

## Knowledge Creation And The Seci Model

**Harpreet Kaur<sup>1</sup>**

### Abstract

Knowledge is sharing one's view points, feelings and experiences with others. Knowledge is created through social interaction between tacit and explicit knowledge. It gives birth to both knowledge creation and its generation. Knowledge creation is a synthesizing process of mental, emotional and active knowledge, through which an organization interacts with individuals and the environment to transcend emerging contradictions that the organization faces. Knowledge generation refers to the activities that increase the stock of organizational knowledge. Ikujiro Nonaka and his colleagues proposed the SECI (Socialization-Externalization-Combination-Internalization) model of organizational knowledge creation, which achieved paradigmatic status since its publication in 1991. Because of this model, knowledge flows easily through different levels of organization. Basically, there is tacit knowledge and explicit knowledge that revolve around this model. In SECI model knowledge creation begins with socialization (S), continues with externalization (E), combination (C), and internalization (I), before returning to socialization, but at a new level, hence the metaphor of a spiral of knowledge creation is created in the organization. This paper contributes to our understanding of knowledge creation by developing a comprehensive model of the knowledge creating process in organisational work teams.

**Keywords:** Knowledge, Knowledge creation, SECI model, tacit knowledge, explicit knowledge

1 Research Student ,MCM DAV College for Women, Sector 36A, Chandigarh

### Introduction

The advocates of the knowledge Based-view of the organization (Nonaka and his colleagues) emphasize that the two predominant goals of the organization are the generation and the application of knowledge. Knowledge is a familiarity, awareness or

understanding of someone or something, such as facts, truths, or principles, which is acquired through experience or education by perceiving, discovering, or learning. It is the body of truths or facts accumulated in the course of time. Therefore, it emphasizes that knowledge is essentially related to human action.

Knowledge Management is about getting the right knowledge to the right person at the right time in an organization. It refers to a multi-disciplined approach to achieving organizational objectives by comprehensively gathering, organizing, sharing and analyzing its knowledge in terms of resources, documents, and people skills. It is based on the idea that an organization's most valuable resource is the knowledge of its people. Thus, Knowledge Management is the concept of professional practice which improves the capabilities of human resources of the organization and enhances their ability to share what they know.

This paper presents the deep understanding of the concepts of organizational knowledge creation and the SECI model of knowledge conversion. The SECI model has been proposed by Ikujiro Nonaka, Hirotaka Takeuchi, George Von Krogh and others in 1991. According to this model, four distinct knowledge interactions can be found out between the tacit knowledge and explicit knowledge.

## **REVIEW OF LITERATURE**

Nonaka et al. (1994) conducted a confirmatory factor analysis to test a priori model of organizational knowledge creation with data collected from 105 Japanese middle managers. The results provided strong support for viewing organizational knowledge creation as a higher-order construct comprised of four knowledge conversion processes: socialization, externalization, combination, and internalization.

Nonaka (1994) proposed a paradigm for managing the dynamic aspects of organizational knowledge creating processes created through a continuous dialogue between tacit and explicit knowledge. The nature of this dialogue is examined and four patterns of interaction involving tacit and explicit knowledge are identified. They also argued that new knowledge is developed by individuals and organizations play a critical role in articulating and amplifying that knowledge. For this they developed a theoretical framework which is then applied in two operational models for facilitating the dynamic creation of appropriate organizational knowledge.

Nonaka et al. (2000) recognized importance of knowledge and its dynamic process, in which an organization creates, maintains and exploits knowledge. They proposed a model of knowledge creation consisting of three elements: (i) the SECI process, knowledge creation through the conversion of tacit and explicit knowledge; (ii) 'ba', the shared context for knowledge creation; and (iii) knowledge assets, the inputs, outputs and moderators of the knowledge-creating process.

Bratianu and Orzea (2010) critically discussed and analyzed the important models of organizational knowledge creation such as *Nonaka's model*, *Nissen's model*, *Boisot's model*, and the *SECI model*. They also presented the main determinants of the knowledge creation process and made an overview of the state-of-the-art of knowledge creation.

Ramírez et al. (2011) analyzed how the 4 modes of knowledge conversion affect organizational learning and the results of the organization and took a sample of 284 Spanish companies. The results showed firstly that there is a positive relation between the modes of knowledge creation, secondly, knowledge creation influences organizational learning as an essential part of Knowledge Management and thirdly, knowledge creation and organizational learning can create a new approach of continuous improvement leading to the increase of organizational performance.

## **RESEARCH METHODOLOGY**

### **A. Research Design:**

Here the research design is descriptive in nature and the paper contains the theoretical review of scientific literature on SECI model of organizational knowledge creation.

### **B. Sources of Data:**

The data is collected from secondary sources like different web links, articles, books, journals, magazines and old research papers.

### **C. Objectives of the Study:** The primary objective is:

- a) To study the concepts of knowledge, knowledge management and knowledge creation.
- b) To study about the SECI model of knowledge creation and its elements.

### **D. Limitations of the Study:**

The study is based on secondary data. Due to shortage of time and non-availability of resources it was difficult to collect the primary data.

## **KNOWLEDGECREATION**

Knowledge creation, according to the Nonaka's SECI model, is about continuous transfer, combination, and conversion of the different types of knowledge, as users practice, interact, and learn. Beyond this, knowledge creation is also supported by relevant information and data which can improve decisions and serve as building blocks in the creation of new knowledge. The ability to create new knowledge is often at the heart of the organization's competitive advantage.

Organizational knowledge creation is the process of making available and amplifying knowledge created by individuals as well as crystallizing and connecting it to an organization's knowledge system. In other words, what individuals come to know in their (work-) life benefits their colleagues and, eventually, the larger organization.

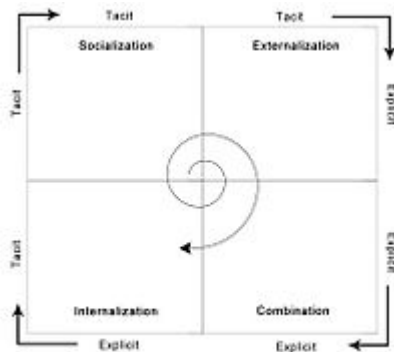
## **SECI MODEL OF KNOWLEDGE CREATION**

Nonaka and his colleagues developed the theory of organizational knowledge creation that originated from experiments in innovating companies. Hence, they developed a SECI matrix of knowledge conversion which consisted of two main dimensions:-

- i. **Epistemological Dimension:** It is a site of social interaction that describes the transformation of tacit knowledge to explicit knowledge and vice versa.
- ii. **Ontological Dimension:** It depicts the passage of transformation of knowledge from individual to group to organizational knowledge and vice versa.

Recently the above two dimensions have become three elements, namely, the SECI model; a shared context of knowledge creation; and, the knowledge assets. SECI stands for Socialization-Externalization-Combination-Internalization. It comes out of research in knowledge management which assumes that knowledge is created through synergies between knowledge holders (both individual and group) within a supportive and developmental organizational context. The elements of SECI model are as below:

**Figure 1: SECI Model of Knowledge Creation**



**i. Socialization (Tacit to Tacit):**

Socialization is the process of converting an individual’s tacit knowledge into social interactions by sharing one’s feelings, emotions, experiences and mental model with others in the organization. The individuals may not only be workers of the same department or organization but the interaction of employees with their customers and suppliers is suggested. However, Socialization must stimulate deeper layers of experiences and stored knowledge apart from everyday dialogues and exchange of neutral phrases.

**ii. Externalization (Tacit to Explicit):**

Externalization is an individual process through which the tacit knowledge, gained from Socialization, is transformed into explicit knowledge, thus allowing it to be shared, disseminated and transferred to others in the organization. It is done through the use of ideas, images, and concepts, figurative and visual language. The efficiency of this process depends upon the level of education and motivation.

**iii. Combination (Explicit to Explicit):**

Combination is a social process in which explicit knowledge is collected, combined and edited from Externalization and then processed to form new knowledge, by using documents and databases. Then the new explicit knowledge is disseminated among various employees of the organization to make it more usable. The success of this process is based on the communication and diffusion processes of explicit knowledge and the efficient use of computerization and systemization.

#### iv. Internalization (Explicit to Tacit):

Internalization is the closing the circle of knowledge creation. It reflects the transformation of explicit knowledge into tacit knowledge through continuous individual and collective interactions. In this process, the old explicit concepts obtained from Combination are updated, expanded, extended, transformed and then shared by the individuals of the organization in their own tacit knowledge, according to their own styles and experiences, thus, starting again a new cycle.

#### Conclusion

After Internalization the process continues at a new 'level', hence the metaphor of a "spiral" of knowledge creation is developed. In this way the process of SECI model goes around. Here, Socialization and Combination are processes of transformation of knowledge from one form to another in a social context, while Externalization and Internalization are processes of knowledge conversion at the individual level in the organization. Organizational knowledge creation is a continuous process, where the horizontal field of forces is generated by the **epistemological nature of the individual learning process**, and the vertical field of forces is generated by the ontological nature of the organization.

But it has been noted that it is very difficult to conduct empirical research on SECI framework because of its philosophical nature. Also, the concept of Socialization, Externalization, Combination and Internalization is based on Japanese culture, so it does not fits into the cultures of other countries so well.

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