Relationship Between Knowledge Management Components Based on Mark M. Mc Olay's Model and Social Capital, Regional Ministry of Electricity Employees Hamedan

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ABSTRACT

Following paper investigate the relationship between social capital and knowledge management component deals. Social capital in the field of organizational behavior concepts that are new and innovative compared to other organizational capital has a lot of importance and urgency. Social capital plays a vital role and function in the development and enhancement of basic competencies and also its role in creating knowledge (the knowledge of) an issue of knowledge management is necessary to ease the binding. Looked of knowledge management in a may refers to the process through which an organization with the assistance of its intellectual property and to rely on the data, information, knowledge and ... to create added value and generate wealth and create new knowledge deals. In this study, the relationship between knowledge management component model Mark M. Mc Otvry and social capital has been studied. The population DOE employees comprise the total regional electricity Hamadan employees are selected and a total of 420 people. Instrument of this research for the analysis of software questionnaire statistical structural equation modeling using spss and graphics Amos application is used. In the theoretical part of the theory of Bourdieu, Putnam, Hicks, Williams, Mark M. Mc Otvry, my back is used. Findings indicate that social capital in the process of individual and group management, knowledge management has a direct and positive impact.

INTRODUCTION

Modern concepts of social capital are much more important role than physical and human capital plays in organizations. Today, sociology and economics, and recently in the management and organization of the social capital concept has been widely used. The concept of social capital as a source of valuable reference relations lining Network affiliated with the norms of mutual trust and thereby accomplishes the goals of members. In the absence of social capital, other capital lost its effectiveness and ways to measure the economic and cultural development is difficult. Social capital at the macro management level and management level of an organization can a new understanding of socio-economic systems to provide better guidance to managers in helping the system; For many components of social capital have mentioned that to consider one aspect of social capital should be considered is various aspects of this concept could take this is because the social capital of a large capacity for a wide range of things to do. Modern management inexhaustible source of benefits and competitive advantages for organizations in knowledge has and taking into account the wide range of organizational needs and the growing requirement for the proper management of this vital aspect of the organization should try to understand on the affected factors. Knowledge management is a continuous process and knowledge so that it can be used effectively by the organization to know. Social capital can also pave the way for improvement of intellectual capital and intellectual capital based on the combined knowledge and experience of different aspects.
of the creation of intellectual capital as a major because of social capital is facilitated. Social capital is also theorized to play a role in the development of core competencies that are essential for creating knowledge. Knowledge management definitions have mentioned that it can be expressed as the difference in the dimension definitions however; knowledge is a crucial element for modern organizations. Business process that can capture, transfer, creating and applying knowledge, stating. However, social capital can also be recording, editing and transmitting knowledge to help. Social capital promotes knowledge management processes because the organization's ability to create value in innovation by facilitating the exchange and combine resources in an organization will contribute.

**Necessity and importance of research:**

World Bank sees social capital as a result of the impact of social phenomena, human relations and norms on the quantity and quality of social interaction the organization's experience has shown that this phenomenon has a significant impact on the economy of various countries. Today, social capital, a very important role in physical and human capital in organizations and can play communities collective relationships and networks, Consistency among people, organizations, and individuals and organizations are organizations. Without of social capital, other capital loses its effectiveness. And social capital, cultural and economic path of development, is rugged and tough components of this research showing the relationship between knowledge management and social investment model Mark M. Mc olrvy, It will help to clarify the situation at different levels and better policies to achieve growth and prosperity, the most effective use of all actual and potential capacities of social capital, knowledge and information in an enterprise is an effective way forward.

**Research goals:**

**The main goal:**

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**Subsidiary goals:**

1. The relationship between social capital (trust, Cohesiveness, Participation) and the production of knowledge
2. Determine the relationship between social capital (trust, Cohesiveness, Participation) and continuous knowledge

**Literature review:**

Creation of new knowledge and innovation are the most important functions of any society. To achieve this purpose it is necessary for the management, external and internal sources (information and intellectual capital) to create harmony. In general, knowledge management as a process of liberation, power, knowledge and tools to take advantage of this investment is worthwhile. The management of knowledge, thought, and knowledge-centered and people-centered alternative investment experience at its core is a central and shared knowledge. The Soumy ânanda D. investigated the formation of social capital through its effect on human capital and economic growth is explored. In this study, first enter the three assets - physical, human and social - in the production function and to evaluate the impact on the growth of each other to explain the interactions are explored. The study concludes that social capital of the world, 63 countries had significant positive effect on economic growth in this country has had. Bartolini, S., et al endogenous growth model to explain the American economy, with emphasis on social capital. The model shows that when the social capital of the community, there is little economy will grow, but its growth rate is very slow and low. But when it reaches a high level of social capital in society, the economy will grow exponentially.

**Generalized trust, according to the above definition implies the following points:**

1. Generalized trust only those who interact face to face relationships established between them is limited.
2. Generalized trust boundaries, family, tribal, and local and national swept across spreads.
3. Generalized trust department of the people we interact or have the potential to include.
4. Generalized trust is a relatively new phenomenon in the formation of modern states or nation - state arises.
5. Generalized trust requires the collaboration of millions of citizens that make up modern complex societies.
6. In the traditional society of generalized trust is not required because certain boundaries between insiders and outsiders and between friends and enemies there. Reliance on traditional community limited to those who belong to it, gathered outside where everyone is a suspect and the suspect.

**Knowledge Management:**

After several years of knowledge management topics, many of the people according to their field, have offered various definitions of it but still single definition of knowledge management in the scientific community have been expressed. One of the main challenges of knowledge management, knowledge understands the
concept of general knowledge, the information that the person has in his mind. Managing knowledge, so essential activity that strategies and measures for managing capital is focused on human-centered thinking. Knowledge management refers to the set of processes so that they acquire knowledge, stored and used purpose of the exploitation of intellectual property in order to increase productivity, create new value and enhance competitiveness is achieved. Concept of knowledge management is to collect, share and analyze knowledge of individuals and groups which have direct effects on organizational performance. Knowledge management organization that helps people connects with each other and the information they provide. Knowledge on the distribution and maintenance of knowledge and ways to increase the speed, efficiency and competence of individuals in an organization to profitability and be more focused interests. In today's business world production speed and service of knowledge management for any organization that intends to be at the peak of the rise is vital, and, is essential. We're living in an era when we are drowning in data, but strong need to have knowledge. Indeed, individuals and organizations are faced with a host of information and data that may be very important and critical to the proper management it is to apply difficult. Knowledge management is the collection, organization, classification and distribution of information within an organization is defined. Knowledge Management, an adaptive framework for knowledge, the members of the organization to create an effective working between members of interdisciplinary and inter-agency teams there are. In other words, knowledge management practices that easy, systematic, measurable, and maintaining it is easy to develop. Knowledge management technologies and techniques of interaction patterns and shape. For example, in information technology to collect, store and disseminate information to works well, but is unable to interpret. Organizational knowledge is properly managed, has the potential to create value is only that knowledge with all strategies and strategic decisions must be linked.

**Hick's Model:**
Hick's model is one of the functional models, this model is composed of four sub-processes:
* Creation: This refers to the ability to learn and communicate. The development of this capability, knowledge and experience to share knowledge, make connections between ideas and making connections with other topics of key importance is the cross.
* Store: As second element required is knowledge management through which, organized storage capability that allows fast data search, information access and sharing of knowledge is provided for other employees, are produced. This system should, easy to use all the knowledge necessary to be stored.
* Publication: The process of developing a community spirit, where people pursue as partners toward common goals, have a sense of continuity to the activities related to each other helps.
* To apply fourth when the process starts from the idea that the creation of new knowledge by the application of objective knowledge is possible. This element unified knowledge management center completes the circle.

**Mark Mc olrvy Model:**
His collaboration with other members of the international consortium KM (2002) A conceptual framework for knowledge management called the "course of life" is defined. This model focuses on an important point, "Knowledge is only after they were produced there and then it can contain, and can be shared." From this perspective, Mc olrvy process knowledge into two major processes: the production of knowledge and knowledge divides ongoing.

**Seven C Model:**
This model is based on the first letter of their seven words «C» is built and hence the model «7c» has been dubbed. This model is a functional model. Components of this are model:
Creation: Create a new understanding of working with colleagues, clients and external agencies;
Capture: determining and documenting their ideas better;
Contribute: Contribute ideas to help others;
Collaborate, exchange of knowledge in general;
Consume: use all the collective knowledge of what to do;
Communicate: Due to the knowledge and use the knowledge to help others learn the value is outside;
Culture: Expanding the culture of knowledge sharing throughout the organization.

**Beckman Model:**
This model is a type of performance models. My back has proposed eight stages for knowledge management:
1 - Identify 2 - Capture 3 - Select 4 - Store 5 - Share 6 - to Apply 7 - Create 8 - Sell.
**Bukowitz and Williams Model:**
Components of the knowledge management process, Williams and Bukowitz provided by seven factors: Find, Consume, Ability, Contribute, Assessment, create and remove the need for an integrated knowledge-based assets are managed.

**Nonaka model and Taguchi underline:**
The concept of tacit knowledge and explicit knowledge by Nonaka's theory of organizational learning is classified as a projection. In this division, according to the association between overt and covert forms of knowledge, they have established a model that has been popular in their own name. This model, unlike previous models, will focus on two types of knowledge have given trait and how to convert them to each other and how to make it at all organizational levels (the individual, group and organizational) are given. In this dynamic model, how to use and convert this knowledge and how knowledge management in the context of the spiral (helical) is assumed.

**The basic model of knowledge building:**
This model Probst, Raub & Romhard called the "base model (foundation stone) building knowledge management" is named. The design of these models, they see KM as a dynamic cycle in constant rotation. The process model consists of eight components consisting of two cycles, internal and external.
*Blocks discovered by the internal cycle (identification), acquiring, developing, sharing, and application (utilization) and maintenance of knowledge are made.*
*The outer cycle consists of blocks of goals and evaluation that will determine the knowledge management cycle and two cycles to complete the "Feedback" is.*

**Peter Gottshalk Model:**
According to Petter Gottschalk Knowledge management process is divided into four levels below shows the process of knowledge management.
First Step: PERSON to Technology
Second Step: Person to Person
Third Step: Person to Information
Four Step: Person to System.

**Bergeron Model:**
Bergeron life cycle knowledge management has provided eight phases:
Production / business: involves gathering information from internal and external sources of knowledge by employees of the organization or organizations;
Modify: Change the structure, shape and type of knowledge for knowledge management system;
Apply: knowledge and information used for purposes such as sales and distribution organization;
Archive: Data is stored in a structure over time; both in terms of physical and cultural changes are preserved;
Transfer: data to be transferred from one place to another, such as transmission via the Internet;
Translation / Editing: information for other groups or different targets is used to transform such as use of figures rather than numbers;
Access: provided limited access to information and knowledge commensurate with the responsibilities of individuals;
Shedding: knowledge and information in the future nothing will be removed to avoid confusion.

**Turban Model:**
Other models of knowledge management Turban cycle that includes six stages are:
Production: When people are learning new ways of doing things are produced Sometimes the organization external knowledge is brought into the organization.
Obtain: as a source of valuable new knowledge should be identified and displayed in a logical structure.
Treatment: New knowledge must be provided to act as content. This stage is where the blind man comes in to help.
Store: Useful knowledge should be stored in the form of logical storage that can be accessed by others.

**KM Newman General Model:**
According to Neumann KM process is divided into four steps:
1 - Create Knowledge: process is in which the knowledge you need within your organization are created. This phase includes all activities that are logged in to the school or new school. Here an activity such as discovery, creation and development of knowledge is important.
2 - Maintaining knowledge: the knowledge of where and how much longer remains and this is keeping the ability to provide maximum recovery. Here are the activities that the knowledge will be permanent institutional memory can be noted in this regard. The main task of institutional memory, maintenance of organizational knowledge.

3 - Convert and transfer of knowledge: knowledge in your organization should be easily exchanged. Activities are discussed here, with the knowledge of the change form or another individual or group of individuals or groups to communication. Activities like coding knowledge exchange knowledge and forming teams at this stage is important.

4 - Consume of knowledge: the knowledge of the process from the other due to their knowledge of other facilities, the ability to develop and apply knowledge of the work environment will meet your expectations. Knowledge, valuable time that could be used. Knowledge management activities should be such that not only affect the actions and strategic plans of the organization, but also its effects on the activities of daily seen.

Model Conceptual Research

Conceptual and operational definitions:

**Social Capital:**

Defining the concept: the actual and potential sources of network ownership, resulting in long-lasting relationships between individuals and institutional membership in a group.

Operational definition: the network with the norms of trust, integrity and partnership with the structure of a particular social relationship between actors is determined.

**Trust:**

Concept defined in the Oxford Dictionary as a reliance or confidence in the quality or character of a person or a thing, or the fact that reliability is described.

Operational definition of trust can be examined at three levels, the underlying confidence in the personal and psychological issues such as interpersonal trust, generalized trust.

**Cohesion:**

Conceptual definition: consensus reached among the members of a society accepts and internalize the values and norms of a given society and the existence of collective and cumulative interaction among people in society.

**Method:**

The study and the implementation of the objectives and nature of the subject and is executive facilities survey. The survey researcher to explore the opinions and preferences of the persons uses a questionnaire survey to determine causal relationships cannot be used as definitive. The survey relationships between variables can be examined.

The data collection tool is questionnaire.

**Statistical Society:**

Statistical Society in this study, electrical workers, Hamadan region, involving 420 patients, respectively.
Sample size:

Our sample was based on the number of employees. A total of 201 questionnaires were completed. Cochran formula, 201 subjects were selected.

\[
n = \frac{\sigma^2 \rho_{pq}}{d^2} \left(1 + \frac{1}{N} \frac{\sigma^2 \rho_{pq}}{d^2} - 1\right) = \frac{(1/96)^2/(5)/5}{(0.05)^2} \geq 201
\]

Sampling:

Inasmuch as DOE staff includes male and female employees in the organization as well as men more than women. The questionnaire was distributed to more men were questioned. In this research for selecting the sample size stratified random sampling method is used. Stratified random sampling so that the community can be categorized and then a random sample of each class is selected. One reason for the sampling of classes rather than taking a simple random sample of the entire population is ensuring plenty of examples that can be selected from each category.

Research findings:

In order to determine the type of test used for hypothesis should first attempt to examine the assumptions of normality or non-normality of the data, we then, using the results of parametric statistical methods appropriate for we use testing hypotheses.

\[H_0 : \rho = 0\]  Distributed observations follow a normal distribution
\[H_1 : \rho \neq 0\]  Observed distribution does not follow a normal distribution

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<th>Table Kolmogorov – Smirnov.</th>
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<th>0.833</th>
<th>201</th>
<th>Social capital</th>
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<tr>
<td>Normal distribution</td>
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<td>0.966</td>
<td>201</td>
<td>Knowledge Management</td>
<td></td>
</tr>
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</table>

As you can see in the table below the critical value of the test statistic at the 0.05 level thus the null hypothesis and accept the hypothesis of normal distribution of data exchange, which indicates that the data is not normal, is rejected. Thus, according to data normality test, Spearman's correlation coefficient was used to test this hypothesis. Using the Spearman correlation coefficient between social capital and knowledge management is a significant correlation between these two variables, sig = .004, indicating a significant amount that social capital has a major role in establishing knowledge management and knowledge management is much stronger social capital will be more successful. The first sub-hypothesis research focuses on the relationship between knowledge management and social capital (cohesion), the hypothesis was formulated such that there is a significant relationship between knowledge management and social capital. This hypothesis was analyzed using Spearman correlation test, the result was that a significant amount of KM sig = .001 significant correlations with Social capital (cohesion) capital. The second sub-hypothesis research focuses on the relationship between knowledge management and social capital (trust), the second sub-hypothesis was formulated such that between knowledge management and social capital (trust), is a significant correlation between. This hypothesis was analyzed using Spearman correlation test, the result was that a significant amount of KM sig = .045 significant correlations with social capital (trust).

The third sub-hypothesis research focuses on the relationship between knowledge management and social capital (participation), these hypotheses were formulated between knowledge management and social capital (participation), there was a significant relationship. This hypothesis was analyzed using Spearman correlation test, the result was that a significant amount of KM sig = .003 significant correlation with is social capital (participation).

Structural equation modeling with Amos graphics applications:

Structural equation modeling for the purpose of providing a quantitative test a theoretical model is assumed.

This model allows the researcher to statistically model complex phenomena to test out. This model is essentially a combination of multivariate techniques models and trajectory models, confirmatory factor analysis, and so is obvious and hidden variables. This section tests the validity of the structure by measuring the goodness of fit test using Amos software having data on variables derived from hypotheses explains. (To draw the final model, the two-step approach to proper operating loads handled and the acceptability we proceed to the final model). Model to test the validity of the following factors (trust, integrity, community involvement) on knowledge management structure is examined goodness of fit test. As the model name suggests, the measurement of the latent variables to provide more references on their times. The structural part of the model also suggests that social cohesion variable rate (0.44) The maximum amount of variance in knowledge
management, community involvement (0.43) and social trust (-0.15) It has an explanation. Well as changing Contribute community level (0.84), the variance of social trust (the dependent variable), and social trust (0.78) is the variance in social participation were explained. It should be noted, however, the impact of social trust on knowledge management variable is not significant, but they have a strong theoretical base rate (0.15) in the model is retained. Parameters of the model, goodness of fit test proposed theoretical structure and construct validity of the data observed by measuring the controversial show. All indicators of adaptive models, higher values of 0.90 shows that the mean power of the model away from a model of independence closer to a saturated model was based on the criteria defined for them. WHEREAS, measures GFI=0.97, TLI=0.99 and IFI =0.99 close to one are indicative of high fitness standard model and 0RMSEA=0.032, indicating poor performance of the rest of the model. (Of course, since the statistic $\chi^2$ is completely under the influence of the sample under study and the sample size in this study is high, significant or meaningful $\chi^2$ is not an appropriate criterion for judging models).

<table>
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<th>DF</th>
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<th>Chi-square</th>
<th>AGFI</th>
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**Conclusions:**

Today organizations should be required knowledge for innovation in their products and improve the business processes and the dissemination of their staff and work are in all daily activities. Only in this way can the perceptions of the competitive environment and to respond to customers’ needs. Given the importance of knowledge management and social capital, the factors influencing the facilitation of this process is essential. According to the definitions of social capital, because it seems that both of the people in the organization emphasize interaction and communication are essential to knowledge management interact level of social capital of organizations to be tested. To develop and strengthen knowledge management in different parts of the organization such as the success of others in the field of managerial and non-managerial experience teaches. In close interaction with friendly relations with other organizations, they can be modeled and then compare payments. Users can also participate in a quick and efficient transfer of knowledge at all levels of the organization to be achieved. All these are interconnected knowledge management and social capital are considered as the two elements are inseparable. Existence of social capital can also be recording, editing and transmitting to help knowledge. It promotes social capital and knowledge management processes. Because the
organization's ability to create value in innovation by facilitating the exchange and combine resources in an organization is involved.

Suggestions:

According to the research objectives and results and observations, the researchers during research proposals are discussed as follows:
1 - To provide information about the wants and needs of employees, recruit and hire new employees with the ability to cause more interaction and an atmosphere filled with the information needed to be confident.
2 - Organizing training courses and seminars tailored to the information needs of employees creates a more dynamic is to establish knowledge management.
3 - More access to the internet via internet free subscription to employees for use at home and outside office hours for updating the knowledge of employees.
4 - Knowledge is stored in the memory’s Memory include documents, databases, and the ability to create forms using information technology, organizations will have to register and document the knowledge, database and information knowledge of their employees to be documented is that it creates a sense of obligation.
5 - Experienced For training classes to manage employees who have left the company and have retired. It creates a dynamic atmosphere for learning methods are tasks.
6 - Considering its intellectual property rights to knowledge and previous findings employees, For example, if a project based on the research staff has gone to an acceptable level continued under the direction or supervision of the management of the people and the lack of cooperation of the people - is entitled.
7 - Create a database (such as intranet sites) to inform employees of their co-operation and benefit from their knowledge and capabilities.
8 - Journal publishing the achievements and results of the company will be formally available to partners.

REFERENCES