The Role of Storytelling in Personal Knowledge Convey

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The relative difficulty of capturing and conveying knowledge is determined on the diversity of knowledge types. It is necessary to interpret the consciously capturing process of the knowledge that is formed unconsciously. Storytelling is important in the capturing and conveying of tacit knowledge. Culture, structure, system, and the knowledge holders within the organization also affect the transfer of personal knowledge. The company M, has successfully created knowledge based on transfer of personal knowledge by leveraging the organization mechanism “The board of advisors”. In order to elucidate the process, the author analyzed the recordings of the passing on contents using the protocol analysis.

Keyword: personal knowledge, storytelling, “KOMONKAI”, Protocol analysis

Introduction

The relative difficulty of capturing and conveying knowledge is determined on the diversity of knowledge types. Many existing researches in the Knowledge Management field analyzes the methods of sharing and conveying knowledge in organizational units (Garvin, 1993; Argote & Ingram, 2000; Nonaka, Hirotaka, & Katsuhiko, 1996; Davenport, Sirkka, & Beers, 1996), but this study is focused on an individual unit. Due to the difference in experience and existing knowledge in the individual units, different forms of understanding and knowledge has been transmitted knowledge.

The Personal Knowledge has implied properties as described in a number of studies. Potential properties of Personal Knowledge are not treated separately with the understanding of the conscious mind. It is necessary to interpret the consciously capturing process of the knowledge that is formed unconsciously (Carston, 2002). Storytelling is indispensable to the capturing and conveyance of tacit knowledge.

Personal Knowledge Convey

The Personal Knowledge

The definitions of knowledge are: (1) A person has acquired theoretical or practical understanding through experience or education; (2) What is known in a particular field or in general. Such as facts and information; (3) Recognition or logic obtained by the facts or experience circumstances (Matsumura, 2006). In recent years, many of the researches on “organizational knowledge” and “organizational learning” are in order to convey knowledge as more people known in enterprises. However, Due to the difference in experience and existing knowledge in the individual units, different forms of understanding and knowledge has been transmitted knowledge. Therefore, it is necessary to analyze the knowledge transfer from the perspective of “personal knowledge”.

The personal level knowledge was divided in micro point of view by Wiley (1988): intra-subjective intelligence and inter-subjective intelligence. Intra-subjective intelligence is a part of knowledge that focus only on their personal interactions with object. On the other hand, to obtain knowledge by interacting with others are similar to the intra-subjective intelligence is to get the intelligence of inter-subjectivity to be mutual constraints on the intra-subjective intelligence of others, this is inter-subjective intelligence.

Judging from the transmission side of the knowledge, the personal knowledge is not generally known and is understanding, thinking, fact, information and logic, which is hard to formulate.

Communication and Cognition

Oral communication, is a modification by the speaker of the hearer's acoustic environment, as a result of which the hearer entertains thoughts similar to the speaker's own (Sperber & Wilson, 1986). Therefore, the communication of oral is one of effective methods for the conveyance of personal knowledge.

The set of premises used in interpreting of what is being said constitutes what is generally known as the context.

A context is not limited to information about the immediate physical environment or the immediately preceding utterances: expectations about the future, scientific hypotheses or religious beliefs, anecdotal memories, general cultural assumptions, beliefs about the mental state of the speaker, may all play a role in interpretation. (Sperber & Wilson, 1986, p. 15)

While observed behavior can, in principle, be conceptualized both in purely physical terms and in mental (intentional) terms, but it is possible to conceptualize, we almost inevitably go for the latter (Sperber, 1996). Furthermore perhaps what is inexpressible (which is mysterious to me and unable to express) is the background against which I could express its meaning (Wittgenstein, 1980). Moreover recipient of knowledge interprets the catch contents on the basis of the existing knowledge and experience. With respect to this process of interpretation, first step is the removal of the ambiguity of the word. Grice (1970) states how to determine the minimal truth-conditional content of the utterance, was to be distinguished from those aspects of utterance that were considered to be irrelevant to its truth-evaluation in a particular context. Another process is implicating a part of what the speaker was trying to express. Bach (1994) maintains a distinction between what is said and what is implicated. "Explicit" part of which said is "explicate", the part of "lexical strengthening" than "explicate" is defined as "implicature", decipher extension meaning and conceptual strengthening is "implicature".

As described above, the operation of oral communication is involved in both of the transmission side and the recipient side. However, it is not easy for conveying correctly in a general transfer method. Swap et al (2001) demonstrated that the story is an effective method of communication which based on studies of cognitive science and memory mechanisms. Then he proposed it as a method of conveying information "stories teaching". Leveraging the story, I think there is a conveyance method of personal knowledge which can convey easily intention correctly for both transmission side and the receiver.

Storytelling

Weick (1995) states a good story is necessary to make sense. Potential properties of Personal Knowledge are not treated separately with the understanding of the conscious mind. It is necessary to interpret the consciously capturing process of the knowledge that is formed unconsciously (Carston, 2002).

The personal knowledge transmission process like Figure 1 is usually used in companies and schools now. At first the transmission side of the personal knowledge recalled the recollection for a certain target, then

process the story in accordance with the time of the situation and the recipient of capacity in his/her mind. Summarize the transfer point. The intention conveying mistake may be occurred in this process. In the next step, transmission side replaces the transfer point to the words, convey to the recipient of knowledge. The same as previous, the intention conveying mistake also may be occurred in this process. On the other hand, recipients of knowledge, according to the context, will interpret the transmission content based on existing knowledge and experience. By the gap between the transmission side and the recipient side about existing knowledge and experience, and understanding of the context in this process, there is a possibility of generating a large intention transmission mistake. Recipient can make corrections of each of the contents on the basis of context and the existing knowledge and experience (or through practice), organizes the process. In this process there is a possibility of generating an intention transfer mistake which may also has a possibility of modifying the intention conveying mistake. A number of personal knowledge transfer process stopped at here. While some of the recipient of the knowledge implicate in the head in order to deepen the memory, to form the received content to the story. In addition, part of the recipient continues voluntarily thinking, which can discover something new. In that case, it can be linked with the formation of new knowledge. However, in this case, the personal knowledge transmission process is inefficient for the reason that there are 4 places which have potential to generate intention transmission mistake.

Figure 1. The example of personal knowledge transmission process.

Figure 2. Storytelling of personal knowledge transmission process.

Transmission side can express in words in accordance with the thinking (or recalling) such as background, deployment of the situation, the feeling flow, the idea and other information through the story. Recipients accept the information which is “not necessary” such as background, deployment of the situation, feelings flow, the idea from the story. In this way, the recipient can have the same kind of thought process like the transmission side. Due to the same thoughts as the transmission side, in comparison with the general transmission process of personal knowledge, it can be more properly understood.

In addition, “story” has three features: (1) When explaining the situation through the story, the listener can memorize more easily (Swap, Dorothy, Mimi, & Lisa, 2001). (2) There is a high possibility that people would make the same interpretation and assumptions under the certain condition if they have similar reasoning ability. Because it can be promoted to have the same kind of thought process through the story (Sperber & Wilson, 1986), there is a high possibility that interpretation and assumptions about the story coincides. (3) Story has strong causal relationship, both of the recipient side and the transmission side accord to the change in the view, there is also a high possibility that both sides can find new things.

As stated above, storytelling is an effective method for conveying informal understanding, thinking, facts, information, logic, etc., such-called personal knowledge.

“KOMONKAI”

Culture, structure, system and the knowledge holders within the organization also affect the knowledge transfer within the company. Benefit of new knowledge can be achieved by the exchange of existing knowledge for other knowledge. It is an ideal state that can be utilized in places that need the knowledge for the benefit of the company (Nonaka, Katsuhiko, & Dai, 1996).

Culture, Structure, the Features of the System, and the Knowledge Holders

The company M, has successfully created knowledge based on transfer of personal knowledge by leveraging the organization mechanism. Because Company M has a short history and the employees’ average age is young, accumulation of personal knowledge was insufficient. However, the current annual increment such as Ordinary income rate, patent number was extending for years, and that is an upper class in the same scale of the enterprise.

The organizational culture of M.co is “to have a spirit of challenge”. Beginning from the president, the employees are always challenging new things. Therefore, they always encounter the things never experienced before, as a result new knowledge and new ideas are required. Furthermore the organizational structure is functional. It is easy to make new concepts and new products and, the employees are communicating easily in the same field. In order to support the new ideas and new products, in-house education system, such as “Light Juku” “The board of advisors” were being installed. “The board of advisors” which hired 13 site managers from some major leading companies can guide the younger employees directly through meetings and consultations at each department. “The board of advisors” is a department outside from the organizational structure. It is a collection of knowledge holders regardless of the business operations, which only focus on knowledge conveyed and solving problem such as employee training, advice in areas of responsibility and support staff. When advisors pass on personal knowledge by empirical studies, storytelling was utilized. Therefore the author collected data such as charts, documents, and voice when advisors pass on personal knowledge. In this case that was analyzing the 100 minutes recordings of the lecture what the adviser K of Intellectual Property sector is telling in the new employee training sessions by using the Protocol Analysis.

Protocol Analysis

To study the higher mental processes such as thinking process, Ericsson and Simon have established the protocol method from developing the introspective method. Protocol Analysis is a method which can analyze the cognitive processes of more scientific observation subject, by using an image extraction and word

frequency analyzing to analyze raw speech data recorded by a method such as recording. There are two reasons of taking advantage by using the Protocol Analysis. (1) It can provide a scientific methodology by using the analysis of internal cognitive processes of the individual (Kato, 1985). (2) Protocol Analysis has a wide range of utterance data as targets, such as “thinking speech”, “dialogue” and “Status utterance” (Kaiho & Harada, 1993).

Analysis Procedures

- (1) Transcribe the voice data to the character.
- (2) Divided into categories, and extracts the sentence along the terms which are determined as “personal knowledge” (see Table 1).
- (3) Extract a document belonging to the story from the voice data. Compared the sentence what represents “personal knowledge” with the documents that belong to story.
- (4) Extract technical words from each story to create a co-occurrence network diagram. Subsequently arrange co-occurrence network diagrams along the context, to compare the flow of thoughts and the target point.

Table 1

The “Personal Knowledge” Terms

Category	Terms
Thoughts, ideas or opinions	(I) think, consider, plan, imagine, etc.
Fact (It is not generally known) or experience	(I) notice, discovery, find out etc./Previous, typically, etc.
Explanation, interpretation or decision	(I) understand, recognize, identify, acknowledge, etc.

Result of Analysis

We can understand that knowledge holders who have rich experience of knowledge convey always using a lot of storytelling from the ratio of the story to the entire voice data. The conveyance side can express “personal knowledge” easily through storytelling from the sentences which express “personal knowledge” and the story of overlapping ratio.

Table 2

Compare

Category	Percentage of total	Percentage of story	Percentage of non-story
Thoughts, ideas or opinions	2.62%	3.78%	1.80%
Fact (It is not generally known) or experience	35.75%	64.91%	15.18%
Explanation, interpretation or decision	14.70%	19.81%	11.09%
Story	41.36%		

We have seen attention points and main thought of the conveyance side from the frequency and relevance of the word from Co-occurrence network diagram. Further in Figure 3 it is possible to compare the changes in the main thoughts, the status and attention points which was expressed in each story. Receiving side of the personal knowledge will understand the thinking process of conveyance side easily when the conveyance side conveying the personal knowledge by storytelling.

Figure 3. Co-occurrence network diagrams.

Conclusion

This paper defined the “personal knowledge” and organized the advantages and difficulties of oral communication. It is inefficient for the reason that there are four places which could make mistakes in intention transmission by analyzing the general transmission process of personal knowledge. On the other hand, it was found out that it was an effective method for conveying informal understanding, thinking, facts, information, logic, etc., such-called personal knowledge by analyzing the storytelling of personal knowledge conveying process.

Finally, research results about Company M were mentioned throughout the paper and what has successfully created knowledge based on transfer of personal knowledge by leveraging the organization mechanism. We have seen that conveyance side can express “personal knowledge” easily, and receiving side can also could understand the thinking process easily when the conveyance side conveying the personal knowledge by storytelling.

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