



Studying the relationship between knowledge management and organizational entrepreneurship study of case: labor and social affairs department of Qom

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ABSTRACT

The aim of this research is to identify the components of knowledge management and their relationship with the organizational entrepreneurship in Labor and social affairs department of Qom province. In order to evaluate the components of “knowledge management” with respect to previous researches, 41 questions related to the knowledge management cycle based on Jashapara’s theory were used. In order to evaluate the components of “organizational entrepreneurship”, 31 questions used by Shokri were implemented. The research method used is quantitative and is of correlation type and is done by the survey method. A survey tool having appropriate validity and reliability was used for gathering the research data related to variables of knowledge management and organizational entrepreneurship. After determining the sample size using Cochran equation, a simple random sampling method was used in order to access the members of sample. The correlation test was implemented to test the research hypotheses. The results showed positive correlation between the knowledge management and the organizational entrepreneurship.

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Introduction

In recent years, knowledge management has been one of the most interesting and challenging topics in business and is developing along with other topics of management field. Knowledge management is a procedure which helps the organizations identify, select, organize, disseminate and transfer the important information and skills which are part of the organization history and are usually non-organized (Turban 2006). Today, multinational and leading organizations have a great emphasis on implementing knowledge management and use such programs in their organizations. Importance of knowledge for surviving in business environment has made the organizations to emphasize extensively on activities such as organizing, creating, transferring, searching and sharing the knowledge under an umbrella called knowledge management (Kelid 2009, 54). By implementing knowledge management in an organization, one can expect the organization reach its goals and gain great successes. In today’s changing world, success belongs to those societies and organizations which establish a meaningful relationship between their rare resources and management competencies and entrepreneurial capacities of their human resources. In other words, only those societies and the organizations can have accelerating and forward movements which equip their human resources with knowledge and productive entrepreneurial skills so that they manage and direct other resources of the society and organization for value creation and attaining development. Knowledge management is one of the factors affecting the staff entrepreneurship. It’s an important tool for the organizations for better management of information and more importantly, knowledge. Unlike most of concepts, knowledge management cannot always be defined easily, since it encompasses a wide domain of concepts, management behaviors, technologies and activities (Gupta, 2008). Today, organizations with sustainable competitive advantages are more

successful in the market (Bechine et al, 2005, 99). Choi et al (2008) states that in current situation the sustainable competitive advantage can only be obtained by using knowledge for innovation (Choi et al, 2008, 235). Therefore, today, knowledge is a valuable organizational property which requires management. The main kernel of knowledge management is gaining the right knowledge for the right staff at the right time and in the right form (Madhooshi, Sadati, 2010, 393). King et al (2008) and Tressa et al (2006) have defined knowledge management as a structured process for creating, acquiring, sharing, transferring and implementing implicit and explicit knowledge as an organizational property to encourage innovation and entrepreneurship (King et al, 2008,168). In their researches, they emphasize that knowledge management processes are chain threads which can lead to innovation, performance improvement and obtaining sustainable competitive advantage only when these indices support each other in a systematic way. On the other hand, some other researchers have investigated the effect of each of the knowledge management components on innovation, performance, competitive advantage and other organizational goals separately (Lee, 2009, 443).

Problem Statement

Factors such as globalization, downsizing of the governments, citizen-orientation, and the necessity of citizen participation require special attention to knowledge management. Organizations must be able to manage their knowledge capitals in an effective way (Abtahi and Salavati 1385). The most important role which can be attributed to knowledge management is to consider it as a change methodology. Knowledge management can be the most important cause of change in an organization by attracting new knowledge into the system in one hand and by managing that knowledge in an effective way on the other hand. Since

knowledge is closer to the organizational decisions and actions, it can cause organizational performance improvement much better than data and information and therefore can cause improvements in performance and thus improving the organization's services in general and public organizations in special (Hels, 2001). The phrase of knowledge management encompasses many different issues in management world. The reason for creating this concept is transferring and moving economical and production systems towards knowledge-based societies. In this sense, knowledge is considered as a property along with other properties such as land, labor and capital (Nonaka & Takeuchi, 1995). Knowledge management must be seen as a monolithic management plan which concentrates on strategic goals, moves on the basis of business processes and uses the Information Technology. Knowledge which is managed includes both explicit and tacit knowledge (employees' mental knowledge) (Davenport, 1998, 1). It must be noted that all the staff have a strong but unknown mental knowledge. The intrinsic innate knowledge is often tacit and is based on the mental and oral transfer which leads to knowledge distortion. It must be considered that this knowledge must be documented and used when needed (Okorafor, 2010, 9).

Entrepreneurship is the main driving force of economic development and a tool for gaining success in organizations (Green, 2007, 357). Entrepreneurship unifies the behaviors in an organization in order to create a new essence in the organization, products, services, new technologies, and new management techniques in order to obtain competitive advantage (Antony and Histerich, 2004, 520). Today, the most researches concerning entrepreneurship is based on identifying the personality traits of entrepreneurs and is of the structural and environmental situation type which has been criticized due to the lack of attention to social relations network (social capital), i.e. noneconomical factors (Ohio, 2004, 201).

In the present research we try to find out whether or not there is a relationship between knowledge management and entrepreneurship in the Labor and social affairs department of Qom.

Importance and Necessity of the Research

Some believe that the thread of losing knowledge is the main cause of the advent of knowledge management (Hidreth, 2002). Others believe that knowledge management is a response to the problem of brain depreciation and amnesia (Garden, 2003). In recent years, many organizations are implementing knowledge management projects and this is actually an attempt to improve and gain competitive advantage and survive in the competition field (Davenport and Prusak, 2000). Knowledge management emerged as a novel approach for utilizing and developing the capitals of an organization in order to reach the organizational goals (Bhatt, 2001), and concentrated exclusively on the adoption of strategies and measures for managing the human-based capitals (Adam & McCreedy, 1999). The aim of knowledge management is the complete inclusion of the current knowledge in goods and services in order to improve the core competencies and gaining superiority in competition (Coli & Ahmad & Ives, 2002). Knowledge management basically concentrates on improvement, innovation and achieving goals (Sallis & Jones, 2002).

Therefore implementing knowledge management in organizations is a financial necessity. Organizations need to manage their intellectual capital in an effective way in order to be able to gain and maintain competitive advantage. Since

knowledge is in the employees' minds, its management is mostly human-based rather than technology-based. However technology (Internet, group software systems) can be used as a powerful tool for knowledge management (Garden, 2003).

Development of entrepreneurship and promotion of entrepreneurship culture is a serious economic, social and political necessity. In developed countries, the importance of entrepreneurship is not only for creating jobs, but is also due to the fact that the small economic activities which have been established and developed in these countries have been able to have a major portion in development of advanced technologies as well as producing wealth in the world (Samadaghaei, 1383).

The primary Goals

Investigating the relationship between knowledge management and organizational entrepreneurship (according to knowledge management cycle).

The Secondary Goals

- Investigation of the relationship between knowledge creation and organizational entrepreneurship.
- Investigation of the relationship between knowledge organizing and organizational entrepreneurship.
- Investigation of the relationship between knowledge exchange and organizational entrepreneurship.
- Investigation of the relationship between knowledge implementation and organizational entrepreneurship.

The Main Hypothesis

There is a meaningful relationship between knowledge management and organizational entrepreneurship.

The Secondary Hypotheses

- There is a meaningful relationship between knowledge creation and organizational entrepreneurship.
- There is a meaningful relationship between knowledge organizing and organizational entrepreneurship.
- There is a meaningful relationship between knowledge exchange and organizational entrepreneurship.
- There is a meaningful relationship between knowledge implementation and organizational entrepreneurship.

Research Methodology

The method used is descriptive and is of the correlation and field research type. Descriptive research is a research that describes things as they are. This type of research also includes describing, recording and analyzing the current situation. In this type of research, the attempt is to find out the relationships between non-manipulated factors (variables). Data collecting method in the current research is of the survey type. In order to evaluate the variable of "knowledge management" with respect to previous researches, 41 questions related to the knowledge management cycle based on Jashapara's theory (2004) were used. In order to evaluate the variable of "organizational entrepreneurship", 31 questions used by Shokri (2003) were implemented.

In the current research, descriptive and inferential statistical methods were used in order to analyze the data obtained from the samples. Descriptive statistical method has been used for investigating the characteristics of the responders. Spearman correlation tests, ANOVA test, and T test have been used for data analysis using SPSS software.

Population and sample

The statistical population of the current study is the department of labor and social affairs of Qom province which consists of 205 employees. The statistical sample for the studied

population has been chosen based on the finite Statistical Population (cochran) which turned to be 111 persons.

Theoretical background

Knowledge management is not a set of technical approaches to a problem, but a human and social process which could be facilitated through technical and technological approaches (Salis and Jones, 2000).

Knowledge creation is an endless process which includes creating novel ideas, understanding new patterns, combination of separate rules and developing new processes for creating knowledge (Noeepur, 1382, 262).

Knowledge Organizing is storing, recording, and maintaining knowledge in a form or framework which keeps the cohesion of it's components, and has the ability to be retrieved and used by the organization's employees (Rading, 1383, 179).

Knowledge exchange is movement, distribution and dissemination of knowledge among the employees and knowledge databases in mechanized or non-mechanized ways and in a bidirectional way (Rading, 1383, 180).

Knowledge implementation is implementing ideas and obtained knowledge regardless of who has proposed it (Benbia, 2008, 55).

Four-looped Model of Knowledge Management

According to different aspects of knowledge management , Jashapara defines knowledge management as a four-looped cycle: effective learning processes which include creation, management, exchange (both the implicit and explicit types which is incontestable by appropriate use of technology and cultural environment), and implementation of the knowledge which in turn leads to the promotion of organizational intellectual capital and improving its performance (Jashapara, 2004, 12).

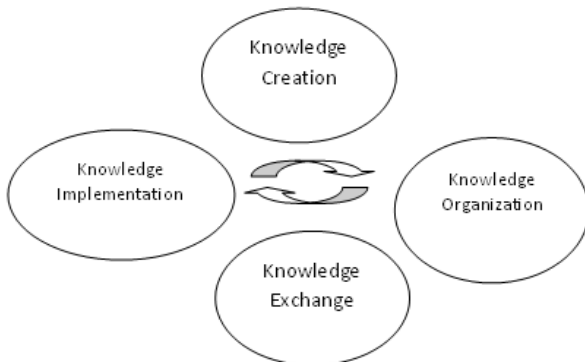


Fig. 1 The four-looped knowledge management cycle (Jashapara, 2004, 12)

Organizational entrepreneurship is defined as a system which increases the creative capacity of the managers and the whole organizational workforce, encourages them to achieve the entrepreneurial goals by means of developing the organizational fields and units and developing products and services, identifies the resources and makes them utilizable, and finds the best suppliers and customers inside and outside the organization in order to obtain developments in production and profit. In this model, two domains affecting the organizational entrepreneurship including internal organizational environment and external organizational environment are represented (Moghimi, 1384, 229).

Statistical Analysis Results and Conclusion

Descriptive statistics analysis

The descriptive statistics show that most of the members of the statistical population are of under-30 age group. Most of the

members of statistical sample are female (125 persons, 63 %). Most of the members are married (117 persons, 59 %). Most of the members of the statistical sample have a bachelor degree (92persons, 46.7 %). Most of the members of the statistical population have less than 5 years of work experience. Most of the members' organizational post is "expert".

Inferential data analysis

Spearman Correlation Test

First secondary Hypothesis: There is a meaningful relationship between knowledge creation and organizational entrepreneurship.

$$\begin{cases} H_0: \rho = 0 & \text{There is no relationship between knowledge creation and organizational entrepreneurship} \\ H_1: \rho \neq 0 & \text{There is a relationship between knowledge creation and organizational entrepreneurship} \end{cases}$$

Table 1: Values of correlation coefficient

Hypothesis	Number	Type of Test	Correlation Coefficient	Sig	Test Result
Relationship between knowledge creation and organizational entrepreneurship	111	Spearman	0.712	0.000	Hypothesis verified

As it can be seen in Table 1, by carrying out the Spearman test at a 95% confidence level, the Sig was found to be 0.000. Since the value of Sig is lower than 0.05, we reject the zero hypothesis and accept the opposite hypothesis. Therefore there is a meaningful relationship between the knowledge creation and organizational entrepreneurship. Since the value of Spearman correlation coefficient for this test is 0.712, the relationship is positive. As a result, the first secondary hypothesis is verified at a 95% confidence level.

Second secondary Hypothesis: There is a meaningful relationship between knowledge organizing and organizational entrepreneurship.

$$\begin{cases} H_0: \rho = 0 & \text{There is no relationship between knowledge organizing and organizational entrepreneurship} \\ H_1: \rho \neq 0 & \text{There is a relationship between knowledge organizing and organizational entrepreneurship} \end{cases}$$

Table 2: Values of correlation coefficient

Hypothesis	Number	Type of Test	Correlation Coefficient	Sig	Test Result
Relationship between knowledge organizing and organizational entrepreneurship	111	Spearman	0.606	0.000	Hypothesis verified

As it can be seen in Table 2, by carrying out the Spearman test at a 95% confidence level, the Sig was found to be 0.000. Since the value of Sig is lower than 0.05, we reject the zero hypothesis and accept the opposite hypothesis. Therefore there is a meaningful relationship between knowledge organizing and organizational entrepreneurship. Since the value of Spearman correlation coefficient for this test is 0.606, the relationship is positive. As a result, the second secondary hypothesis is verified at a 95% level of confidence.

Third secondary Hypothesis: There is a meaningful relationship between knowledge exchange and organizational entrepreneurship.

$H_0: \rho = 0$ There is no relationship between knowledge exchange and organizational entrepreneurship
 $H_1: \rho \neq 0$ There is a relationship between knowledge exchange and organizational entrepreneurship

Table 3: Values of correlation coefficient

Hypothesis	Number	Type of Test	Correlation Coefficient	Sig	Test Result
Relationship between knowledge exchange and organizational entrepreneurship	111	Spearman	0.405	0.000	Hypothesis verified

As it can be seen in Table 3, by carrying out the Spearman test at a 95% confidence level, the Sig was found to be 0.000. Since the value of Sig is lower than 0.05, we reject the zero hypothesis and accept the opposite hypothesis. Therefore there is a meaningful relationship between knowledge exchange and organizational entrepreneurship. Since the value of Spearman correlation coefficient for this test is 0.450, the relationship is positive. As a result, the third secondary hypothesis is verified at a 95% level of confidence.

Fourth secondary Hypothesis: There is a meaningful relationship between knowledge implementation and organizational entrepreneurship.

$H_0: \rho = 0$ There is no relationship between knowledge implementation and organizational entrepreneurship
 $H_1: \rho \neq 0$ There is a relationship between knowledge implementation and organizational entrepreneurship

Table 4: Values of correlation coefficient

Hypothesis	Number	Type of Test	Correlation Coefficient	Sig	Test Result
Relationship between knowledge implementation and organizational entrepreneurship	111	Spearman	0.651	0.000	Hypothesis verified

As it can be seen in Table 4, by carrying out the Spearman test at a 95% confidence level, the Sig was found to be 0.000. Since the value of Sig is lower than 0.05, we reject the zero hypothesis and accept the opposite hypothesis. Therefore there is a meaningful relationship between knowledge implementation and organizational entrepreneurship. Since the value of Spearman correlation coefficient for this test is 0.651, the relationship is positive. As a result, the fourth secondary hypothesis is verified at a 95% level of confidence.

The Main Hypothesis: There is a meaningful relationship between knowledge management and organizational entrepreneurship.

$H_0: \rho = 0$ There is no relationship between knowledge management and organizational entrepreneurship
 $H_1: \rho \neq 0$ There is a relationship between knowledge management and organizational entrepreneurship

As it can be seen in Table 5, by carrying out the Spearman test at a 95% confidence level, the Sig was found to be 0.000. Since the value of Sig is lower than 0.05, we reject the zero hypothesis and accept the opposite hypothesis. Therefore there is a meaningful relationship between knowledge management and organizational entrepreneurship. Since the value of Spearman correlation coefficient for this test is 0.866, the

relationship is positive. As a result, the main hypothesis is verified at a 95% level of confidence.

Table 5: Values of correlation coefficient

Hypothesis	Number	Type of Test	Correlation Coefficient	Sig	Test Result
Relationship between knowledge management and organizational entrepreneurship	111	Spearman	0.866	0.000	Hypothesis verified

T Test

This test is used in order to compare the average of two populations or samples. In this research for example, this test has been used for investigating the effect of sex on knowledge creation variable.

The T Test to show that there is no difference between males and females in knowledge creation:

$H_0: \mu_1 = \mu_2$ the average of knowledge creation is not different between males and females
 $H_1: \mu_1 \neq \mu_2$ the average of knowledge creation is different between males and females

Table 6: Investigation of independent T test for secondary hypothesis

	T Stats	Degree of freedom	Level of significance	Difference between averages
Knowledge Creation	-0.264	200	0.792	-0.034

As it can be seen in Table 6, the level of significance is higher than 0.05, and therefore there is not enough evidence to reject the zero hypothesis and the zero hypothesis is verified at a 95% level of confidence. Therefore one can say that at a 0.05 level of significance, there is no difference between the two groups considering the variable "knowledge creation".

ANOVA Test

This test is used to compare the average of two or more populations. In this research for example, Kruskal Wallis and ANOVA tests have been used for investigating the effect of education on knowledge creation variable.

ANOVA Test to show that there is no difference between the knowledge creation of people with different education levels:

$H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4$ The average of knowledge creation is equal in groups with different levels of education
 $H_1: \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$ The average of knowledge creation is different in groups with different levels of education

Table 7: Descriptive variable statistics

Education	Number	Average	SD
High School Graduation and under it	13	3.71	1.06
Bachelor's degree	138	3.78	0.842
Master's degree	34	3.86	1.16
PHD or professional degree	11	3.60	0.788
Sum	196	3.76	0.909

Table 8: Investigation of ANOVA test for secondary hypothesis

Hypothesis	F Statistic	Sig	Test Result
The average of knowledge creation is equal in groups with different levels of education	0.461	0.701	Hypothesis verified

As it can be seen in Table 7, since the level of significance is higher than 0.05, zero hypothesis is verified. Therefore we can say that at a 95% level of significance, the

average of all educational levels is equal on the variable of "knowledge creation".

Discussion and Conclusion

Suggestions considering the results of first secondary hypothesis:

Since there is a positive relationship between knowledge creation and organizational entrepreneurship, an atmosphere must be developed in the organization in which the employees are interested in creating knowledge through new tools. The training procedures of the employees should be appropriately regulated and they should be motivated to spend time to promote their knowledge. The knowledge-based workers must be glorified and learning opportunities must be provided for all of the workers. The staff must be consulted about a long-term planning for promoting their knowledge as well.

Suggestions considering the results of second secondary hypothesis:

Since there is a positive relationship between knowledge organizing and organizational entrepreneurship, an atmosphere must be provided in the organization so that the employees are able to implement their knowledge, and express it if needed. The employees must have no difficulties obtaining the needed information in the organization. They must also be helped to identify the information required for their job.

Suggestions considering the results of third secondary hypothesis:

In order to promote the knowledge exchange in the organization, a trustful atmosphere must be provided in which the employees exchange their thoughts through research teams, the experienced workers are encouraged to transfer their experiences to inexperienced ones, sharing personal knowledge relevant to work becomes a part of the workers' duties, the research teams are able to cooperate with other experts, the staff are motivated to use network and databases, and staff are encouraged to share their personal information.

Suggestions considering the results of fourth secondary hypothesis:

Since knowledge implementation and organizational entrepreneurship are positively related to each other, an environment must be provided in the organization in which the workers could ponder how to implement their learnings and are encouraged to implement their knowledge, the trainings are relevant to the employees' administrative duties, the staff use their findings after attending training courses and use their unofficial experiences and learnings in the workplace.

Discussion about the T test and ANOVA test

According to T and ANOVA tests of the knowledge management variable, it was shown that there is no difference between males and females as well as between groups with different educational levels considering knowledge creation as an effective component in entrepreneurship.

Suggestions considering the results of main hypothesis:

Findings about the relationship between knowledge management and organizational entrepreneurship showed that there is a positive and meaningful correlation between the components of knowledge management and organizational entrepreneurship. Therefore in order to promote the organizational entrepreneurship, it must be attempted to provide a condition in which the employees believe in themselves while participating team activities, their ideas are given enough attention and their scientific level is updated continuously. There should be an environment of criticism and scrutiny in the

organization, and the managers should emphasize on the employees' participation in decisions.

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