

Key success factors of knowledge management

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Abstract

In an era when knowledge is considered the most important factor in creating competitive advantages in organizations, it is especially important to pay attention to knowledge management (KM). Therefore, in order for the organization to be successful and have a better performance in this area, key success factors of knowledge management should be emphasized. It is a highly difficult task to bring about change in an organization and enable an organization to utilize all of the forms and capabilities of knowledge management using the available resources in order to obtain its goals regarding its circumstances and binding commitments. Assessment and evaluation depend upon the concepts of knowledge. One of the keys to success is to achieve high quality products. There are two common approaches in all organizations for achieving key success factors, one of them is the business process and the other is human resources process. Both of these processes are crucial for building major organizations and companies, but human resources should be emphasized here. Here, I start with providing definitions for management, knowledge, different types of knowledge, and knowledge management systems and then I will discuss about what knowledge management is and whether or not the knowledge of management preferred to knowledge management.

Keywords: management, knowledge, implicit knowledge, explicit knowledge, key factors

Introduction

In recent years, knowledge management has been one of the most interesting and challenging issues in the field of business management and its application

has been widening along with other issues in the area of management. Knowledge management is a process that helps organizations in the field of identifying, selecting, organizing, disseminating, and transferring important information and skills that are part of the history of organizations and are mainly found in an unstructured mode in organizations. Since knowledge management originates in expert systems, organizational learning, and innovation, it is not a new idea by itself. Successful managers have usually utilized intellectual capital and recognized its value. However, these efforts have not been organized and there was no guarantee that the obtained knowledge will be shared and distributed appropriately for maximizing the benefits of the organization, while knowledge and intellectual capital are the basis of core competencies and a strategy for better performance. Knowledge can be strategic only if the organization can use it in the activities that lead to value creation and utilize it as a tool for implementing the available opportunities in the competitive market. Because it is not possible for companies anymore to keep their competitive advantages by doing their tasks in a faster and better mode, rather, the competitive advantage is facilitated when others are not able to imitate the implemented tasks. To obtain sustainable competitive advantage, it is very important to focus on the available knowledge and its effective use and also to create a structure for making use of modern knowledge. Organizations should consider everything, because knowledge management, just like a business strategy, operates simultaneously in all parts of the organization and is considered the development tool for the general plan of an organization.

Management

There are a lot of definitions of management today. Whether to think of management as a science

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or an art is very crucial. At present, because of the lack of familiarity with concepts of management and knowledge, our organizations are faced with numerous crises. Changing managers, not replacing them with appropriate managers regarding their position, and their knowledge about the assigned positions reflect the lack of managers' familiarity with the current management in our society. All teachers of the science of management emphasize the theory that management is a process that must reveal itself during time, but the fact that whether or not the manager has the knowledge to learn this process matters. So, the respected teachers state that management is the process of effective and efficient application of material and human resources in planning, organizing, mobilizing resources and facilities, leading, and control which are fulfilled for achieving organizational goals according to the value system.

As it is observed, management is divided into several parts, requiring a great deal of knowledge, and this shows that the knowledge of management should be obtained first and then the knowledge

must be managed. As Howard Carlyle says "management is focused on targeted activities, now we should consider what percent of the activities of our organization is targeted and whether or not the organization possesses an acceptable strategy.

There are two methods for learning knowledge management: one is via training and the other is during work (Rezayian, Management Principles, p. 8). In the first method, i.e. training, the thing that a manager acquires is the theoretical stage of the problem, and the thing that demonstrates itself and in fact completes the knowledge of the manager's theory is the stage of getting the job done. So, the science of management is training and the art of management is its applying.

Data, information, and knowledge

While data are a set of what is known, calculations, and statistics, information is organized or processed data that is updated and correct. Knowledge is information that is conceptual, relevant, and implementable. The relationship among data, information, and knowledge is illustrated in figure 1.

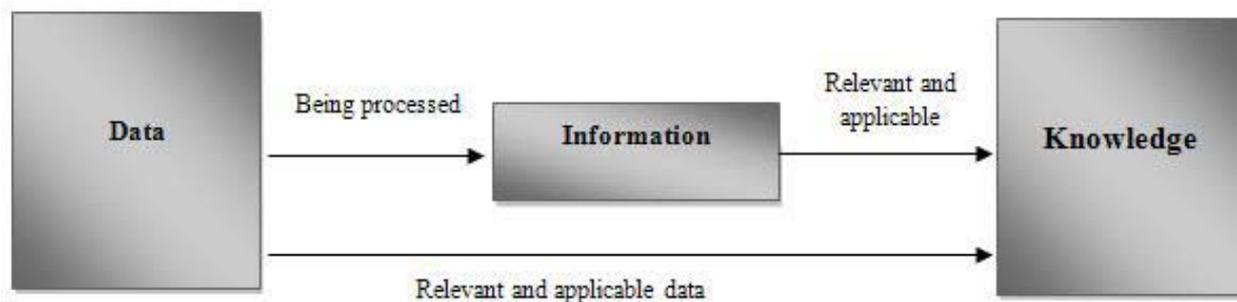


Figure 1. The relationship among data, information, and knowledge.

Although data, information, and knowledge are seen as assets of the organization, knowledge is in a higher level of importance compared to data and information. Knowledge transfers concepts, so despite its being ephemeral, it is more valuable. According to Holsapple, knowledge has some characteristics listed below, that distinct it from other assets of the organization:

- Extraordinary power and increasing efficiency: Knowledge is not subject to the rule of descending efficiency. While it is used, it is not diminished. Since customers are able to add items to it, its value increases.
- Dispersion, leakage, and the necessity to be

up-to-date: while knowledge grows, it is branched and divided into parts. Knowledge is dynamic, and in fact, it is applied information. Therefore, the organization should constantly update its knowledge base so that it can preserve it as a source of competitive advantage.

- Unknown value: Estimating the impact of investment on knowledge is very difficult due to the existence of some intangible aspects.
- Unknown value of sharing: similarly, estimating the impact of knowledge sharing or even its main beneficiaries are difficult.
- Dependency to time: the utility and validity of knowledge may change over time; so, urgency,

aging, deterioration, and instability are important features of knowledge.

Implicit and Explicit Knowledge

Polanyi was the first person to define the explicit and implicit knowledge of organizations and put a distinction between them. Explicit knowledge is tangible, intellectual, and technical (data, policies, procedures, software, documents, etc.). Implicit knowledge is usually in the range of mental, perceptual, and experimental learning, it is highly personal and difficult to be formalized.

Explicit knowledge includes the policies, procedure guidelines, public reports, reports, plans, products, strategies, goals, missions, and competitive advantages of the company and its IT infrastructure. This knowledge is formulated in a way that it can be distributed among people or transforms into a process or strategy without any need to people's interference. There is a simple relationship between knowledge formulation and its transfer fee. The more the knowledge becomes explicit, the lesser its transfer fee would be.

Explicit knowledge is also called leaky knowledge because after being documented, it can easily disport from individuals, documents, or organizations. Implicit knowledge is a set of experiences, mental plans, insight, intelligence, expertise, information, business secrets, skill sets, perceptions, and learned material of an organization and an organizational culture that encompasses the past and present experiences of people and the processes and values of the organization.

Implicit knowledge - also known as tacit knowledge- is usually embedded in people's minds or placed in the group interactions of a department or branch of the organization. Implicit knowledge usually involves high levels of expertise or skill. Its transferring is usually slow and expensive and can be distorted by vague items. Tacit knowledge is also called sticky knowledge, since it is fairly difficult to separate from its source.

Definitions of knowledge management

According to Jones, knowledge management is an integrated systematic approach for identifying, managing, and sharing all information assets of the organization that includes information banks, documents, policies, and procedures. Knowledge management is also known as a target-oriented and systematic application of modules in order to lead and control tangible and intangible knowledge assets of the organization that are used aiming at activating

new knowledge, creating value, creativity, and progress aimed at utilizing current internal and external knowledge of the organizations. According to Smith, knowledge management creates a new working environment in which knowledge and experience can easily be shared. It also activates information and knowledge so that they flow towards real people in real time to enable them to operate more efficiently. Peter Drucker believes that "the secret of success for organizations in 21 century is correct implementation of knowledge management". So, in the organizations of 3rd millennium, it is necessary to implement knowledge management, and the institutes must plan for it. The success of organizations increasingly depends on how they can effectively collect, store, and retrieve knowledge among employees of different levels.

Knowledge Management Systems

Knowledge management systems emphasize on the use of modern information technologies (such as the internet, intranet, extranet, software filters, data warehouses) to organize, promote, and facilitate knowledge management within and outside the organization.

Knowledge management systems seek to provide access to skilled human capital for the organization, and so help the organization in adjusting with conditions such as loss of forces, rapid changes, and diminishing the size of the organization.

An active knowledge management system will follow six steps in a cycle (Figure 2). The reason for the system to be like a cycle is the improvement in its dynamics over time. In a proper knowledge management system, knowledge never ends, because over of the time, the environment changes and needs to be updated to reflect these changes. Lifecycle of the knowledge management system acts as follows:

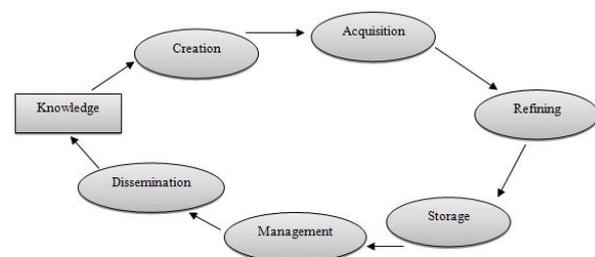


Figure 2. Knowledge Management system cycle.

a. Knowledge creation: Knowledge is created when people find new methods to do things or ac-

quire a new skill. Sometimes external knowledge enter the organization.

b. Knowledge acquisition: new knowledge should be considered valuable and be presented in a reasonable way.

c. Knowledge refining: new knowledge should be adjusted to the conditions and thus become applicable. At this point, human insights (tacit capabilities) should be applied in line with explicit facts.

d. Knowledge storage: then the useful knowledge must be reasonably stored in an knowledge repository so that other people in the organization also have access to it.

e. Knowledge management: knowledge must be kept up to date, just like a library. Necessary reviews in order to confirm their relevant and correctness must be done constantly.

f. Knowledge dissemination: knowledge must always be available everywhere and in the suitable format for anyone in the organization who might need it.

Key success factors for knowledge management (KM)

Nowadays, the importance of knowledge management is clear to a lot of organizations, and managers are searching for the main reasons for success in design and implementation of knowledge management systems in their organizations. There are several factors that facilitate successful implementation of knowledge management. Research and studies indicate that the following factors could be considered as key factors for success in the field of knowledge management:

1. Knowledge storage: the knowledge stored in organizational knowledge (implicit and explicit knowledge) is a key ingredient in knowledge management system. Database on the skills, expertise, and saving implicit and explicit knowledge are as important as the knowledge management system itself.

2. Knowledge audit: Knowledge audit is defined as the examination and measurement of the used knowledge in the knowledge management system and also as a tool for the valuation of knowledge and knowledge management opportunities and problems.

3. Knowledge Strategy: One of the most important factors for successful knowledge management is to have a clear and well planned strategy. This is a basic factor for how an organization can make advancements and successfully develop its capabilities and resources for success in line with the goals of knowledge management.

4. Training programs: In order to distribute

knowledge policies in the organization, workers should be familiar with the concepts thoroughly and deeply. Thus, training programs are very important for an organization that is associated with knowledge management.

5. Top manager's support and commitment: success in planning knowledge management system in an organization depends on the direct support and commitment of senior management. Indeed, a knowledge management plan needs the support of senior management to be successful in the design and implementation stages.

6. Trust: The factor of trust activates the efforts of KM efforts and also helps knowledge sharing.

7. Experts Network: In order to develop knowledge in an organization there should be a network of experts to facilitate knowledge sharing among them. This network can include a scientific committee, operating associations, knowledge systems, and knowledge centers.

8. Knowledge Sharing: Knowledge sharing among the employees of the organization requires a culture of ethics, trust, and transparency in the organization.

9. Organizational Culture: Organizational culture is necessary for appropriate knowledge sharing. Motivation culture, sense of belonging to the organization, trust and respect to the organization must be done prior to sharing, development, and use of knowledge.

10. Pilot Implementation: Knowledge management system should first be implemented as a pilot, and then be implemented in all parts of the organization. Feedback should also be taken from the knowledge management system so that necessary modifications are done.

11. Knowledge Identification: This factor is part of the initial stages of the knowledge management cycle in which all available knowledge in the organization must be fully stored and identified so that all the experience and knowledge of the organization can be optimally utilized.

12. Business Process Reengineering: business process reengineering includes changing the traditional ways of business and find new and creative ways to replace them. From the new methods, new rules come out that specify how business processes are done. With the implementation of business process reengineering, new business processes are adjusted and aligned to knowledge management efforts, contributing to proper operation of knowledge management team in organizations.

13. Knowledge Structure: A well-structured knowledge system contributes better knowledge identification, storage, sharing and reuse in an organization.

14. Knowledge Capture: In case of capturing wrong or unimportant knowledge, the shared knowledge will be of little use for the other personnel of the organization. So this factor is of special importance.

15. Information Technology Infrastructure: Without a strong information technology base, an organization cannot encourage its employees to share information on a wide scale.

16. Establishment of a reward strategy: This factor encourages the employees to share more knowledge and receive more knowledge from the higher levels of the organization.

17. Knowledge Architecture: An organizational architecture can be defined as a multidimensional and complex construct indicating the principle that determines how to design an organization and organize and implement the constituents of a business model. Knowledge architecture can also be defined as a logical set of principles and standards that guide an organization's knowledge management system structure engineering. So companies that seek to design a knowledge management system must be highly sensitive to the architecture of knowledge.

18. Transparency: for knowledge sharing, transparency is essential in all part of the organizations. However, transparency is directly related to the support and commitment of senior management

19. A user-friendly system for sharing and reusing the knowledge: Via such a system, the employees can easily share their experiences and knowledge with the other employees.

20. Ability to generate creative ideas: By implementing this factor, of all parts of the organization look for is less expensive ways to create competitive advantage.

Conclusions

Every organization, in order to achieve development and advancement must analyze itself internally and externally and must be aware of its time and place situation in comparison with its competitors. Ignoring the competitors and lack of attention to success factors and what is happening around us may prevent us from progress. So we must constantly identify success factors and think of developing and improving those factors. The performance-re-

lated knowledge, existence of a conscious and purposeful leader, possessing strategies and systems in the organizational, enjoying a proper infrastructure, and finally performance measurement are some key success factors for knowledge management that each of them were described in details in this paper.

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