A Study of the Relationship between the Knowledge Management Model of Nonaka and Takuchi with the Components of Leadership Style

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Abstract

A changing world today requires organizations to look for new tools for survival. Knowledge management is one of the tools that organizations can help with these goals. Knowledge management is a comprehensive approach for organizations to achieve organizational effectiveness and is of increasing importance as the main competitive advantage. Successful implementation of the knowledge management process can affect the performance of the organization. Studying the effects of leadership styles on knowledge management is essential because of its significant impact on organizational performance.

Another important issue is that achieving the best leadership style is an effective step towards improving the knowledge management process and promoting organizational performance. The sample consists of 130 people. A researcher-made questionnaire was used to collect data, with a reliability of 0.92. SPSS software was used to analyze the data. The results of the research indicated that there is a positive and significant relationship between leadership style and knowledge management dimensions.

Keywords: KM, Supportive Leadership, Leadership Leadership, Agricultural Banking, Nonaka and Takuchi Model

Introduction:

Knowledge management allows organizations to use their intangible assets, and this benefit generates value through improving the organization's performance (Davenport and Prozac, 1998) or knowledge management is dependent on such a concept that the knowledge workers (Tacit knowledge) can use them in an appropriate way to achieve better business performance (Linder, 2001).

Regarding the literature, the subject of creativity, acquisition, organization, transfer and sharing of knowledge are the main elements of the organization of knowledge management, which is known as the process of knowledge management (Sarlak, Fratti, 2008: 226). Specialists and knowledge holders introduce different types of basic knowledge processes. Lawson (2003).

Today, knowledge is recognized as a key competitive asset, which is the basis for sustained growth and the key to maintaining a sustainable competitive advantage of an organization. Knowledge management also allows organizations to use their intangible assets, and this Utilization creates value by improving the organization's performance. Knowledge management is a process that helps organizations discover,
select, organize, disseminate and transfer important information and experiences necessary for activities such as problem solving, dynamic learning, strategic planning, and decision making (Gupta et al., 2000: 17). A varied world today needs organizations to pursue a new tool. Management knowledge is one of the tools that organizations can help with these goals. Knowledge management is a process that helps organizations to select, organize, and publish the most important information, and is specialized in activities such as problem solving, dynamic learning, and decision making. KM can improve a range of functional features by empowering the organization to "smarter performance". On the other hand, implementation of management knowledge and ensuring its success in organizations requires conditions and substructures, and various factors affect its success and success, including organizational structure, cultural organization, leadership, etc.

Theoretical Foundations of Research:

The term knowledge management has other definitions that are referred to below: (Sarment, 2003). A part of the hierarchy of sets consists of data, information, knowledge and knowledge.

Nonaka and Takuchi model:

This model is presented by a person called and to express the concept of the dynamics of knowledge in the organization. In this process, knowledge is created through four types of interaction between the two types of knowledge, implicit and explicit. Nonaka calls the relationship between these two types of knowledge the process of transforming knowledge.

Knowledge extraction:

The outsourcing process is supported by two factors. The first factor is explicit expression of tacit knowledge that should be expressed in the minds of individuals through phrases, metaphors, similar words and narratives. The second factor involves the equivalence of tacit knowledge of customers and professionals in a way that is understandable to the people of the organization. Thus, knowledge that has been in our minds and within us, and can not be presented and understood in a collective way, has been transformed into knowledgeable and transmissible knowledge. Writing an essay or documenting the experiences of managers and staff can be considered as a mode of knowledge extraction process (Heydari, 1392).

Combination:

The compounding process is the transformation of obvious knowledge that is scattered into explicit, integrated knowledge. In this process, we move from explicit individual knowledge to explicit group knowledge and using existing knowledge, problem-solving can be provided through the group and develops knowledge. (Afraza, 1384)

Knowledge Socialization:

The term socialization is used to express the notion that tacit knowledge is accomplished through a joint activity with time and time in a common environment, not through written texts. A major contribution of knowledge is useful and necessary for employee activity derived from knowledge experiences that has been formed over time for older employees. Socialization or socialization occurs when we transfer tacit knowledge in our minds to tacit knowledge in another mind and share our thinking with others. In this process, there is a close relationship between the two individuals in which the knowledge lies in the minds of human beings and the more subjective knowledge is provided through mental participation (Talebi, 2011).
To benefit from this knowledge, newcomers and inexperienced people should use their experiences in the process of interacting with these people in a collaborative environment. This close interaction is not limited to collaborators in the environment, and providing close contact with customers and suppliers also provides tacit knowledge. Also, the teacher's teachings - apprenticeship and knowledge gained through participation in work teams can be considered as examples of the process of socialization. Empathy is also known as the knowledge that is created through the exchange of two tacit knowledge. (Newman, 1999).

**Internalization of knowledge**

An internalization can be observed when managers or experienced professionals speak, or authors decide to write a description of an organization or institution. Internalization also requires that obvious knowledge be crystallized and embodied in practice. Therefore, maple must be received in a practical and objective manner. Also, passing this stage to individuals creates new personal implicit knowledge (acquisition of new hidden knowledge of the obvious knowledge available (2005).

**Leadership:**

One crucial factor in knowing why an organization is successful is to study its leadership. Leadership is a skill that is used to influence members of an organization to work enthusiastically for specific purposes defined for good performance (Pars and Scintillation 377: 2013). The concept and definition of leadership and leadership style may be different from one person or position. The term "leadership” has been used for different aspects of human effort, for example, for politics, business, university, social functions, etc. (Timoshi et al., 2011: 100 ) Leadership often returns to a powerful and dynamic person who creates a path for a nation so that this route may affect the management of the organization. (Ismail et al. 90: 2011).

**Supportive Leadership:**

This behavior pattern refers to the role of the leader in the tool of attention, affection and goodness with followers, proof of attention, kindness and understanding of followers through personal communication, friendship and informality, and encouraging the improvement of open-ended open communication with followers.

**Guiding Leader:**

This template refers to the behavior of the leader in assigning specific tasks to followers, the explanation of methods for use in completing tasks, the precise clarification of expectations of the size and function of followers, the setting of goals for followers, the planning and coordination of the work of followers, and the identification of roles and procedures. To come back to follow. (Howell & Castelli 22: 2001).

**Transformational Leadership:**

In 1985, Boss published the basic ideas of the concept of transformational leadership. According to him, leadership research has so far focused on exchange relations. With this theoretical approach, focuses on the critical aspect of the evolution of followers seeking to advance and expand Research is available because "the transformational leaders are the stirrers and drivers of the world.” Transformational leadership refers to the interactions between the leader and the followers who are considering the needs of the followers. In this type of leadership, the motivation of the leaders and the proponents increases and their relationship becomes greater. The educational process is a kind of leadership "in which the leader eliminates the need for subjection and encourages subordinates to perform actions beyond the main expectations. Which may outweigh personal interests. "Within this process, leaders can experience higher moral values, just like followers.
Exchange Leader:
Exchange leadership does not rely not only on the individual characteristics of the followers and on their individual progress, but rather on the relationship between the leader and the follower, in which both are working for individual gain. Under the guise of the leaders, they follow only because they demand their benefits and they are escaped from punishment.

Literature review:
In an article entitled "The Knowledge Management Framework for Organizational Knowledge Management," Dace 2006 states that KM components often come with execution levels that are translated into most aspects of the human dimension of KM. Hence, it emphasizes knowledge management skills and examines how the three concepts of personal, knowledge and management relate to the concept of personal knowledge management, and how personal knowledge management plays an important role in organizational knowledge management.

In a research called Value Models and Measures for Personal Knowledge Management, Skerritt (2005) presents a model for knowledge management that addresses the problems of access and management of a particular type of knowledge (tacit knowledge).

Albert et al. (2001), in an article entitled Conceptual Approach for Information and Personal and Organizational Knowledge Management, has argued that increasing awareness of knowledge management in organizations has emerged as a key factor for the company's competitive success.

In a paper titled Roles and Values of Personal Knowledge Management, Chang and Tsui (2011) presented a developed conceptual framework describing the values and roles of personal knowledge management and concluded that personal knowledge management plays an important role in the process of knowledge management, both individuals and organizations benefit from this personal knowledge management and improve their abilities and capacities.

Raj and Marvin (2008) in an article on effective use of technology in personal knowledge management have examined the emerging concept of personal knowledge management to familiarize researchers with this new concept. Specifically, the purpose of this paper is to highlight the issues of effective use of technology in personal knowledge management. And provides a conceptual framework that combines knowledge management skills, such as technology and tools, and concludes that the impact of effective knowledge management increasingly depends on the skill of having the appropriate tools.

Yong and Lee (2005), in a paper titled "Personal Knowledge Management System in Learning Communities," author introduces some of the relative theories of e-learning and personal knowledge management including concepts, content, goals, and backgrounds, and how to use management tools Describes personal knowledge such as I Space Desktop, I Nota, My Base in virtual learning environments for the management of personal knowledge in virtual learning environments. It has come to the conclusion that individuals must skillfully learn the skills of personal knowledge management to transform themselves into a constantly growing individual and thereby maintain their value. And that the mode of learning and knowledge management is influenced by the IT revolution and the development of e-learning.

Dong and Wang (2008) in an article titled "Identifying effective factors in the widespread use of personal knowledge management" explores the implications of the use of personal knowledge management systems by their partnerships and creativity, and concluded that Both attributes are significantly related to the behavior of personal knowledge management.

Research Methodology:
In this research, since the researcher is trying to explain the relationship between two variables of
leadership style and conversion of knowledge, the research method is correlation. The statistical sample of this study was made by the staff of the Agricultural Bank. To study a topic, it is not necessary to observe and observe all of that community, but in most cases it is enough to observe it. In other words, more research is aimed at sampling the researcher. In this research, a random sampling method was used. The method of this research is applied to the purpose of the research, and in terms of the nature of the method, a descriptive correlation type is used. From there, in the present study, the present research has been described in terms of existing facts Descriptive. In descriptive researches, regardless of the causes of events, only how the quality and quantity The data are also sought. In researcher's correlation research, using the obtained information, determines the existence or non-relationship between variables (Khaki, 2010).

Analysis of the findings:

Of the total number of respondents, 4% are diplomas, 6% are diplomas, 60% are undergraduate, 25% are masters and 5% are PhD. Of the total number of respondents 15%, 25-30 years, 70% are between 35 to 45 years old and 15% above 45 years. Most respondents are between the ages of 35 and 45. Of the total number of respondents, 6% were less than 5 years old, 24% were between 5 to 10 years old, 60% between 10 and 20 years, and 10% between 20 and 30 years. With most respondents aged 10 to 20 years old.

Correlation test between leadership style and dimensions of knowledge conversion

Spearman's correlation coefficient between leadership style and knowledge socialization is 0.623, and the significance level obtained is 0.000 a little smaller than the considered error level of 0.05. Therefore, the zero assumption is rejected and the assumption that a leadership style influences knowledge socialization is accepted. Spearman's correlation coefficient between leadership style and internalization of knowledge is 0.432.

Also, the significance level obtained is 0.000 less than the estimated error level of 0.05. Therefore, the zero assumption is rejected and the assumption of one that the leadership style affects the internalization of knowledge is accepted. Spearman's correlation coefficient between leadership style and knowledge composition is 0.222. Also, the significance level obtained is 0.000 a little smaller than the estimated error level of 0.05. Therefore, the zero-assumption is rejected and the assumption is that leadership style affects the composition of knowledge of the effect It is accepted. The Pearson correlation coefficient between leadership style and knowledge extravagance is 0.329, and the significance level obtained is 0.000 a smaller amount than the considered error level is 0.05. Therefore, the zero assumption is a rejection and assumption of one that the leadership style on extrinsic Knowledge is valid, accepted.

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<thead>
<tr>
<th>extravaganca</th>
<th>internalization</th>
<th>composition</th>
<th>socialization</th>
<th>leadership style</th>
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<tr>
<td>0.329</td>
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<td>130</td>
<td>130</td>
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Leadership style regression test and internalization of knowledge

Analysis of variance and regression coefficients of leadership style and internalization of knowledge
Regarding the regression equation with the standard coefficient is also: \( Y=0.899+0.611x_1+e \)

In the above regression equation, the dependent variable of leadership style, \( x_1 \) is the predictor of knowledge internalization, and \( e \) is the error rate of the model.

**Leadership style regression test and knowledge socialization**

Analysis of variance and regression coefficients of leadership style and knowledge socialization

<table>
<thead>
<tr>
<th>Sig</th>
<th>F</th>
<th>( R^2 )</th>
<th>R</th>
<th>Sig</th>
<th>T</th>
<th>( \beta )</th>
<th>B</th>
<th>Predictive variables</th>
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</thead>
<tbody>
<tr>
<td>0.002</td>
<td>79.015</td>
<td>0.472</td>
<td>0.687</td>
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<td>3.774</td>
<td>-</td>
<td>0.899</td>
<td>Constant</td>
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<td>0.003</td>
<td>8.884</td>
<td>0.601</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.611</td>
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</tbody>
</table>

According to the regression equation with the standard coefficient, it is also: \( Y=1.212+0.212x_1+e \)

In the regression equation above, \( y \) is the dependent variable of leadership style, \( x_1 \) is the predictor of knowledge socialization and \( e \) is the error rate of the model.

**Leadership style regression test and knowledge extraversion test**

The regression coefficient of leadership style and externization of knowledge is significant and, in contrast to the zero assumption, the regression coefficients are not significant:

Analysis of variance and regression coefficients of leadership style and knowledge extraversion

<table>
<thead>
<tr>
<th>Sig</th>
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<th>( R^2 )</th>
<th>R</th>
<th>Sig</th>
<th>T</th>
<th>( \beta )</th>
<th>B</th>
<th>Predictive variables</th>
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<tr>
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<td>13.015</td>
<td>0.133</td>
<td>0.365</td>
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<tr>
<td>0.001</td>
<td>3.884</td>
<td>0.398</td>
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<td></td>
<td></td>
<td>0.513</td>
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</table>

According to the above table, the regression equation with the standard coefficient is also: \( Y=1.888+0.513x_1+e \)

In the above regression equation, \( y \) is the dependent variable of leadership style, \( x_1 \) is the predictor of knowledge extravagation and \( e \) is the error rate of the model.

**Leadership style regression test and knowledge combinations**

Analysis of variance and regression coefficients of leadership style and knowledge combinations

<table>
<thead>
<tr>
<th>Sig</th>
<th>F</th>
<th>( R^2 )</th>
<th>R</th>
<th>Sig</th>
<th>T</th>
<th>( \beta )</th>
<th>B</th>
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<tr>
<td>0.002</td>
<td>24.291</td>
<td>0.214</td>
<td>0.463</td>
<td>0.022</td>
<td>2.988</td>
<td>-</td>
<td>0.813</td>
<td>Constant</td>
</tr>
</tbody>
</table>

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According to the regression equation with the standard coefficient, it is also: Y=0.813+0.333x1+e

In the above regression equation, the dependent variable of leadership style, x1 is the predictor of the knowledge composition and ei is the error rate of the model.

Conclusion:

The supportive leadership has a positive, direct, and meaningful relationship with the externalization of knowledge. Given that outsourcing is a process in which tacit knowledge is expressed in the form of explicit concepts, and in this process of knowledge lies explicit knowledge and non-written and subjective knowledge into written and contextual knowledge, hence the "Supportive leadership will increase the interaction and dialogue between individuals and ultimately increase the tacit knowledge of writing," he said. Comparing the results showed that supportive leadership style had the greatest impact on knowledge internalization and had the least impact on the externalization of knowledge. On the other hand, correlation coefficients showed that this effect is positive and directional, meaning that the supportive leadership style and the creation of a supportive and trust based and supportive environment improve the processes of socialization, extrinsicization, composition and internalization of knowledge, and in It ultimately leads to the development of knowledge management.

Supportive Leadership There is a positive, direct, and significant positive relationship with knowledge management and supportive leadership with the internalization of knowledge. Therefore, supportive leadership has a positive, direct, and significant relationship with the socialization dimension of knowledge. Given that socialization is defined as the process of sharing experiences and the subsequent creation of tacit knowledge, such as mental patterns and joint implicit skills, and for the effective implementation of this process, it must be created between the common cultural community and the ability of the working group, so leadership Support encourages this process and increases the willingness of people to share experiences.

The supportive leadership has a positive, direct, and meaningful relationship with the dimension of knowledge combining. Given that the combination of knowledge involves the conversion of explicit explicit knowledge that is sparse, it is a set of explicit knowledge that is integrated. At this stage, the movement of explicit individual knowledge into explicit group knowledge and its storage Done. Hence, supportive leadership facilitates the process of collecting, classifying and combining existing information and creating new knowledge.

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