The Ways of Using Nonaka Model of Knowledge Management in Organizations

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ABSTRACT

On the verge of the third millennium, organizations use the overall knowledge of individuals accumulated in their mind in order to achieve their goals. In the case of the nonuse of the knowledge, the failure of organization or the highness of costs owing to the repetition of some decision-making processes and the optimum nonuse of empirical backgrounds and decisions can be expected. For this reason, pioneering organizations attempt to gather personnel and work groups' hidden knowledge. Knowledge management is suggested as a strategic need for institutes and organizations. Knowledge management guarantees long-term superiorities for organizations and societies. Regarding knowledge management, twenty six models are presented until now that most of them are almost similar to each other in terms of content. Among these models, Nonaka Model is one of the best models in terms of explaining how knowledge is generated. In this paper, an attempt has been made to deal with the ways of employing Nonaka Models-based knowledge management in organizations. The objective of conducting this research is describing Nonaka Model of knowledge management and presenting ways to employ it in organizations. The obtained results concerning the research questions include: The first research question: what are the constitutive elements of Nonaka Model of knowledge management? The obtained results of Nonaka Knowledge cycle indicate that this model is consisted of four phases and four elements. The first phase is socialization in other words, move from experience, individuals' different education and their hidden knowledge to other individuals' hidden knowledge. The second phase is externalization in order to manifest an individual's tacit knowledge who has obtained the required information and knowledge in respect to the made problem for it. The basis of this phase is disseminating and manifesting knowledge. The third phase is the stage of combination so that the individual can use several kinds of objective knowledge of the documentations of organization simultaneously and in fact, combines them. The last phase is internalization so that the individual takes and makes the best actions and decisions in organization by combining available explicit knowledge with his education and personal experience. The obtained results regarding the second research question "what are the phases of performing Nonaka Model?" indicate that Nonaka Model is consisted of four snail phases including socialization, externalization, combination and internalization. The four phases mentioned above continue constantly and in a snail-form move so that each phase completes its previous phases internalizing knowledge in organization and generating new kinds of knowledge. Regarding the third research question "what are the ways of using Nonaka Model of knowledge management in organization?" some ways are suggested in order to reach each of the four phases according to the four phases of Nonaka Model.

KEYWORDS: Knowledge Management, Nonaka Model, Tacit Knowledge, Explicit Knowledge.

INTRODUCTION

Studying and investigating the developmental movement of knowledge management (KM) from past to present indicate changes in the kind and way of human thought. Once upon a time, money, wealth and material assets were considered a kind of power, but in the present age, having philosophical thought, new thought and the way of employing it in the appropriate way are considered wealth and asset. Nowadays, knowledge is suggested a valuable and strategic resource as well as asset [1]. According to Behrangi [2], the capital of an organization is not only financial or physical, but the capital of individuals' knowledge is more important than the two other ones, which is considered by managers. Once upon a time, only output and quantity were important, but today, human resource involved in the complex, managers and teaches are important.

KM is the success secret of organizations in the 21th century and successful organizations have found that knowledge is their most important asset. Some basic principles of KM exist in the personnel and organization and they view KM as the key factor of the success of organization. For this reason, they have made a large investment for employing such a kind of management (http: //www. fekreno.org/articlefekreno/arfek575.htm).

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Grover and Divennport [3] believe that KM in most organizations is still in its preliminary stage, while, data management and information management have attracted considerable research focus in the field of information systems to themselves. KM is increasingly an inseparable transaction activity for most organizations.

Converting informal, subjective and personal (tacit) knowledge to the registered, formal (explicit) knowledge is one of the key goals of KM causing the reduction of risk of losing the worthy knowledge of organization with the lack of personnel's cooperation and the reduction of the risk of losing the memory of company at the time of regulating manpower (http://www. fekreno.org/articlefekreno/arfek575.htm). Organizations, which apply KM gradually and are in accordance with organizational culture, have been more successful than companies which have created intense and widespread changes [4].

Since the dynamism maintenance of organizations is possible thanks to the employment of personal and tacit knowledge of manpower, therefore, the circumstance of concerting personal knowledge to the formal and explicit knowledge, in other words, KM is a suggestive issue. I this paper, an attempt have been made to deal with the ways of employing Nonaka Model-based KM in organizations. The used methodology is descriptive with referring to printable and electronic documents. The objective of conducting this research is describing Nonaka Model of knowledge management and identifying how is it employed in organizations.

The research question, which the researcher attempts to answer them are as follows:
- What are the constitutive elements of Nonaka Model of knowledge management?
- What are the phases of performing Nonaka Model?
- What are the ways of using Nonaka Model of knowledge management in organization?

The History of KM

The origin of KM dates back to the time of passing knowledge to technology occurred in the Industrial Revolution. According to Dracker and Professor Dick [5], the position of knowledge was related with different axes as follows. The first one is the economy of agriculture. It was started with planting and harvesting as well as breeding domesticated animals and birds. In this stage, human has not obtain great knowledge. The second one is the economy of natural resources. Human discovered and extracted natural resources and gradually the need to knowledge was felt. The third one is the Industrial Revolution and product. Forming the Industrial Revolution, the need to organization, mechanization, investment market, presenting high quality products, fair price and higher technology and accessible knowledge was felt. The fourth one is the information revolution. In the second half of the twentieth century, with the appearance of information technology, wider gathering of information provided the possibility of interchanging information between companies and providers as well as customers so that comprehensive and opportune management was occurred. The fifth one is knowledge revolution. Over the two past decades, human resource as the main producers and supporters was emphasized, because they play an important role in contributing organizational knowledge and culture, which form the current of knowledge in the organization [1]. The application of knowledge as tool, processes and products was happened as the result of the Industrial Revolution [6]. After the World War, management revolution was occurred and knowledge found its social position practically [6].

Many of the theoreticians of KM were responsible for developing and distributing the issue of management that outstanding characters such as Dracker and Sterols from the US can be named [7]. Dracker and Sterols [7] created cultural dimensions of KM mostly regarding the importance of promoting information and simple knowledge as organizational resource and Sangeh did so by focusing on the learning organizations.

KM was founded an acceptable and researchable field in the early 1990. The core of KM incudes making effort for obtaining all insights and experience resulting in creating an organizational performance. KM was started as a research area for practitioners instead of simple scientific effort. Scanda is the famous Scandinavian company. This company was involved with creating a special role concerning KM for the first time in the world [8]. In 1979, the Swedish accountant named Karl-Erik Sievby then who was famous as one of the founders of KM stated that the value of an organization s more than its physical assets and the real value of the organization depends on the personnel's competence as a collective thought and brain [1]. Sievby introduced this finding as "thought asset" and "intangible asset".

In the middle of 1980, the importance of knowledge became famous as the competition asset among organizations. In 1980, the development of KM systems was created that using conducted works in the field of artificial intelligence and intelligent systems introduced new concepts as acquiring knowledge, knowledge engineering, knowledge-based systems and computer-based epistemology to the world [9].

The first generation of KM was revolving around information saving and accessing, wireless networks, information process, automatic processing systems and expert systems as well as data-analysis systems, but in the second generation of KM, the issue was reformed since 1997 with the entrance of concepts such as tacit knowledge, cooperative expert groups, content management, organizational transformation and systematic innovation [10].

Knowledge Management (KM)

Movahedzadeh [11], in defining KM, believes that the investigation of the concepts of data, information, knowledge, wisdom and the difference and relationship among them should be dealt with in order to have a better understanding of the concept of KM.

The stairs of knowledge are consisted of three elements of data, information and knowledge. Briefly, it can be mentioned that data are a series of facts and certain affairs concerning a phenomenon. Information includes organizing, grouping and categorizing data in the meaningful patterns and knowledge is information, which provides the background for change and combined contemplation and proper measure through experience [12].

Data

Data are the first component of knowledge cycle. Data and information are used instead of each other in many cases, while they are not synonymous [13]. Hamidizadeh [14] considers data as aspects of objective and immaterial reality in the phenomena and believes that data could not be considered concerned with the particular purposeful decision-making [6].

Raw data lack any understanding without presenting explanations. Data reflect complete, unified and consistent interactions and interchanges remembered as petty components. These components are saved and managed in the databases [11].

Information

According to Hamidizadeh [14], information, in fact, is the very processed, purposeful and relevant data containing a kind of meaning and message. Message usually manifest itself in a written documented form or in an audio and visual contact. Having contact and objective characterize information. Several important criteria for converting data into information include as follows:

They should be a specific context and the objective of data collection should be specified, they should be divided into key sections and data determiners should be specified, data might be analyzed by mathematic and statistical calculations, data should be emended and summarized in a smaller size [6].

Knowledge

Movahedzadeh [11] defines knowledge as the insight resulted from information and data. He believes that knowledge contributes to collect useful information and delete unwanted information. Knowledge is defined in some other ways. For example, Kanter [15] considers knowledge as the power for practice and decision-making.

According to Baghayinia's definition of knowledge [16], it is adding understanding and memory to information and summarizing initial information as much as possible.

Hamidizadeh [14] considers knowledge wider and profounder than data and information and believes that knowledge springs from human's dynamic minds.

Knowledge is extracted from information, but it is richer and more meaningful than information [6]. In fact, knowledge is considered as the insight resulted from information and data. Knowledge contributes to collect useful information and delete unwanted information.

Rahmanseresht in 2000 considers knowledge as the flowing mixture of experiences, values, available information and expert systematic views producing a framework for evaluating and using new experiences and information [17]. Knowledge is created and used in the scholar's mind.

Cohen et al., [18] believe that the root of knowledge is in information and the root of information is in data. Converting information to knowledge, in practice, is the responsibility of human. Viewing beyond the issue, it would be manifested that usually "basic knowledge" is the distinguishing factor between data, information and knowledge. This is one of the reasons that some institutes and companies can maintain their economic and competitive superiority in the knowledge-depended environment and space. Developing knowledge depends on the learning passion and prior knowledge. In other words, gained knowledge is the effective factor in increasing reaction and simpler learning of concepts. Thus, knowledge is an organized combination of data obtained through laws, processes, performance and experience.

In other words, knowledge is a meaning and concept created from thought and without it is considered information and data. Through this concept only information is revived and converted to knowledge.

Nonanka in 2012 introduces knowledge as "confirmed honest belief" in accordance with traditional epistemology [8]. Although traditional issues are focused on "honesty" as the necessary characteristic of knowledge, nowadays considering knowledge is taken as a personal "belief" and the importance of the "confirmation" of knowledge should be emphasized [1].

Types of Knowledge

Heydaritafaroshi et al., [6] quoted from Polanyi in 1966 believe that human knowledge is of two types including "explicit knowledge" and "tacit knowledge". Explicit knowledge is a kind of knowledge is easily transferable and can be compiled and codified in the form of writing, audio, video, image, software and database with the help of a series of signs such as letters and numbers. For this reason, sharing explicit knowledge is easily possible.

Tacit knowledge, in fact, is the knowledge and experience that individuals have and carry and in their mind. Tacit knowledge, to a large extent, is personal and it can be expressed and described hardly [19]. Nonanka in 2012 believes that tacit knowledge can be suggested for others to be accessible through externalization process under the title of explicit knowledge [8].

Definition of KM

The word "knowledge" in the knowledge management does not signify its scientific concept, but it signifies being aware of something. KM has been defined as follows:

Macdonalld [20] regards KM as the creative and effective use of all knowledge and information accessible for the organization in favor of customer as a result in favor of organization.

Baghayinia [16] believes that KM is using individual experience and knowledge through the process of generating knowledge, sharing and employing it with the help of technology in order to achieve the goals of organization.

Alaghebnd [21] defines KM as employing intellectual capital for the success of organization in the competition with equal organizational and innovative responses for new challenges and lever for practice and a mediator.

Bhatt [22] expresses that KM is the process of creating, confirming, presenting, distributing and applying knowledge.

Grover and Divennport [3] believe that data management and information management have assigned considerable researches to themselves in the field of information systems. KM is increasingly an inseparable transaction activity for most organizations.

Wickramasinghe, & Lubitz [23] state that KM includes all methods, which organization manages its knowledge assets including how to collect, save, transfer, employ, update and create knowledge.

Hilbard in 2008 considers KM as the process of obtaining group expertness in a company that creates the highest income and value. In his view, this expertness can exist and be interchanged in database, documents and individuals' brain [24].

According to Bhatt [22] KM is the process of creation, effect, presentation, distribution and application of knowledge that these five factors provides the ground for feedback education, reeducation or education deletion usually intended for keeping, maintaining and reviving organizational capacities.

KM is a process helping organizations to identify, select, organize and publish important information and skills, which are considered a type of organizational memory and exist usually unorganized. This issue enables the organization to solve learning issues, strategic planning and dynamic decisions efficiently and effectively. KM emphasizes on identifying knowledge and its presentation so that it can be shared formally and consequently be reused.

Objectives of KM

The objective of KM is to manage knowledge capital that its major part is hidden in managers and experts' minds. Briefly, based on the conducted studies, the following goals and programs are taken into account for KM:

- Converting to an intelligent and knowledge-based organization at worldwide level
- Producing and maintaining the knowledge assets of organization and making them developed and enriched
- Achieving market leadership of the country for offering technology and research through KM
- Promoting the flexibility of business actives of organization for rapid responsiveness and responding to environmental requirements (employees, competitors, customers, law-maker authorities)
- Identifying resources and solutions for generating the knowledge of organization
- Enriching explicit knowledge and converting tacit knowledge kinds to explicit ones
- Accessing competitive advantages in research and technology in the framework of knowledge-based organization
- Providing the background for sharing knowledge and converting it to pillar abilities of company
- Creating a dynamic and wide system at organization level for identifying and documenting available knowledge
- Encouraging employed manpower at organization level for participating in KM
- Improving employees' capacities and abilities through encouraging individual and organizational learning
- Developing documentation and registering organization knowledge in the framework of creativity and producing technology
- Developing cooperation culture in the issue of in order to establish the system of KM
- Providing and distributing scientific-applied references relevant with KM
- Holding educational courses for promoting practitioners and experts' learning skills and familiarizing processes of KM
- Providing and employing the software package of KM [25].

Dimensions of KM

1. **KM as a technology:** in this aspect, the technical and technological of KM is stressed. In this dimension, KM approaches are mainly based on the information technology. KM is considered to be synonymous with information management or data management. If this dimension is considered alone, it can make various problems for KM [6].
2. **KM as a field:** in this dimension, KM presents bases and methods for conducting research and holding courses and educational workshops [6].
3. **KM as practice and management philosophy:** this dimension is important for managers who intends to perform programs of KM. according to this attitude, they should find that way and how KM programs and activities can be effective in achieving organizational goals [6].

4. **Km as a social movement:** this attitude believes that globalization in the 21th century results in creating knowledge era. Therefore, knowledge forces as the most important assets will play a key role in the success of organizations (Ibid: 206).

Nonanka Model of KM

The key contribution of regarding KM is written in the texts. He is the first person who deducted and took the first step in making a more complex model of KM for thinking through how knowledge, in fact, could be transferred and he expressed that the transference occur. Knowledge is the converted information. After that, Nonaka developed his confirmed model that how such information could be transferred. Basically, Nonaka model was suggested to express that a dynamic complexity exists between explicit knowledge and tacit knowledge so that the extracted tacit knowledge is converted to explicit knowledge and is internalized as tacit knowledge again [8].

Nonaka developed his ideas. In a series of different papers in 1990 and in a book co-written by Hirotaka, he reached his apogee of fame. Through these publications, Nonaka was in search of creating a dynamic sense in the Model of Knowledge Transference and therefore, he suggested SECI Model as follows:
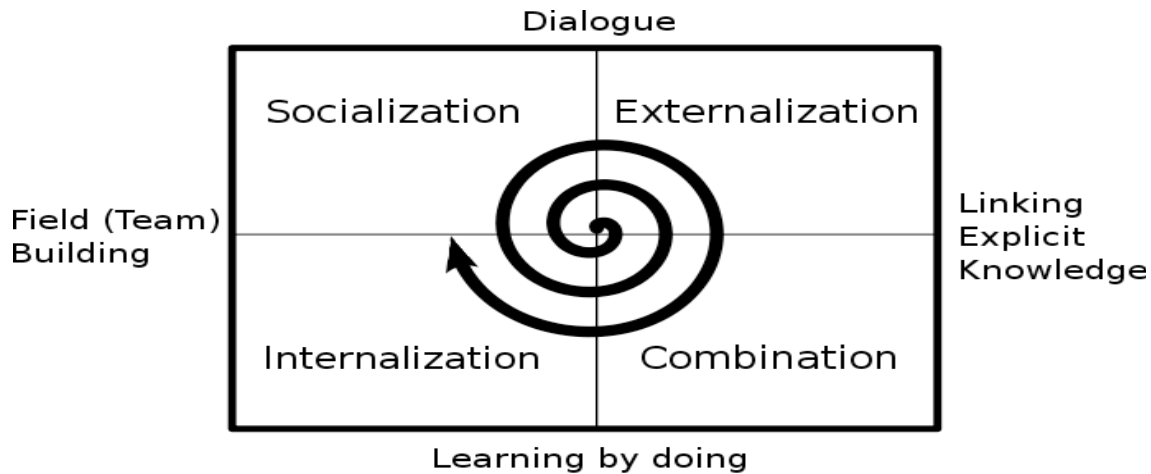
Socialization: socialization is move from tacit knowledge to tacit knowledge. In this state, individuals attempt to share their tacit knowledge with other through creating interaction. The point to be taken into account is that the individual is able to receive tacit knowledge without using language, for example through face-t-face contact [11]. Socialization occurs when that hidden knowledge in our mind is transferred to other's mind in a hidden knowledge form. This kind of knowledge has the quality of intersubjective [6]. This experience is active and is a "living thing" that includes gaining knowledge through walking around and direct interaction with customers and providers outside the organization and people in the organization. It depends on the fact that experience, obtained results in the skills and common mental models would be shared. Socialization, in the first stage, is an interpersonal process [8].

Externalization: move from tacit knowledge towards explicit knowledge is called "externalization". Codifying experience and insight in a form useable for others is called externalization. In this stage, individuals' subjective and unwritten knowledge is converted to written and complied knowledge [6]. In other words, discourse is an important means for both of them. In such a face-to-face relationship, people share their beliefs. However, in immediate encounters and simultaneous interchange of ideas, they learn to form their thoughts in a better way and articulate skillfully. Externalization is a process among individual of a group [8].

Combination: combination occurs when interchange exists between two kinds of explicit knowledge. In this process, scientific texts, databases and statistical banks, which are among explicit knowledge, are developed [6]. Combining different sections of explicit knowledge by individuals, results in presenting a new kind. Explicit knowledge is transferred through a process that Nonaka calls it "combination". In this area, information technology is more useful than other factors, because explicit knowledge can be transferred in documents, email, databases as good as interchanges through meetings and sessions. The key phases of collecting domestic and foreign knowledge is publishing, editing and processing, which makes it useable. Combination allows knowledge to be transferred among all the groups of organization [8].

Internalization: the process of converting explicit knowledge to tacit is called "internalization" [6]. When individuals internalize and share their explicit knowledge and then use it to extend and revise their tacit knowledge [11]. In other words, it is the process of understanding and attracting explicit knowledge to tacit one conducted by each individual. Knowledge in its tacit form is traceable and actionable by its owner. Internalization in order to update concepts and

methods is empirical to a large extent through a real activity or simulation. Internalization is the process of explicit knowledge of organizations and groups to individuals [8].

The four phases mentioned above continue constantly and in a snail-form move so that each phases completes its previous phases internalizing knowledge in organization and generating new kinds of knowledge.

The important point here is that when individuals participate in these processes, organizational education also occurs, because individuals' knowledge is shared with others, explained and accessible to them. In addition, generating and producing new knowledge occurs through these processes. Certainly, it should be noted that these processes do not occur in isolation, but they happen in different combinations and in working situations among individuals working with each other. For example, creating new knowledge is the result of mutual effect of individuals and explicit and hidden knowledge. Hidden knowledge is externalized and shared owing to the individual's interaction with others. Individuals create, publish and internalize knowledge while obtaining insightfulness and their organizational experience by themselves or other employees in these processes through KM [26].

The Application of Nonaka Model and Organizations

Organizations need dynamism for their activity and existence in the third millennium and dynamic organizations use knowledge well and need employees who can participate in new methods rapidly, communicate effectively, cooperate, search and evaluate information independently and share their knowledge with their colleagues eagerly in an understandable way for using [27]. Nonaka model views knowledge from two dimensions. One dimension is tacit or hidden knowledge and the other one is objective or explicit knowledge. The most important part of this model is the way of sharing this knowledge with each other.

When an individual enters an organization, he or she has passed some kinds of education concerned with his or her working field or has obtained worthy experience in other organizations. When this person enters the new organization, he or she needs other information and knowledge that can satisfy his or her needs of organization. Here, individual's knowledge with the knowledge of organization (group) requires a strong and mutual interaction, because the newly-arrived person has information and knowledge in other areas, but cannot make an appropriate relation with his or her new working area. Nonaka model of the process of generating knowledge makes this relation between the individual and organization. The individual suggests his acquired hidden knowledge, which is the result of different kinds of experience and education over his service in another organization with another individual's hidden knowledge for the organization working in to solve his problem. In this model, this phase of the process of generating knowledge is called "socialization".

When the individual refers to the documentations such as laws and regulations, bylaws, contracts and what is written and objective in their organization in order to make it compatible with his tacit knowledge (or the very education not available as written). At this time, the individual obtains required information and knowledge and provides the obtained knowledge in written form and in fact, as explicit knowledge for the organization in accordance with the made problem. In this model, this phase of the process of generating knowledge is called "externalization".

In the next phase, the individual refers to the resources of organization (explicit knowledge) and use them. In this model, this phase of the process of generating knowledge is called "combination", because the individual simultaneously uses several objective kinds of knowledge using the documentations of organization and, in fact, makes them combined.

The individual makes and takes the best decision and measure by combining explicit available knowledge with his knowledge, education and personal experience and makes the organization benefitted from the results of that decision by applying a proper decision. This phase of the process of generating knowledge is called "internalization".

Increasing competitive backgrounds at areal and global level, developing privatization, rapid growth of the borders of knowledge and technology, ever-increasing development of human factors in accessing steady competitive advantages make the necessity of dealing with KM explicit than ever so that no pioneering organization can see itself independent without it. The movement of pioneering and dynamic towards learning organizations results in mire stability of the position of KM in the strategy of development and growth of pioneering organizations.

In most of organizations, the use of employees' tacit knowledge in the direction of their explicit knowledge in order to improve the performance level of organization is unavoidable. For this purpose, the appropriate atmosphere for transferring this knowledge and making employees in contact with each other should be provided, because tacit knowledge often transfers through language, body, and physical exhibition of skills [11].

The Ways of Using the Four Phases of Nonaka Model

A) First Phase: Socialization:

In order to create a safe space for interchanging experience, individual's different kinds of education and his hidden acquired knowledge to other individual, observing the following points seems indispensable:

1. Creating a safe and warm environment among the personnel of organization in order to interchange their experience
2. Providing studying opportunities for the personnel regarding with the services they offer in the organization
3. Holding in-service courses in order to achieve other colleagues' knowledge
4. Providing the preliminaries of increasing personnel's interaction with each other
5. Creating interest in the employees aiming at providing our knowledge to the other personnel of organization
6. Promoting knowledge and personnel's view concerning the importance of KM

7. Increasing the stay time of personnel in the appointed posts
8. The tendency of organization's individuals in doing group works

B) **Second Phase: Externalization:**

It is used for manifesting individual's knowledge who obtained required information and knowledge according to the issue, which is made for it. Lin and Umoh in 2002 believe that with the advent of information and communication technologies, not only traditional saving and transferring methods are completed, but also it has the improvement and efficiency of the mechanisms of transferring general knowledge [27]. Technologies such as the Internet and depended technologies and electronic portals help organizations to integrate knowledge with their own working procedure. Organizations should make policies and procedures in order to develop KM using information technology [27].

IT-based systems are created to support and promote creation processes, saving, transference and employing organizational knowledge and the success of organizations, to a large extent, depends on the collection, analysis, consistency and interchange of information outside and inside them.

Organizations are successful in externalization, which their personnel are familiar with documentation and can convert the gained knowledge to explicit one and knowledge when would be explicit that the individual can deliver it to other individuals. In conferences and workshops, individuals' awareness regarding information and documentation methods can be promoted, but knowledge promotion for conducting documentation and making knowledge explicit is not sufficient and the individual's attitude should be changed. Changing individual's attitude for making knowledge explicit and documentation requires changing culture and creating moral commitment. The appropriate ways of accessing the second phase include:
1. The stratagem of the preliminaries of employing information and communication technologies in making knowledge explicit.
2. Communicative infrastructures in terms of computer networks for transferring information in organizations should be provided.
3. Preparing the space for documentation in various digital or non-digital forms.
4. Supporting personnel financially and psychologically in publishing knowledge.
5. Disseminating the culture of making tacit knowledge explicit and satisfaction in individuals who offer knowledge to others.
6. Holding educational courses of public relations and communications.
7. Identifying and appreciating active individuals in the second phase of Nonaka.
8. Applying change management regarding the reduction of individuals' resistance in organization against documentation and publishing knowledge and believing the slogans and values of organization by the employees.
9. Participation of research sections and public relations of organization with individuals in publishing knowledge.
10. The authorities' supervision over documentations designed by personnel.
11. Designing the process of extracting individuals' knowledge.

C) **Third Phase: Combination:**

A suitable background for accessing the published documentations and using them should be provided so that the individual can use several objective kinds of knowledge of the documentations of organization simultaneously and, in fact, combine them with each other. For this purpose, the availability of the published documentations, creating interests in the personnel and encouraging them for using documentation and their fidelity to the goals of organization and the role of updating themselves in achieving the goals of organization are necessary. The suggestive ways in traversing the third phase include:
1. Creating the need to use objective knowledge in individuals
2. Fidelity and commitment feeling in individuals for the goals of organization and realizing their indispensable role after gaining objective knowledge in achieving the goals of organization
3. Holding conferences with the approach of gaining objective knowledge in the personnel
4. Increasing staying time in job
5. Creating interest in individuals for studying objective knowledge
6. Granting special privileges to active personnel in using objective knowledge

D) **Fourth Phase: Internalization:**

The following point should be taken into consideration for the individual can have the best measures and decisions in the organization through combining explicit available knowledge with his knowledge, education and personal experience:

1. The experts of organization should master software relevant with their own expertness
2. Authorities' supervision and analysis and appreciating the best measures as the result of explicit knowledge
3. Encouraging personnel to use explicit knowledge in organizational measures
4. Designing accessible bank of explicit knowledge for personnel's measures and decisions in organization
5. Identifying individuals who use explicit knowledge in the direction of optimizing activities
6. Granting rewards to individuals who use expect knowledge

7. Creating motivation and making employees interested in using and combining explicit knowledge

8. And finally, according to the snail nature of Nonaka model, organizations should provide the necessities of dynamism so that each phases completes its previous phases internalizing knowledge in organization and generating new kinds of knowledge.

CONCLUSION

Implementing KM appropriately and successfully helps the organization in achieving goals and perspective and will have good achievements. Different models are suggested by experts in order to apply KM.

Nonaka model is one of the models of knowledge cycle. The models of knowledge cycle describes the processes of knowledge cycle and have the highest efficiency in the models of KM. this group of models are recognized as fundamental models for developing KM and the way of interacting between tacit knowledge and explicit knowledge. The focus of this group of models is mostly on the processes of identifying, developing, creating, sharing and publishing knowledge in organization. The obtained results concerning the research questions in Nonaka model indicate that:

The first research question: what are the constitutive elements of Nonaka Model of knowledge management? The obtained results of Nonaka Knowledge cycle indicate that this model is consisted of four phases and four elements. The first phase is socialization in other words, move from experience, individuals' different education and their hidden knowledge to other individuals' hidden knowledge. The second phase is externalization in order to manifest an individual's tacit knowledge who has obtained the required information and knowledge in respect to the made problem for it. The basis of this phase is disseminating and manifesting knowledge. The third phase is the stage of combination so that the individual can use several kinds of objective knowledge of the documentations of organization simultaneously and in fact, combines them. The last phase is internalization so that the individual takes and makes the best actions and decisions in organization by combining available explicit knowledge with his education and personal experience.

The obtained results regarding the second research question "what are the phases of performing Nonaka Model?" indicate that Nonaka Model is consisted of four snail phases including socialization, externalization, combination and internalization. The four phases mentioned above continue constantly and in a snail-form move so that each phases completes its previous phases internalizing knowledge in organization and generating new kinds of knowledge.

Regarding the third research question "what are the ways of using Nonaka Model of knowledge management in organization?" according to the four phases of Nonaka Model, the following solutions and ways are suggested in order to reach each of the four phases:

A) First Phase: Socialization:
- Creating a safe and warm environment among the personnel of organization in order to interchange their experience
- Providing studying opportunities for the personnel regarding with the services they offer in the organization
- Holding in-service courses in order to achieve other colleagues' knowledge
- Providing the preliminaries of increasing personnel's interaction with each other
- Creating interest in the employees aiming at providing our knowledge to the other personnel of organization
- Promoting knowledge and personnel's view concerning the importance of KM
- Increasing the stay time of personnel in the appointed posts

B) Second Phase: Externalization:
- The stratagem of the preliminaries of employing information and communication technologies in making knowledge explicit.
- Communicative infrastructures in terms of computer networks for transferring information in organizations should be provided.
- Preparing the space for documentation in various digital or non-digital forms.
- Supporting personnel financially and psychologically in publishing knowledge.
- Disseminating the culture of making tacit knowledge explicit and satisfaction in individuals who offer knowledge to others.
- Holding educational courses of public relations and communications
- Identifying and appreciating active individuals in the second phase of Nonaka
- Applying change management regarding the reduction of individuals' resistance in organization against documentation and publishing knowledge and believing the slogans and values of organization by the employees.
- Participation of research sections and public relations of organization with individuals in publishing knowledge.
- The authorities' supervision over documentations designed by personnel.
- Designing the process of extracting individuals' knowledge.

C) Third Phase: Combination:
- Creating the need to use objective knowledge in individuals
- Fidelity and commitment feeling in individuals for the goals of organization and realizing their indispensable role after gaining objective knowledge in achieving the goals of organization

- Holding conferences with the approach of gaining objective knowledge in the personnel
- Increasing staying time in job
- Creating interest in individuals for studying objective knowledge
- Granting special privileges to active personnel in using objective knowledge

D) Fourth Phase: Internalization:
- The experts of organization should master software relevant with their own expertness
- Authorities' supervision and analysis and appreciating the best measures as the result of explicit knowledge
- Encouraging personnel to use explicit knowledge in organizational measures
- Designing accessible bank of explicit knowledge for personnel's measures and decisions in organization
- Identifying individuals who use explicit knowledge in the direction of optimizing activities
- Granting rewards to individuals who use expect knowledge
- Creating motivation and making employees interested in using and combining explicit knowledge

Suggestions
The following suggestions are made for organizations and other researchers for the dynamism of organizations and useful use of individuals' knowledge:
- The stratagem of the preliminaries of implementing the ways of using Nonaka Model-based KM
- Promoting the culture of using tacit and explicit knowledge in order to offer better services in organizations
- Forming a bank of individuals' knowledge of organization
- Top managers should provide the background for encouraging the personnel towards KM
- Researchers should investigate the circumstance of applying other models in organizations
- Researchers should study the application of KM in educational organizations

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