

## Study about the Pattern of Knowledge Management in (Glenview) Healthcare Service Provider

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**Abstract:** In many organizations have not enough information about individual knowledge. This health care centers and hospitals in the communities responsible for health promotion increasingly are important. Effective knowledge management by focusing on solutions that encompasses the whole system, including the most important tools for this information is considered. Therefore, using of knowledge management for increasing the efficiency of these centers as a tool for productivity would benefit. This cross sectional study to evaluate status and level of knowledge about non-physician staff in a health care center. Data collection was conducted by questionnaire. Average of values and weight were calculated for all questions and standard. The end result is a numeric between 1 and 5 that shows the position of knowledge by this description: less than 2: poor knowledge, 2 to 3: relative knowledge existence, 3 and 4: acceptance knowledge and more than 4: desirable. Among the non-physician staff, 72 were selected randomly and questionnaires were distributed among them. Number of right completed questionnaires collected, is 47 cases (20 persons write incomplete and 5 did not fully answer the questions). Total score of observed health care center is equal 2.77 namely the non-physician staff of this center has respective knowledge about their works. According to the score list, raised problems, the desired center need to implement infrastructure of knowledge projects in organization and new personals and youth should appropriate training programs had served during work time even understanding knowledge factors as an important investment to take organizational foundation.

**Key words:** Knowledge management • Pattern • Nonaka model • Healthcare service provider

### INTRODUCTION

There is not enough information about staffs' individual knowledge in many organizations. Effective knowledge management by focusing on solutions that encompasses the whole organization, including the most important information tools for this matter is considered. Knowledge management is the art of value creation about invisible assets or capital and intellectual property of fact. Clear and systematic management of knowledge and processes of creation, collected, organized, distribution and use is related to a conscious process includes creating of knowledge, accreditation of knowledge, knowledge provide, distributed knowledge and its application. For designing of knowledge management system and improve its level in an organization, it is necessary to first fully understand the nature and

importance of knowledge and knowledge management and knowledge was components and functions and its Implications to achieve strategic advantages from making knowledge management implementation in the organization, the platforms and areas of success and how interaction and balance between these factors, special attention was paid. Knowledge Management helps organizations to use from new knowledge from existing knowledge by advantages [1-5].

Organizations were used some methods for improving performance and management such as TQM (total quality management) and BPR (business process reengineering) current years. Expert systems and systems DSS (decision support system) and development of information technology development for knowledge and experience sharing and knowledge management literature was introduced slowly [6-10].

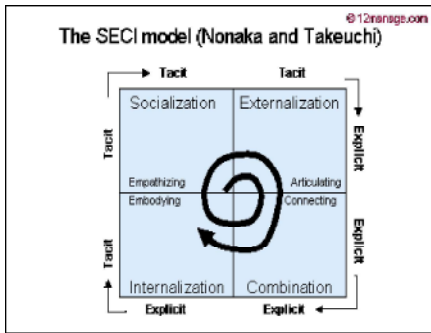


Fig. 1: SECI model of NONAKAandTAKEUCHI

Health centers and hospitals as organizations responsible for promoting health in their communities are like many other organizations at any time, suffered the pressures of relationships within and outside the field of health officials are sometimes many of boss admit deficiency of this centers explicitly and whereas the health centers and hospitals have major role in the process of providing health care and responsible for this [11]. Because the health centers play an important role in citizen satisfaction plays, if non-efficient irrecoverable strokes would be compiled to health community.

Therefore, the top treatment centers mission-improving the health community-as well as the diversity of information and health professional field as well the optimal management of limited resources and the need for increased efficiency can be centers of knowledge management as a tool would benefit to productivity [12].

In this paper, knowledge status of non-medical staff has been investigated based on nonaka and takeuchi model, in a healthcare center.

**Knowledge Management Nonaka’s Model:** Nonaka and takeuchi model, between presented models for survey of knowledge status is the only model levels of knowledge and levels of transmission to each other and separate the clear expression of this model is actually used capacity localize to create the knowledge management process [13-27].

This model, unlike the other models, focus of two obvious and hidden knowledge and had paid their way into each other and how to create the all organizational levels (individual, group and organizational) [28-30]. this model used conversion the two types of knowledge and how knowledge management in relation to spiral life cycle (spiral) according to Figure 1 and is assumed continuous process [31].

In this model is putative that only personals create the knowledge. Thus, the process of organizational knowledge production as a continuously process in which the organized knowledge that created by persons must strength and conduct.

**MATERIALS AND METHODS**

To review level and status of non-physician personals in the healthcare center likert scale questionnaire was used to measure the amount of accountable oppose or agreement [32]. Thence the model of nonaka has 8 parts, to prepare the questionnaire at first appropriate parameters for each of 8 parts, produced the questionnaire, therefore each layer of model has a questionnaire.

For validity of the questionnaire, 12 people who studied community, experts were considered, selected and questionnaires distributed between them and their opinions were collected during several steps to troubleshoot. Finally the questions were evaluated by Cochran's Q test [33]. And suitability of questions evaluated.

Main questionnaire determine persona's real knowledge status of the healthcare center (determines weight of the questions) and 8 specialized questionnaires determine the impact parameters set of persona's knowledge improvement in center (determined the value of questions). Then, average weight ( $\bar{w}_i$ ) and value ( $\bar{X}_i$ ) of each question calculated and standard by using the following formula.

$$V = \frac{\sum_i \bar{X}_i * \bar{w}_i}{\sum_i \bar{w}_i}$$

Consequently, the above function makes a number between 1 and 5 that classify following:

Less than 2: poor knowledge, 2 to 3: The relative knowledge, 3 to 4: acceptance knowledge and more than 4: favorite knowledge.

**RESULTS**

Among the non-physician staff of healthcare center, 72 were randomly selected and described the goals for their research, questionnaires were distributed among selected to complete the must return. Number of questionnaires collected properly and 47 respectively.

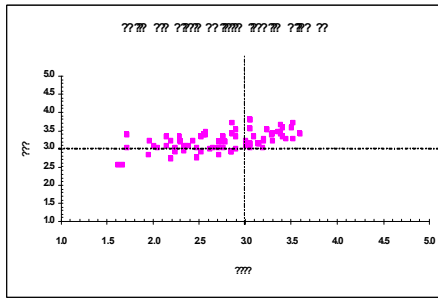


Diagram 1: The most achieved points

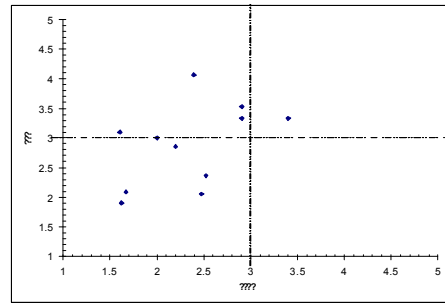


Diagram 5: The situation of personal explicit knowledge level to the organizational explicit knowledge.

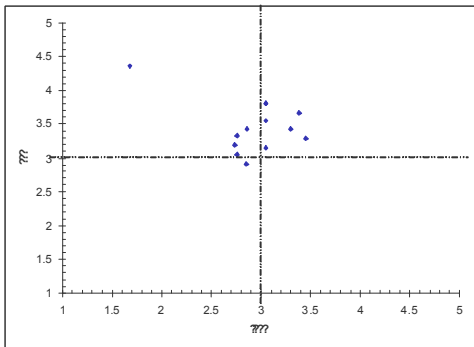


Diagram 2: The situation of the level of personal implicit knowledge in the organization

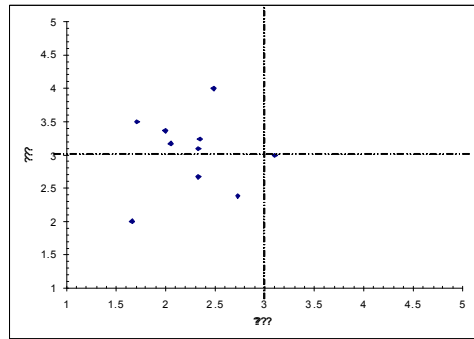


Diagram 6: The situation of organizational explicit knowledge level

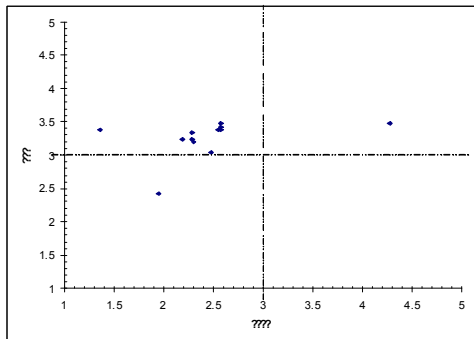


Diagram 3: The situation of expliciting personal implicit knowledge level to the personal explicit knowledge.

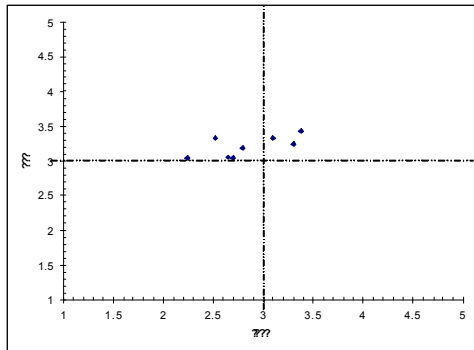


Diagram 7: The situation of the level of changing from grouping explicit knowledge to the organizational organized knowledge

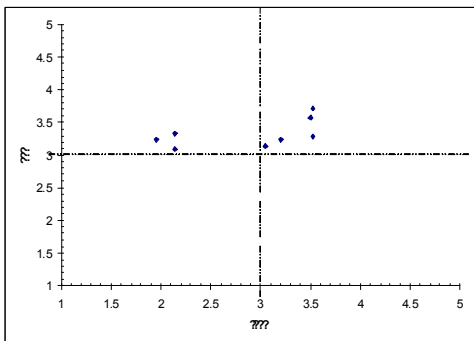


Diagram 4: The situation of personal explicit knowledge level

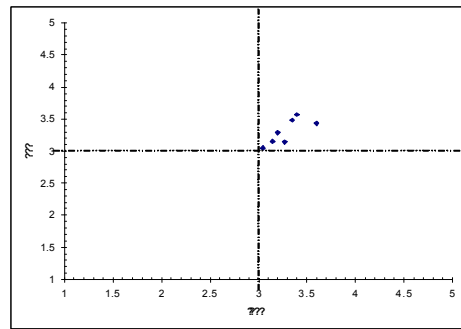


Diagram 8: The situation of the organizational implicit knowledge

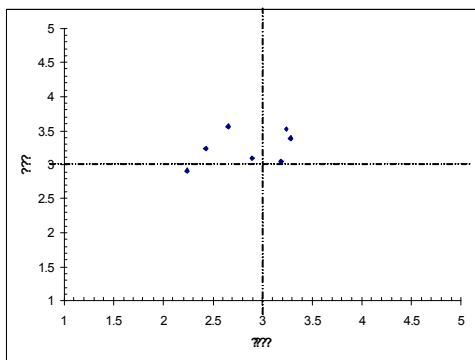


Diagram 9: The situation of the changing level from the organizational implicit knowledge to the personal explicit knowledge

20 respondents answered the questions as incomplete and 5 respondents did not answer the questions fully. 5.7% over the study higher than bachelor's degree, 64% have a bachelor's degree, 22% above high school degree and 3 / 8% are also high degree. Also, 69% of respondents were male and 31% of them are female. 75% of persons between age 25 to 45 years, 20% below the 25 and 5% are over 45 years of age.

In data analysis, the overall score of personals' knowledge is equal 2.77 that is says non-physician staff of healthcare center have desired knowledge relative to their work (Diagram 1).

The score of each nonaka and takeuchi's model section indicates that state of knowledge about the research community in general, all parts (except two cases) is average (relative existence to knowledge) and should knowledge management projects at the center of the base to promote the desired knowledge non-physician workers attempted.

Results of model calculations for 8 Parts has been shown in Table 1 and graphs 2 to 9.

### CONCLUSION

The cases mentioned in Table 1 can be concluded that observed center in part reveal individual knowledge into collective knowledge, a clear (or the same turn) and also part of a group of explicit knowledge is weaker than other parts. While this, in part or building social knowledge into categories of individual and collective knowledge implicit part of the collective knowledge institutionalization best condition compared to other parts is able. Also, the total score gained by the organization and the score obtained in each section, you said that in

total the achieved center position is not desirable and if the strategy to move towards the center axis being is knowledge, project management should knowledge on a regular basis and systematic implementation and follow-up to the center to the knowledge leads to excellence. I do this in the questionnaire should be considered cases of the center of a great importance to respondents, but its value is low in the center, are prioritizing and appropriate strategies for their knowledge management projects to determine and implement seems. In addition to the analysis performed and the scores calculated in different parts, try to list the problems are a way to phase in implementation of knowledge management and proposal for improving knowledge, could be more efficient way to act.

Based on this study about center problems and challenges can be considered the following:

- lack of existing knowledge processes for knowledge extraction of workers.
- Implement documentation procedures fail and lack of experience for the electronic system.
- Non-interest managers to make documentary at project finished.
- Low or lack of social and viewpoints conferences and presentations.
- Non-interest of staff to provide their knowledge.
- Disregard of strategic programs design in organization.
- Not optimal reward system, forming the material and knowledge Exchange.
- Do not use the conference facilities for formal and non-official exchange comments and experiences.
- Not study and research by the staff in their work.
- Lack of desire people relationships of students and professors and their low participation in educational programs
- Resistance against employees using new methods and Life Sciences.
- Being a long time to achieve the required knowledge to solve problems.
- No action to buy technical knowledge.
- Speed of new employees become familiar with the institutionalization of Life Sciences Center.
- Not enough funding for research and lack of interaction with other levels of research center.
- Non-published journal with the participation of persons.

Table 1: The situation of the studied center base of nonaka model

situation	score	Dimensions of the model
desirable	3.02	The level of personal implicit and explicit knowledge
moderate	2.41	Externalizing personal implicit knowledge to the personal explicit knowledge
moderate	2.90	The situation of the level of explicating personal knowledge
moderate	2.62	The situation of the level of changing personal explicit knowledge to the organizational explicit knowledge
moderate	2.34	The situation of the level of organizational explicit knowledge
moderate	2.85	The level of changing grouping explicit knowledge to the organizational organized knowledge
desirable	3.28	The situation of the level of the organizational organized knowledge
moderate	2.93	The situation of the level of changing organizational organized knowledge to the personal implicit knowledge

Table 2: list of the studied center s problem according to importance

Score	The produced challenges and problems through knowledge management in the studied society
110	Lack of to be process to extract employee s knowledge
108	Not to be apply experiences documentation pressures in the society and lack of using electronic system for it
105	Lack managers interest in to have projects documentary knowledge at the end of the work
103	To be few or lack of meetings and associations to present the organization knowledge achievements and presenting insights and views
88	Lack of interest in the studied society s employees to share their knowledge in the organization
85	Lack of consideration the organization to design effective plans base on increasing grow of role of knowledge from the production
83	Not to be give reward because presenting experiences and externalizing knowledge and not to be desirable material and abstract rewarding system against exchanging knowledge
81	Not to be use the organization from facilities of formal and informal meetings to exchange views and experiences
70	Lack of study and research by the organization s employees in the field of their work
70	Lack of tendency to commune cat between the master and pupil by the society s people and to be few their participation in training programs
68	The organization s employees resistance against using new methods and knowledge's
65	To be long achieving time to the required knowledge in the organization to solve the problems
65	The organization doesn't act to buy technical knowledge
64	The slow speed of the organization to familiarize the organization new employees with its organized knowledge's
55	Not to be spend fund to do researches to corporate client s need and lack of interaction between the organization research department and other parts of it
52	Not to be publish publication with participating the organization s people in the field of production knowledge

Validity to the problems or challenges (not the same problems or challenges) they re experts and the research community involved and one of them was requested to problems and challenges obtained according to importance, they Scoring (16 points to the most important problem and the lowest is 1). The results obtained using the Friedman test was analyzed [15].

Based on test results be the same problems or challenges are rejected ( $P < 0.001$ ). In other words, problems and challenges identified in the organization the same weight are not equal. Final result inserted in Table 2 (which sorted problems are based on experts). In fact, the low facilities, must according to the desired center cases considered in Table 2, to solve problems and engage.

**Suggestions and Strategies:** The desired scores by the practice list, in healthcare center and problems related to, it seems, the center need to implement infrastructure projects and the knowledge infrastructure. This infrastructure includes human resources as the most important part is included and technological facilities.

On the other hand should center for young people new to training programs while at work is appropriate to the importance of knowledge factors as an important investment to take organizational foundation. Facilities must also parts of their health than before realizing the importance of knowledge assets to. The importance of creativity and innovation is also noted staff. Also in terms of organization, dynamic interaction with visitors and patients and, above all, a system designed to encourage and reward good yield for those who seriously task Affairs performs, including strategies for promoting efficient organization is knowledge. System of documentation of the experiences that other cases should be sure to pay attention. On the other hand to create technological infrastructure such as internal network (Intranet Organization), experience electronic documentation system designed to prevent bureaucracy, is holding formal and informal conferences, database design and using high technology as the important day for move towards becoming knowledge based organization.

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