

The Cognitive Dimension of Tacit Knowledge Based on HIP & SIP: Can It Be Manage by the CEO?

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Outline

- Introduction
 - What is the aim of this study?
 - How can we explain **Human Information Processing (HIP)** & **Social Information Processing(SIP)**?
 - What are the features of cognitive dimensions of tacit knowledge?
- Understanding HIP
- Determine of SIP
- The Breif Explanation of Tacit Knowledge
- Managing Tacit Knowledge: Is it Possible?
- Conclusions: Diffuculties of managing and sharing tacit knowledge by the CEO

The aim of this study is....

- to define the appearance of tacit knowledge in HIP and SIP.
- attempt to present tacit knowledge in the context of cognitive dimension which is based on organizational cognition and organizational learning.
- to make two contributions to the knowledge management literature:
 1. the creation phase of tacit knowledge starts with HIP and the formation phase which includes SIP.
 2. about the difficulties of managing tacit knowledge in organizations by the CEO.

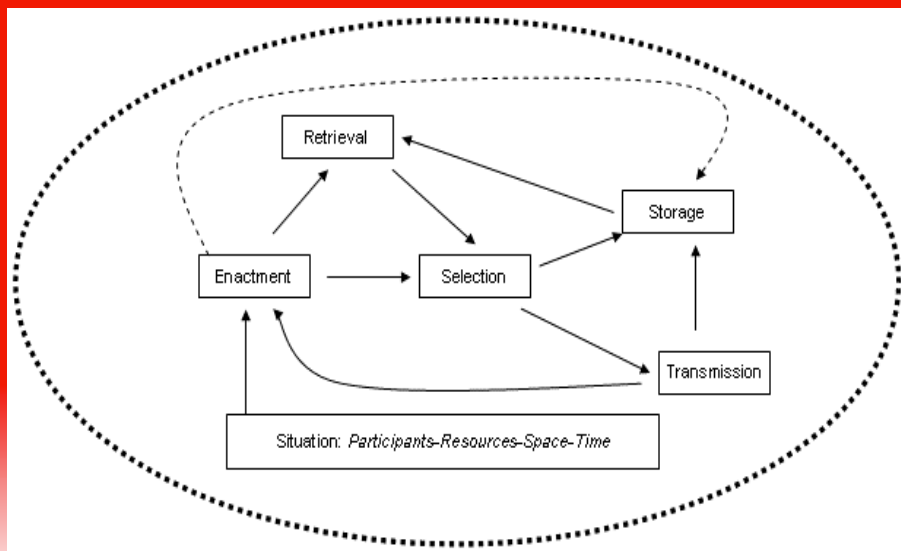
Understanding HIP

- Since the definition of HIP is very difficult to explain and a very broad topic, we try to limit it, in the context of mental modeling.
- HIP is related to human memory. In other words, some authors define it as “a person-based processing” [4]. There are two kinds of memory in literature. Short-term and long-term memory.

Short & Long Term Memory

- Short-term memory is a work space in which only so many tasks can be performed and has only limited capacity
- Long-term memory is contained knowledge structures which includes tacit knowledge. Therefore, we can easily say, tacit knowledge creates in the long-term memory.

SERTS Model



According to SERSTS Model;

- Tacit knowledge is one of the most important process in the level of individual/organizational cognition.
- At the creation process of tacit knowledge, information which is enacted by the environment and stored in the memory with reduction.

“What knowledge is contained in an mental model?”

- There are three components in mental model:
 1. **Context information: targets & constraints, operating procedures, dynamic models**
 2. **When context changes/ triggers**
 3. **Others:**
 - **a.Schemata:** static data structures in memory “called” into the mental model
 - **b.Frames:** hierarchical data structures containing essential characteristics in fixed nodes at top, then progressively less essential characteristics down the frame; similar applicability as schemata
 - **c.Scripts and Scenarios: concentrated more in language comprehension**

How knowledge representations is used by individuals in organizations?

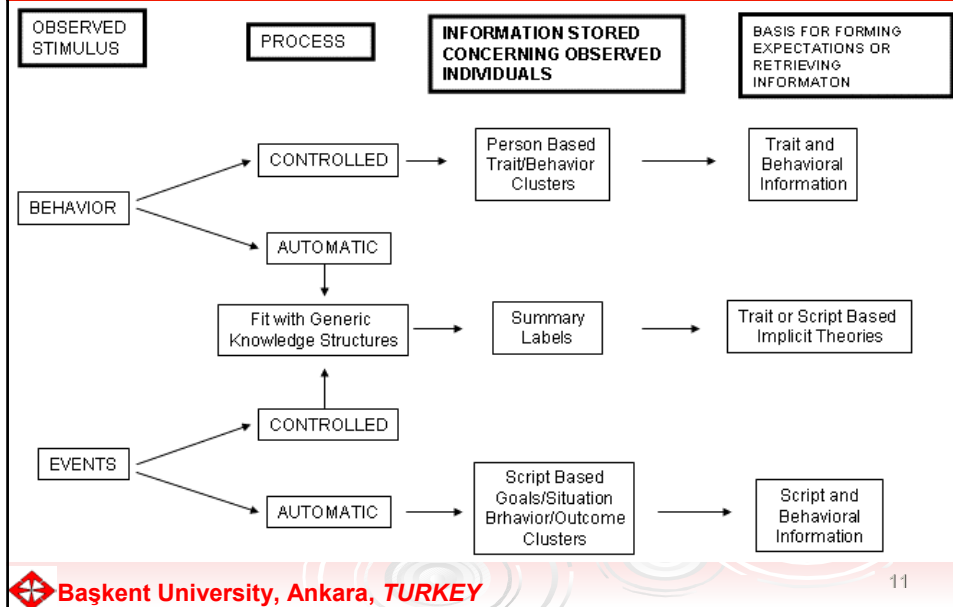
- 1-The enactment selection retention model.
- 2-Computational-representational model of information processing
- 3-Limited attention to issues and schemas.
- 4-Situated cognition.
- 5-Dynamic control
- 6-Social, cultural, and economic embeddedness.
- 7-Social system regulations

The Determine of Social Information Processing

(SIP)

- SIP can not be thought without it is embedded to each other.
- Concerning HIP, situated cognition, dynamic control, social, cultural, economic embeddedness, and social system regulations (4,5,6,7). are occurred social and organizational level because individuals interact with their physical and social environment after the created tacit knowledge on HIP-based in their mind. For this reason, in order to appear tacit knowledge depends on SIP after creating and providing tacit knowledge through HIP in organizational settings.

Model of Social Information Processing Based on Behavior and Event Schemas



Nonaka's SECI Model

- Sharing tacit knowledge between actors, is considered a socialization process (externalization or knowledge transfer as the individual or group of individuals shared knowledge or 'know-how' with each other or within the group).
- Another socialization process is come from Nonaka's SECI Model. Nonaka and Konno have created a model of knowledge creation in this model which consists four modes:
- **1-Socialization** (we need this process in order to learn new knowledge and enable to share, diffuse, disseminate and manage tacit knowledge).
- **2-Externalization** (Tacit knowledge becomes explicit knowledge through externalization).
- **3-Combination** (Explicit knowledge is shared through a combination process)
- **4-Internalization** (Explicit knowledge becomes tacit through this process)

Socialization

- Socialization includes the essential social interaction that is needed to learn new knowledge. As many scientist claim, learning is a social action and interaction is needed to be able to learn
- Tacit knowledge is shared through the deep socialization of a project team, or what we call a microcommunity of knowledge.
- Socialization means that members of the community not only come to understand each other's definition of shared situations, but also agree on a common definition and justified true belief about how to act in that situation

The Brief Explanation of Tacit Knowledge

- Tacit knowledge can be created by HIP and appeared by SIP in organizations.
- There are two dimesions of tacit knowledge: Cognitive & Technical.
- *Cognitive dimension* consists of beliefs, ideals, values, schemata, and mental models which are mentioned above in the HIP and SIP sections.

Tacit knowledge is...

a personal form of a knowledge, which individuals can only obtain from direct experience in a given domain. It is held in a non-verbal form, and therefore the holder can not provide a useful verbal explanation to another individual. Individuals and firms might choose to keep their knowledge tacit in order to prevent its transfer and diffusion and thereby, maintain a competitive advantage.

Tacit knowledge includes...

- relationship, norms, values, and standart operating procedures. Because tacit knowledge is much harder to detail, copy, and distribute, it can be sustainable sources of competitive advantage. What increasingly differentiates success and failure is how well you locate, leverage, and blend available explicit knowledge with internally generated tacit knowledge.

Consequently,

- knowledge that helps to product of our behaviour and constitute of mental modeling. We may control our attitudes, behaviour, values, and ideas through tacit knowledge which emerges in the mind of people. Also both the dimension of cognitive and technical tacit knowledge might be shaped our entacted environment.

Managing Tacit Knowledge: Is it Possible?

- While talking about management of tacit knowledge, we should emphasize that it occurs in the organizational level. Therefore, the question of whether it can be managed by the CEO's or top managers becomes crucial.

Can we ask these ?

- **Could it be possible to say that tacit knowledge can be managed by CEO and top managers which shapes organizations behave and think?**
- **What are the opportunities related to managing tacit knowledge?**

- Technical dimension of tacit knowledge would be possible if certain conditions in the organization are available
- Managing tacit knowledge is a significant challenge in the business world and it requires more than mere awareness of barriers.
- The barriers of sharing the tacit knowledge are the same with the ones concerning its management.

The Barriers of Managing Tacit Knowledge

- 1-Hierarchies
- 2-Strong preferences for analysis over intuition
- 3-Penalties for failure
- 4-Strong preferences for a particular type of communication
- 5-Fear of failing to express the inexpressible
- 6-Inequality in status among the participants
- 7-Uneasiness of expressing emotional life experiences
- 8-Distance

**If this barriers are
overcomed in the organization,
sharing and managing tacit
knowledge becomes possible.**

Managing Tacit Knowledge Components

- Following the HIP for each participant in organization
- The establishment of human relations mechanisms through the SIP
- Using the means of like the powerful organizational information and communication infrastructure and the development of knowledge management systems for opening up communication channels within the organization

Conclusions-1

- Managing knowledge is a new concept (especially explicit knowledge in organization), but managing tacit knowledge is recent which can be created in human mind (HIP) and finally appeared through socialization process (SIP).

Conclusions-2

- Tacit knowledge can be shared interaction by the people in the organizations but it is hard to articulate and difficult to transfer. For this reason, CEO enable to open communication channels in the organizations to establish the socialization process through HIP and SIP.

Consequently, although tacit knowledge management contains certain difficulties as we mentioned above, CEO's should take three crucial points into consideration while managing...

First point is...

- CEO's should observe the creation of tacit knowledge phase in HIP

Second point is...

- They should enable and control the SIP which makes the tacit knowledge elicited

Third point is...

- **By means of abolishment of the practices which constitute barriers to these stages, making tacit knowledge flow freely through the communication channels in the organizations.**

THANK YOU

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