

Tacit Knowledge Transfer of Middle Level Manager and the Relationship between Knowledge Transfer Behavior and Demographic Properties: A Research on Public Enterprises

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Abstract

Knowledge is a strategic factor which provides a competitive advantage in a fierce competition environment. Sustainability of organization, which can be affected by various factors, is needed to transfer of strategic and specialized knowledge from executive to other managers and workers. But the transfer of knowledge is a complicated process, because the knowledge has cognitive or subjective traits as well as objective framework. Because of the nature of knowledge, there are some classifications about its traits. Tacit knowledge and explicit knowledge are the most common classification which emphasizes tacit knowledge is so embedded in the individual while explicit is about facts and things. From this point of view, the aim of this study is to examine the relationship between the behavior of knowledge transfer and properties of middle level manager. The sample group consists of 335 middle level managers in public enterprises in Turkey. The data were collected through a questionnaire that is reformed by the authors as 10 items with reference to Bock et al. (2005) and Göksel et al. (2010). As a result of the conducted analysis, statistical significant relationships were found between the two variables ($p < 0,01$). Finally, demographic information of the sample is seen important for researchers, professionals, and those interested in these fields.

Keywords: Tacit knowledge, knowledge transfer behavior, middle level manager

JEL Codes: D83, M19, H83

1. Introduction

Term of knowledge is considered as the basic competitive tool, which gain importance increasingly after the period of transition from industrial society to information society. Critic knowledge of the organization is a strategic factor which provides a competitive advantage in a fierce competition environment. Sustainability of organization, which is sensitive with cost, speed, quality and competition, is needed to transfer of strategic and specialized knowledge from executive to other managers. Noncompetitive organizations, which are incapable of using knowledge, are on a hiding to nothing. It is quite hard about knowledge not only to use well, but also to determinate and classify well. According to the dictionary, basic definition of knowledge is determined as a familiarity, awareness or understanding of something or someone such as skills, information and descriptions obtained via perceiving, discovering, or learning (Oxford Dictionaries, 2015). The definition of knowledge has evolved over time for what is true and a process to determine that is true or not (Morgan, 2008). Major studies about knowledge belong to Nonaka (1991) and Polanyi (1959; 1962). Polanyi (1959) presents two fundamentally different kinds of knowledge as explicit and tacit knowledge. And words, numbers, diagrams and other symbols are one each

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expression of knowledge, so they are part of explicit knowledge while unexpressed items occur tacit knowledge. Wide classification of knowledge starts from separation of individual knowledge and group knowledge. And it ends cognitive elements and technical elements as heuristic knowledge while procedural knowledge and declarative knowledge create explicit knowledge. This kind of sorting based on organizational structure, and assumes tacit and explicit knowledge both individual and social.

Resource based view of the organization and the concept of core competencies make tacit knowledge and intangible resources more important for sustainable competitive advantage. Being rare, being difficult to imitate, substitutions and transfer are essential components of an organization which might be a public or private organization. Sobal and Lei (1994) suggest that the ability of competitors to quickly acquire some types of resource, but being sustainability requires resources which are idiosyncratic and not so easily transferable or replicable. These characteristics of tacit knowledge make it different from objective knowledge. Objective knowledge, which can be communicated from its possessor to another person in symbolic form, has two main frameworks. Firstly, it can be readily written, drawn, encoded, explained or understood, so it is communicability. Secondly, it can be shared and there is no possession problem about it (Winter, 1987). Polanyi (1962) emphasizes the differences between two kinds of knowledge like this "I shall reconsider human knowledge by starting from the fact that we can know more than we can tell". This special approach shows that people have the power to know more than they can tell, so this rule obtains in organizations too.

In the organizational structure, tacit knowledge cannot explain the decision rules that underline their performance because it is personal knowledge. According to the Sternberg (1994) tacit knowledge has a cognitive dimension, so it can consist of mental models that individuals follow in certain situations. This approach can explain why tacit knowledge is so embedded in the individual and why it is attached to the knower (Ambrosini and Bowman, 2001). Although this knowledge cannot be expressed, it is very practical for business life because of being a part of the resources. In this perspective, tacit knowledge is very similar to know-how, because it consists partly of technical skills (Kogut and Zander, 1992). Similarly, know-how has intangible characteristics which are informal and hard to copy. According to the Sternberg (1994) tacit knowledge has a specific context which acquire on the job or in the situation where it is used. It means that tacit knowledge is deeply rooted in action or a specific context. In business life, it can be seen with a craft, profession, and particular technology. Even, it is an element of the activities of a work group, team or organization.

Differently, cognitive psychologist's sort knowledge in three categories as declarative, procedural and strategic. According to this classification, declarative knowledge consists of descriptions of facts and things or of methods and procedures (Anderson, 1976). So it can be said that it is an instance of explicit knowledge. Procedural knowledge is reflected in skills such as motor, manual, cognitive or mental skills and it is knowledge that manifests itself when doing something, like tacit knowledge. Also, procedural knowledge is the steps of a task or procedure and this point makes it similar with declarative knowledge. Because when a task is described step by step, it includes details about what, when, how it must be done with declarative knowledge. Lastly, strategic knowledge is referred know-when and know-why (Nickols, 2000). Sometimes this kind of knowledge is difficult to describe in this classification. Thus, it can be thought of as a subset of declarative knowledge instead of its own category.

Mechanism of transferring and coding of tacit knowledge requires close interaction and the buildup of shared understanding and trust among them. Because, tacit knowledge is intuitive and unarticulated, that cannot be used without the knowing subject. Also main methods for accumulation and acquisition of tacit knowledge can only be occurred through

practical experience in the relevant context. Mode of appropriation and potential of aggregation have not a single location, so it cannot be stored in objective forms without the participation of the knowing subject (Lam, 2000). Because of the personal contextual, it is distributive and disaggregated. This structure is needed for attention of the close involvement and cooperation of the knowing subject. In the organizational structure, this attention must be given by a manager who wants to achieve goals with advancing effective communication.

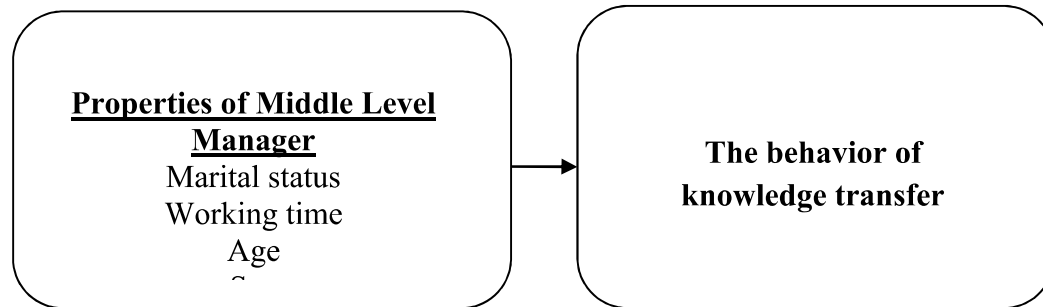
Facts and things are needed to describe and decelerate by attaching to the procedural process of organization with motor and mental skills. In this process, if the knowledge can be articulated, it can be explicit, while others are tacit. So, transfer of tacit knowledge can increase the positive outcomes provided that organizational structure gives employee opportunities. Culture of the organization is as important as management approach which supports individual knowledge. Creation and transfer of knowledge have four ways as “tacit to tacit”, “explicit to explicit”, “tacit to explicit”, “explicit to tacit”. According to the Nonaka (1991), first one is about acquiring someone else’s tacit knowledge through observation, imitation and practice. Second one is about combining discrete pieces of explicit knowledge to form new explicit knowledge such as the results of data analyzes. Third one is tacit to explicit which can be explored and managed hardly. With some rules and principles or descriptions of procedures, some useful declarative knowledge can be provided to create new product or process. The last one is explicit to tacit, which means internalizing explicit knowledge.

No matter which way is using in the organization, the first step of transferring knowledge is to recognize that the acquisitions of procedural knowledge occurs in very different pattern. Second, it is possible to acquire tacit knowledge with the help of verbal descriptions, although it cannot be reduced entirely to words. Third, knowledge must be managed with all variations and permutations of knowledge (Nickols, 2000). Also, the degree of tacitness affects the success of using the tacit knowledge. In the organizational structure, there are two anchor points from explicit skills to tacit skills. In between these two points, there are at least two other degrees of tacitness. First one is tacit knowledge that can be articulated readily from organizational members by asking. The other one is tacit skills that can be imperfectly articulated and become tacit through time (Ambrosini and Bowman, 2001). So, eliciting tacit skills and knowledge requires effort, especially for project manager and middle level manager.

Knowledge-based view of the organization is encompassed from top manager to almost whole employees because of the characteristic of tacit knowledge, such as being unspecified, intentional, dynamic, personal, critical and fallible (Morgan, 2008). A manager who needs strong personal orientation to knowledge also greatly contributes to elicit tacit skills. The hierarchy of the organization shows that middle level manager needs all kinds of knowledge, such as accounting, human resources, manufacturing, although not yet certain for all types of organizations. So, middle manager needs knowledge from above to know the strategy of the organization and from below to track progress and current conditions in functional lines. The singularities of tacit knowledge make the transfer of knowledge more important and hard.

2. Objectives and Hypotheses

The objective of the study is to examine the relationship between the behavior of knowledge transfer and properties of middle level manager. The research problem involves two variables. The first one is the transfer of tacit knowledge and the second one is the properties of middle level manager. So the main hypothesis is that there are positive relations between behavior of knowledge transfer and properties of middle level manager.

Figure 1. The Model of the Research

The variables can also be seen in Figure 1 that include two variables, first one is demographic properties and year-based working time, second one is the behavior of knowledge transfer of middle level manager.

3. Method

After the literature of knowledge transfer behavior of the middle level manager, a methodology for empirical researching the subject is outlined in this part.

3.1. Participants

All participants are a number of 351 middle level managers of public enterprises at. 16 surveys are invalid for various reasons, so 335 surveys are analyzed for the model. The sample method is random sampling, which is the one of the improbable sampling tolls.

3.2. Data Collection Tools

6 items which are the first part of survey measure knowledge transfer behavior and 4 items measure the demographic properties of middle level manager in the second part. The data were collected through a questionnaire that is reformed by the authors as 10 items with reference to Bock et al. (2005) and Göksel et al. (2010). The instruments were applied together to middle level manager in January and February of 2015. Participants were informed about the objective of the study and were presented with detailed training of instruments used.

3.4. Data Analysis

The data collected via the questionnaires have been analyzed statistically with arithmetic mean, descriptive statistics such as validity and reliability and Pearson correlation analysis on the computer using statistical program.

4. Findings

Cronbach's Alpha of "leadership tendency" is 0,894 to 6 items, which is higher than 0,7, so the scale is valid for this research. According to the descriptive statistics about the behavior of knowledge transfer, data is distributed in the range of 2,29 and 3,94. Standard deviations which are a measure of how spread out numbers, are distributed in the range of 0,781 and 1,867. In the behavior of knowledge transfer, data has very similar points in 1th item, while it separates in 4th item. Also for descriptive analysis, it is needed to test of kurtosis and skewness to understand the data has a normal distribution or not. Statistically, skewness is the range of +-2 and kurtosis is the range of +-7, so it shows a normal distribution. Thus, the scale of the research has a normal distribution in this study. After the descriptive statistics about the behavior of knowledge transfer, the correlations between variables are given in table 1.

Table 1. Pearson Correlation Analysis of the Relations between the Behavior of Knowledge Transfer and Sex, Age

Variables	Male	Female	18-25 years old	26-35 years old	36-45 years old	46 & up
The behavior of knowledge transfer	0,052**	-0,031	0,116	-0,047**	-0,094**	-0,039
N:335, **p<0,001 Correlation (two tailed)						

Table 1 shows that there is a significant relationship between the behavior of knowledge transfer and demographic factors as sex and age (p: 0,000). Also, marital status and year-based working time is given as other properties of entrepreneurs in table 2.

Table 2. Pearson Correlation Analysis of the Relations between the Behavior of Knowledge Transfer and Marital Status, Working Time

Variables	Married	Single	1-5 years	6-10 years	11-15 years	16-20 years
The behavior of knowledge transfer	0,055**	-0,055	0,043**	-0,019	0,054**	-0,099
N:335, **p<0,001 Correlation (two tailed)						

According to the table 2, there are significant relationships between the behavior of knowledge transfer and properties of entrepreneurs as marital status, working time (p: 0,000). But some variables have not any correlation with the behavior of knowledge transfer. The results of the correlation analysis, being male and being between 26-35 or 36-45 years old have a correlation behavior of knowledge transfer in this sample, but there is a negative relationship between age and the behavior of knowledge transfer. Also, being married and, working for 11, 12, 13, 14 or 15 years have significant correlation with the behavior of knowledge transfer. But, being just started to work or at the beginning of the work life, there is no relationship with the behavior of knowledge transfer.

5. Conclusion and Recommendations

Being rare and scarce has always made things more important than others. So this principle can be seen both social and economic lives. In the information age, the power is unique and useful knowledge which lead the enterprises leader of the sector. The enterprise products, goods and services with two main ways, and this way determine the future and the strategy of the enterprise. The first way is creating innovative and second way is to copy it. So innovation needs the unique knowledge of people, also copying needs reverse engineering. Therefore, knowledge is the key of success in the destructive competition. Knowledge has different characteristics from tacit to explicit, so it has various classifications such as objective and subjective knowledge or declarative and procedural knowledge. The basic foundation of these classifications is abstract and concrete outcomes of knowledge. First knowledge type is communicated from its possessor to another person in symbolic form. So it can be readily written, drawn, encoded, explained or understood, so it is communicability and shareable. The second type of knowledge is rare, difficult to imitate, substitutions and transfer. At this point, there is a need to arise for extra effort to use the tacit knowledge in the enterprise.

The middle level manager is the person who implements company strategy in the most efficient way by using knowledge. So he or she needs technical, human resources and strategic skills and he is the one who makes an effort in learning and transferring of knowledge. Due to these reasons, the behavior of the knowledge transfer of middle level manager is examined in the public enterprises. It is wondered that which middle level

manager transfer the knowledge and which demographic properties are related this transfer behavior. According to the results, being male and the behavior of knowledge transfer are positive correlations significantly, while being female is not. The second demographic properties are "age" with four classifications as 18-25 years old, 26-35 years old, 36-45 years old, 46 and up. The group of 26-35 years old and 36-45 years old are negative correlations with the behavior of knowledge transfer in this sample. 335 middle level managers who are working in a public enterprise take part in the study. So the sex relations can be explained by the general structure of enterprises which have almost whole male managers, not female. The age results show that the youngest and oldest managers and their behaviors of knowledge transfer have not any correlations.

Marital status and working time are also used for analyzing the properties of middle level enterprises. According to the results, married, middle level managers and their behaviors of knowledge transfer have positive correlations significantly, while single manager have not. Also working time as 1-5 years and 11-15 years has positive correlations, while 6-10 years and 16-20 years have not. To interpret the correlations, it needs to make a deep research with managers. The results of the study draw attention to tacit knowledge and the behavior of knowledge transfer. And it also emphasizes the middle level manager who might be different characteristics from other level of managers. Tacit knowledge is needed to test in different samples for being useful for managers.

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