us

The following features can also be listed for learning organizations

- * Learning organizations are continually dedicating their capability to shape a better future.
- * Learn new methods and ignore old approaches of doing tasks.
- * Not being disappointed in confronting undesirable problems and offer new ideas.
- * Facilitate learning for all members and transfer it on continuously.
- * Facilitate and encourage group learning. «Employees who work through workgroups enjoy working more,» says Gardner and Jouler. Because instead of being mere listeners, they actively participate in the learning process and consider themselves responsible for their own learning.
- * The learning organization generates new perspectives.
- * A learning organization is a place where people constantly increase their ability to create whatever they like to create, learn new learning models, and learn how to learn.
- * The learning organization coordinates approaches required for doing tasks .
- * Emphasizes on employees training and reminds them to always be passionate in learning.
- * Emphasizes on risk and avoids blame.
- * Establishes comprehensive communication with employees and provides them with the necessary information in a timely manner.

- * Teaches employees to develop realistic decision-making power.
- * The learning organization welcomes new ideas.
- * The learning organization quickly introduces regulations and circulars.
- * The learning organization identifies its client needs and liaising with them directly.
- * Provides positive feedback to all employees on an ongoing basis and minimizes penalties.
- * Makes awareness and cognition the key to the growth of employees' professions.
- * Delivers the assigned cases in the least possible time.
- * Strengthens employee satisfaction and pride.
- * Distributes power almost logically throughout the organization to avoid self-centeredness.
- * Relies on documented information, not hypotheses and theories.
- * Learns well from his own experiences and those of the past and knows the value of failures(14,15).

Strategies to strengthen learning organizations

- * Attention and importance to improving the system of activities.
- * Optimizing human resources and improving the quality of people.
- * Paying attention to people's work knowledge as a starting point for improving productivity and improving the quality of production and services.
- * Systematic training of employees.
- * Investing and allocating significant budgets to train and nurture thinkers and innovators.
- * Creating educational opportunities to strengthen and develop talents and creativity.
- * Creating extensive training opportunities in order to provide opportunities for staff growth and development.
- * Using training not only means new learning but also to its effect on improving the work process of employees.
- * Supporting the training of different units of the organization.
- * Fast transfer and implementation of learning of other companies within the organization.
- * Supporting and learning good ideas and successful work of other companies.
- * Pay more attention to the human dimension of management.
- * Strengthen employee motivation.
- * Respect for employees.
- * Fostering and promoting participatory and interactive strategic thinking of employees.
- * Pay more attention to the creativity and comprehensive innovation of the workforce.
- * More tendency to meritocracy.
- * Strengthening the family values of the workforce.
- * Reduction / adaptation of the labor force (especially due to economic insecurity and global competition).
- * Humanization of work environments.
- * Spiritual and material encouragement of employees.
- * Job mechanization.
- * Paying attention to new environmental regulations and considerations / better use of the environment.
- * Using education as one of the major and important infrastructures of individual and organizational productivity.
- * Using training to increase the capacity of existing employees and improve them and reduce the supply of human resources from external sources, which is considered a type of management failure.
- * Put human resource education at the top of organizational priorities.
- * Using training as the main factor in providing scientific and professional capabilities and competencies and abilities of technical and professional skills of employees.
- * Attention to scientific and technological developments (becoming more sophisticated technology).
- * Development of automation.
- * Emphasis on ergonomic developments and advances.
- * Having floating working hours / eliminating working time limits.
- * Virtualization of work environments, independence of work from place.
- * Development of employees' abilities and capabilities.
- * Attention and importance to the participatory management system.
- * Becoming more specialized.
- * Attention to new management issues.
- * Eliminate cumbersome regulations.
- * Increase decentralized management.
- * Delegation of authority and expression of creativity.
- * Development of new management systems.
- * Increase competition and reduce production costs.
- * Variety of products.
- * Transformation of organizational structures.
- * Strengthening and increasing the capabilities of the organization

Conclusion

Soon, in the not-too-distant future, we will not find any organization that can last a moment without learning. The future belongs to organizations that can learn and make the most of all learning methods. Because the world is changing rapidly and no force can stop this change and the organization has a lasting chance to be able to constantly adapt to the environmental changes around it. Environmental change has forced organizations to constantly seek the best solutions and procedures in order to adapt to their environment and thus achieve a competitive advantage, and the only solution for future organizations against its changes and transformations is to become Learn organization.

One of the basic ways to become a learning organization is to apply knowledge management in the organization. Knowledge management accelerates organizational learning by facilitating the process of creating and sharing knowledge, along with providing positive work environments and an effective reward system. Forgive and help the organization adapt to today's accelerated change and keep up with the changes successfully.

Learning organizations are constantly seeking to increase their capabilities in the areas of creativity, innovation and transformation, which is mainly achieved through training and productivity of human resources. It remains to be seen whether your organization is really a learning organization. And if so, how do you evaluate it and what suggestions do you have for improving it?

References

1. Aggestam L. Learning organization or knowledge management—which came first, the chicken or the egg. *Inf Technol Control*. 302–295:(3)35;2006.
2. Maryam R., Mohammad H., Behnaz M. Investigating the role of human resource development activities on employee innovation by examining the mediating role of knowledge management and organizational learning. *Innovation and creativity in the humanities*.1395 .(3) 6.
3. Valentine S, Hollingworth D, Francis CA. Quality-related HR practices, organizational ethics, and positive work attitudes: Implications for HRD. *Hum Resour Dev Q*. 523–493:(4)24;2013.
4. Dzunic M, Boljanovic JD, Subotic J. The importance of concepts of knowledge management and learning organization in managing the knowledge-flow in organizations. In: *Management, knowledge and learning international conference*. 2012.
5. Shahabi B, Sobhani Nejad M, Yuzbashi A. *Learning organization (theoretical foundations, patterns of realization and assessment)*. Tehran: Yastroon; 1389.
6. Nonaka Ikujiro, Takeuchi H, Umemoto K. A theory of organizational knowledge creation. *Int J Technol Manag*. 45–833:(8–7)11;1996.
7. Nonaka I, Takeuchi H. The knowledge-creating company. *Harv Bus Rev*. 162:(8/7)85;2007.
8. Skyrme D. *Knowledge networking: Creating the collaborative enterprise*. Routledge; 2007.
9. Jiang X, Li Y. An empirical investigation of knowledge management and innovative performance: The case of alliances. *Res Policy*. 68–358:(2)38;2009.
10. Ghobadi S, Mathiassen L. Perceived barriers to effective knowledge sharing in agile software teams. *Inf Syst J*. 125–95:(2)26;2016.
11. Peler M, Boydell T, Burgoyne J. Towards the learning company. *Manag Educ Dev*. –1:(1)20;1989
12. Newman P, Kenworthy J. *Sustainability and cities: overcoming automobile dependence*. Island press; 1999.
13. Mile Marquat, Mohammad Reza Zali (translator). *Creating a learning organization: Developing five elements for organizational learning*. Tehran: University of Tehran; 1385.
14. Maleki Nia A., Bejani H. Knowledge management in learning organizations. *Tact*. 203 ;1388.
15. Aghajani H., Samadi Miarkalaei H., Samadi Miarkalaei H. Investigating the relationship between organizational entrepreneurship and the characteristics of a learning organization. *Interest management (beyond management)*. 1394 .(9) 35.