

Presentation of Knowledge Chain Management Model in Organizations

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Abstract

Nowadays, with the expansion of information technology sciences across the globe, this field of science is gaining growing notability every day, so that many organizations have discovered that data is the base pillar in every structure and community and this fact resulted in increasing the usage and efficiency of it. Realization of this fact has led the companies into major competition and as a matter of fact only the organizations succeed which have discovered the importance of data for their company in shorter time than the rivals.

But now that most of the organizations have achieved mutual perception of data, only the groups that distinguish the vitality and its management in a shorter period of time would be the foremost leading. Nowadays the management of science, is the new challenge companies face and in order to increase their productivity, they endeavor to expand the science existing in the organization amongst their staff so that, with the increase of their knowledge, they aid the frame and guideline of the company that leads to its profitability, the final purpose.

One of the efficient ways of knowledge increase is usage of science and its instruction by experienced people having enough skill in working system. On the other hand, the withdrawal or retirement of these members are the challenges companies confront on their way to managing the knowledge. Admittedly, the companies capable of controlling this crisis, or lowering the drawbacks of experienced staff withdrawal, would gain more profits; and this issue would be reduced by chaining the knowledge among the employees.

Keywords: Data; Knowledge chain; Organization; Staff; Management

Introduction

In our world today, the data and science are the bases of a company but only by the perception of their necessity they could come in to use. The information management got tough and complicated by the increase in the amount of data in society and organizations. Considering this issue, the companies determined to only obtain the necessary data and avoid the ineffective ones. The organizations discovered the practicality of the main and necessary information after they gathered them.

The organizations perceived the science after putting together the applicable information from the vast amount of unwanted data. But only the perception of the science is not the sufficient precondition for the organization's success; thus, they should look for its management and orientation.

In case of acquiring science and its proper interpretation and development in the organization, the employee's point of view would spread for the chances and threats inside and outside the organization; and this fact leads to increase in work efficiency and promotion between other companies. The most important rivalry advantage in the contemporary era is the science. This has put the application of ways for gaining, saving and usage of science in the center of attention for managers and organizations in the competitive and dynamic contest atmospheres [1].

Knowledge management is a new subject in information technology management which has recently got a considerable attention from the organizations. Considering this, the pioneer ones have had a great advancement comparing to others. But gaining knowledge by different methods for its management and application is one of the challenges for managers to advance the way of gathering information from people, and more important, its development and stability in the organizations.

Literature Review

Necessity of knowledge management

The information science is mixed with experience, background and interpretation [2]. Knowledge management is a studied, well-defined

and methodical foundation for science renewal and utilization in order to increase the effect and return of the science related to scientific resources [3]. Knowledge management is the process of discovering, achieving, development and making, sharing, maintaining, examining and utilizing the proper science in the correct time by the perfect person in the organization; which is obtained by relating the human resources, information technology, communications and also making a proper plan towards the organization goals achievement [4]. There are 2 main possessions that the organizations own: the people who work in there and the knowledge in their mind [5].

Knowledge management is the organized and systematic process of achievement, organizing and well-defined circumstantial knowledge distribution of employees in order to obtain more effectiveness and productivity via other workers [6].

3 reasons for demand of the current organizations for knowledge management are as following:

- Increase in the rate of workforce transferring
- Increase of workers' age average
- Increase of the faults expenses

According to above reasons, the knowledge must be known as essential and undeniable in the organizations' survival that should be managed

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accordingly. The first step towards achieving knowledge management in organizations is its scientific analysis. To get to knowledge management we must have a view on the organization's learning process above the information technologies and also the fact that how personal learnings lead to organizational ones and the personal knowledge to the organizational one [7].

When the learnings of experienced staff is transferred to others, the managers take higher steps to get to the goals of the company and quicken the pace, but transferring the knowledge from the experienced staff needs proper backgrounds in order to make them apprehensible for the unexperienced.

Across the globe, companies must set their advantage according to the exclusive and valued resources. As doing this, the knowledge is assumed as an important guiding source. As a result, the company's ability for achieving is based on the gaining, assembling, storing and sharing and utilizing of knowledge as a competitive merit. Scientific competitive merit that can differentiate the companies. The existent obstacle is prevention of employees from sharing their experiences. This is a very important issue that managers should encourage the staff to create and use knowledge widely and effectively [8].

Knowledge sharing of the experienced people, who are usually high ranked staff, is of a great value which is sometimes defected caused by fear of wrong knowledge transfer, imperfect communication with other employees, high ranked personality, etc. emphasizing this issue enhances knowledge level for managing directors and even the employees, that is one of the main objectives of companies.

Knowledge Could be Divided into 2 Main Zones in the Organizations

- Informational establishments and information based economic processes (knowledge as the data)

- Employees (knowledge as human resources) both kinds of knowledge are valuable to the organization. In order to succeed, the organization must put effort in to expanding and developing both types of knowledge as a part of their possessions. Ernst and Young center in organizational innovation with the survey examination of about 431 American and European companies realized that the organizations can obtain the following benefits from their active knowledge management:

- Increasing responsibility and accountability
- Flexibility
- Decision making betterment
- Innovation
- Efficiency
- Quality improvement
- Duplication reduction
- Empowering [9]

As mentioned before, knowledge management is so important in the staff zone because it benefits the organization widely. As a result, companies which extract the high experienced staff' abilities, their knowledge, and teach it to other workers succeed in the science field. But this instruction from one person to another must be flexible and not to be taught only from books but also lingual, in order to influence more on their perception and job progress.

Working knowledge is a non-monotonous job that requires official

instructions, permanent reteach and learning. Knowledge workers are also the new workers that need to be managed with different methods who have tremendous wealth sources for organizations [10]. It is known that 80% of knowledge is made by 20% of knowledge workers [11].

New workers always have more energy to acquire knowledge from the elderlies of job in the beginning of their career. Because in the beginning of the job, there is no destructive egotism grown inside them and also prefer to show that they are not weak people to gain knowledge. Accordingly, if organizations tend to transfer a lot of planned effective knowledge to the new knowledge workers, they would be having much less expenses to get to their purposes and they change in to a knowledge learning organization. But it must not be forgotten that presenting a lot of knowledge in a short period of time could make people unwilling for the job progress.

Knowledge and learner organizations are both known as mind attitude and new prospect of the revolutionized job and trade world. Learner organizations are the ones that people improve their ability and science constantly in order to get the desired results. The learner organizations could be called as knowledge maker ones. Learner organizations have skills in gaining, making, transferring knowledge and also balancing their behavior for the new science and insights reflections. Factor for establishment of a learner organization are as follows:

People, processes, technology, strategic commitment that their commercial results would be having knowledge management [12]. Supporting knowledge management has objective and non-objective elements.

Objective systems

Their purpose is to make saving and transferring of knowledge possible in order to be available to all employees.

Systems that do knowledge management objectively are as listed:

- **Internet:** Internet as a comprehensive directory gives people the addresses, phone numbers, job titles and their positions, responsibilities, skills group and process experiences.

- **Data stores:** It makes data processing, ease of access, utilization of them for future planning, etc. possible.

- **Communications expansion:** Communications technology advancements like Internet fiber optics, satellite communication channels, etc. would make schooling much easier.

- **Applications hints:** A great part of investments in knowledge management is dedicated to applications that operate in 3 levels: gathering and coding, combination and reporting.

Non-objective systems

The adjust traditional and cultural systems in a way that all the members of the organization learn to study and tend to share the knowledge for the members' utilization. The non-objective systems could be explained as follow:

- **Training and education:** In the organization, the education is used for the effect on assumptions or thought habits and the training is used to learn skills and as a knowledge management and communication stool

- **Knowledge gathering tool:** The unrevealed knowledge is revealed by tools like process progress, fish bone diagram, etc.

- **Precise leveling:** The process of identification, apprehension and getting top days of the organizations around the world in order to help their company for operation betterment.

• **Strategic alliance:** Unification with the organizations that have information about specific areas of the market or own special skills or goods, leads to increase in knowledge resources of organization [13].

• **Training and education:** In the organization, the education is used for the effect on assumptions or thought as we see, both objective and non-objective systems have importance in knowledge management but the issue that involves the organizations is the problem in non-objective systems; the sharing and presentation of knowledge to the employees is one of the permanent troubles. The organization that uses sharing and knowledge record and transfer it from experienced ones to others would definitely possess profits and get their goals in a shorter period of time.

There must be an atmosphere in the organizations that strategic knowledge owners, either implicitly or explicitly, register their knowledge. This registration must be manual or by computers in order to share it to others. Thus, the knowledge registration, besides the knowledge resetting and their owners and documentation, simplifies the knowledge trade related to reactions and the experiences; and the organizational culture subjects get more importance in this state because the priorities change from knowing to teaching and instructing. In normal conditions, knowledge is the source of power and its owners do not incline towards sharing their experiences easily. This is one of the main obstacles in knowledge management.

Knowledge management must create a communicational atmosphere in the organization that everybody shares their knowledge with others in need willingly. Knowledge management needs the advanced infrastructure of information technology. This is why knowledge management benefits information management. The purpose of information and information management system is to create the infrastructure and ease the managers' decisions. But the knowledge management goes beyond it and discusses identification, documentation and evaluation of knowledge and also simplification of the knowledge trade progress. Without knowledge management, the would be no learner organization.

In knowledge management documentation is not limited only to experience, also owns a group of knowledge including information, science, processes, thoughts, etc. that each has its own way of documentation [14].

Investigating need of organizations to knowledge management

- Increase in the rate of work force transfer

Recruiting new staff has always been very time consuming and also of great importance. Because if the organization makes mistake in recruiting new ones, they will face problems in first steps. This is why the organizations always try to study the responsibilities of each section before recruitments.

After defining the need of each section for recruitments, many people will attend for the job vacancy. Thus, most of the organizations try to choose the best possible candidate for their expectations or at least choose someone with the best possible similar conditions.

After that the people enter the organizations, instruction and knowledge transfer is one of the most important things. The organizations try to present the needed knowledge objectively and precisely to the new staff. The best method for the knowledge development is presence and use of experienced people who usually have a great job experience.

On the other hand, recruitment of new staff not only needs expenses, but also time costs. The organizations count on the new employees after their entrance and plan long term purposes. Therefore, resignation of a person will do the organization some harm. The longer the presence of people in the organization and more experience, the higher the resignation expenses for company.

On the other hand, the employees of the organization are the main pillars and increase in their experience makes them more important. The subject that involves the companies in long term planning is the work force transfer.

Most of the people who demand transfer in the organization have problems like dissatisfaction of their job position, improper contact with other employees, transportation troubles, etc. Thus, when the organization disagrees with their transfer, their job efficiency would lower and therefore many companies would accept the transfer in short or long period of time.

The organizations must chain manage the knowledge in their complex during the transferring in order to have the least losses. Obviously, when the knowledge is balanced in all parts or increase it in the centers, they wouldn't harm this transfer.

- Increase in the age average of the staff

With time lapsing and stabilization of an organization among the rivals, job experience of the staff increases. The longer the period of the staff duty, the more knowledge they get. The subject that increases the organizations' trouble is the objective knowledge transfer of the experienced ones to others.

Some organizations try to convert objective knowledge of the experienced staff to precise and documented science in order to increase the knowledge of the inexperienced employees and transfer knowledge to them. By doing this, besides written registration of knowledge and longtime conservation of documents, knowledge transfer to the inexperienced staff would be easier.

A lot of the information that exist in the organizations are as documents and papers that exact and valuable information could be extracted from them. The documents include letters, methods, instructions, regulations, last researches archive, educational subjects, etc. in many cases, the organizations store their objectives, purposes and job fields documented and their evaluation is necessary and essential [15].

Aging of the employees in organization and their plan for retirement is one of the existing problems because many of the experienced people have good information about job procedures. Considering this, many of the organizations invite the retired staff to cooperation in order to use their knowledge, but many of them decline or spend only a short time with them. But anyway, workers' withdrawal because of retirement or other issues is one of the management troubles that chain managing could prevent the potential harms.

- Increase in the mistake expenses

According to the importance of nonstop work, in order to avoid losing ground from rivals, the organizations spend more time to reach their goals and consequently the least mistakes in concerned jobs leads to more harms compared to the last faults and companies have to spend more time and money.

In today world that customers' expectations have raised and the organizations offering various services have been multiplied, if their needs don't be met, they will probably choose another organization to receive their services and this is a reason to cause losses for them.

In the time of facing unexpected threats and problems that the managers in charge have no previous dealing, they benefit the first-hand experience of their experienced staff and use them to avoid potential dangers; because in the modern world any minor mistake can lead to considerable future harms. Presence of the experienced people with high levels of knowledge in the organization causes shortening of danger averting time and less money

spending. This presence gets more pervasive in time of trouble when the experienced people are not present in there or have resigned out of the company.

Discussion

Chain management of knowledge

According to the descriptions above, most of the organization need knowledge in order to confront the dilemmas. But the knowledge has more effect on the organization when it spreads in it and all the people get to a certain level of knowledge. The valuable source of presenting experiences in the organizations is the experienced and knowledgeable staff, which most of them have great job experience.

On the other side, resignation of the knowledgeable people has always been an important issue that companies encounter because in the time that a person resigns from the organization, he must be substituted with another one with similar abilities. Therefore, it is suggested that the organizations chain connect the knowledge management of people with high experience to lower ones (Figure 1).

Figure 1 shows that people must always be examined by their level of knowledge in the organization and be drawn as a chain from high

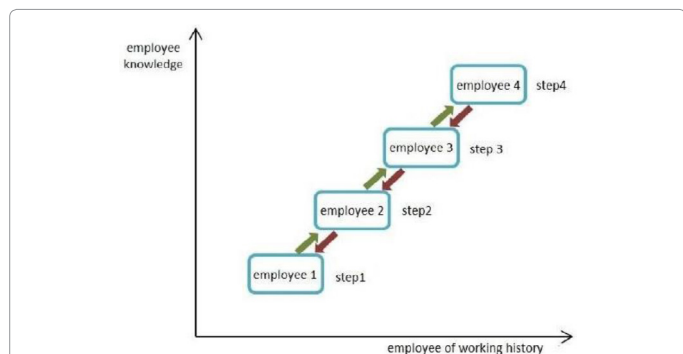


Figure 1: Diagram of knowledge chain management based on experience and work knowledge.

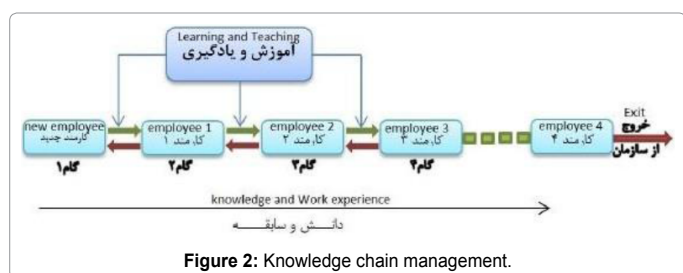


Figure 2: Knowledge chain management.

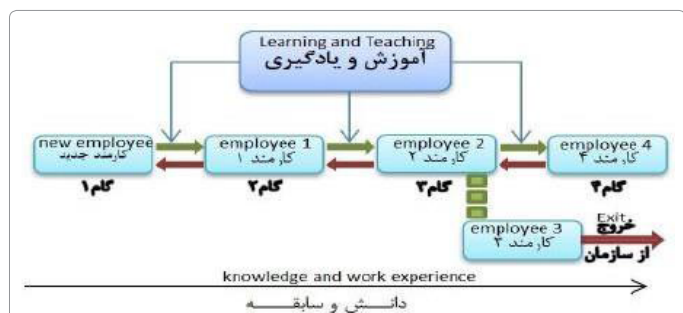


Figure 3: The reaction of knowledge chain management from the middle of organizational knowledge chart.

knowledgeable to the lower knowledgeable people. And each one should have one-by-one contact with the previous and the next person to share knowledge in order to receive the higher knowledge and give their own knowledge to the lower ones.

By making the chart of knowledge level in the organization, they distinguish that in which level of knowledge they are placed and who to communicate in order to expand their knowledge. This makes it possible in time of resignation of a person from the organization, the person before him in the chart replaces him. Therefore, this replacement takes the least possible time and somewhat the least financial or mistake expenses (Figure 2).

As you see in the Figure 2, exit of experienced and knowledgeable person from the organization that usually happens because of retirement, decreases management concerns about permanent knowledge and its increase in the organization to some extent; because after his exit, the most similar person from the level of knowledge point of view will be replaced with him.

In chain management of knowledge, it is also discussed that exit of workers for different reasons in the organizational knowledge chart would cause the least harms to the goals and the organization's level of knowledge (Figure 3).

Figure 3 shows that in the time of exit of a person from the middle of organizational knowledge chart, the previous person replaces him in a short time and this makes it possible to study with the person replaced, owning higher knowledge. Regarding this issue, the concerns of managers for time of the replacement instructions would decrease.

Knowledge chain management advantages: Decrease in time wasting for finding a new person. Easy transfer of objective and precise knowledge to the organization's knowledge chart subset people. Quick understanding of staff because of close knowledge of people together. Decrease in the expenses of transfer and resignation. Decrease in the thought concerns of management. Stability and increase of knowledge after people exit.

Knowledge chain management disadvantages: Evaluation of people's level of knowledge is difficult. It is possible to transfer wrong knowledge from the people in the top of management chart to the lower ones.

Conclusion

Existence of knowledge is such an essential matter in the information age that not only the organizations look for the information, also have taken higher steps and seek to increase and stabilize the knowledge among their staff.

Organizations have tried to expand and manage the knowledge among their staff by receiving implicit knowledge from the experienced and knowledgeable people and converting it to definite knowledge. But always there has been a problem in front of organizations in stabilizing the knowledge condition between the staff. Transferring and understanding of implicit knowledge is more eloquent than definite knowledge and also exit of people from the organization and disability to access their knowledge is one of the main problems.

Knowledge chain management suggests that people in the organizations should be evaluated scientifically and the organizational diagram should be drawn, and people contact other staff individually, the person with higher knowledge who is after him and the lower one who is placed before him. This results that the person gets a better understanding of receiving and transferring implicit knowledge in his own level of knowledge. On the other side, exit of a person with high or low knowledge, wouldn't make the past problems and the gap made in the organization's knowledge diagram would be filled.

References

1. Hoseini S, Mohamd S, Babak A (2009) Model based on knowledge management in the loop supply chain distribution, transportation and logistics. College of Civil Engineering, Islamic Azad University 1: 84-96.
2. Davenport TH, Prusak L (1998) Working knowledge: How organizations manage what they know "Harvard businness school press. Boston 1-224.
3. Wiig KM, Towe BC, Pizziconi V (1997) Knowledge management: Where did it come from and where will it go? J Expert Syst Appl 13: 1-14.
4. Abas A (2005) Knowledge management, Amir Kabir University, Iran.
5. Tobias RM (2000) The boundaries of adult education for active citizenship-institutional and community contexts. J Int Life Edu 19: 418-429.
6. Alavi M, Leidner DE (2001) Knowledge management and knowledge management systems: conceptual foundations and research issues. MIS Quart 25: 107-136.
7. Lee JH, Kim YG (2001) A stage model of organizational knowledge management: a latent content analysis. Expert Syst Appl 20: 299-311.
8. Koh SCL, Maguire S (2004) Identifying the adoption of e-business and knowledge management within SMEs. J Small Bus Enterp Dev 11: 338-348.
9. Alen R (2004) Knowledge management, Mohammad Hossein Latifi, Samt Publishers,Iran.
10. Mehdi AS (1999) General management, (13th edn), Ney Publishers, Tehran.
11. Desouza KC, Awazu Y (2003) Human resource management systems can help track and distribute information throughout the organization. Human resource magazine 108.
12. Thomas DH (1998) Some principles of knowledge management, Graduate School of Business, University of Texas at Austin, USA.
13. MacDonald J (2002) Knowledge management, translation Iranian experts (1st edn) quality and management Publishers, Tehran, Iran.
14. AliAkbar A (2000) System documentation, review and publish them managers with experience (knowledge management), College of Administrative reform. State management and planning organization 29: 11-34.
15. Doas DA (1997) Survey in social science, translated by hoshang naebi, Ney publication Tehran, Iran.