

Case Study

Survey individual and organizational factors affecting organizational knowledge sharing in Fars Industrial Estates Company

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ABSTRACT:

One of the most important and most common processes in the different structures introduced in knowledge management is knowledge sharing, making people motivated to share their knowledge in organizations and improve knowledge sharing among practitioners in order to create competitive advantage are of the most important priorities of knowledge management in the world. Sharing the knowledge effectively between members of an organization leads to cost reduction in producing the knowledge, and to ensure dissemination of best working practices in the organization, thus; it enables organizations to solve their issues and problems themselves. The increasing importance of knowledge sharing for the competitiveness of organizations introduces the identification of factors influencing on it as one of the most important aspects of knowledge management in organizations, and with a management perspective also introduces the factors influencing knowledge sharing in organizations; the effect of these factors on organizational knowledge sharing in Fars Industrial Estates company are then studied through components including satisfaction attained by helping others, self-efficacy of the knowledge, the application of information and communication technologies, organizational bonuses, internal support, and organizational mechanisms among the employees of the company (total of 160 employees). The data collection tool is a combination of four questionnaires. In addition to the inferential statistics the Path analysis method was used to investigate the hypothesis of the research, for the demographic features investigation and the response to demographic hypotheses of the study; the independent group t-test and the one way variance analysis were used. The results of this study indicate that factors influencing organizational knowledge sharing have a direct and significant impact on organizational knowledge sharing, which means that individual, technological and organizational factors will have a very important role in promoting the level of organizational knowledge sharing.

Keywords: organizational knowledge sharing, individual factors, organizational factors, self-efficacy of the knowledge, inner support

INTRODUCTION:

In the current Knowledge-based economy with respect to the low lifetime of the knowledge and high rates of innovations; maintaining on a competitive position for a long time is no longer possible. Furthermore, most organizations which are

highly depended to their own knowledge; every now and then face the problem of size reduction and regenerating the structures, and subsequently they loss the old staff and hire new employees; this may lead them to

the loss part of the organizational knowledge.

In such circumstances, the importance of knowledge management is determined as a crucial and fundamental factor to make the most advantages of past experiences. In this context, knowledge sharing is of utmost importance in order to avoid wasting knowledge and increasing the understanding among human beings and organizations and, ultimately, human development. It is obvious that; managers, executives and technical engineers will cope with these complex issues that in addition to having the necessary information and knowledge, obligate themselves to have a system for sharing and maintaining their past experiences or knowledge within the organization. It is noteworthy that the purpose of the present study is to develop increasing knowledge of applied knowledge in the field of knowledge sharing and factors which may affect it, and to direct the minds of planners and decision makers to the scientific application of knowledge and business systems, maintenance and sharing the retrieval.

Literature review:

Davenport & Prusak (1998) believe that the role of knowledge sharing in knowledge management is so important that some authors argue: "the existence of knowledge management is to support knowledge sharing." According to Mc Dermot and O'dell (2001), although some people believe that knowledge is power, but it seems that the knowledge is not power by itself, rather; what empowers people is part of their knowledge which they share with others.

The most important challenges managers have to succeed in doing it; is to convert the thought of "the power of knowledge " to "the sharing of knowledge" in the organization because the most fundamental application and the challenge of knowledge management is to share the knowledge, not the production of knowledge, because the

knowledge which is not broadcasted will have a very limited value for the organization (FaqihMirzaei and Gholamian, 1388).

The introduction of factors affecting on knowledge sharing as a starting point is in fact helpful for those of senior managers and practitioners involved in the knowledge management activities who are interested in auditing the activities of their organizations in the management of knowledge; with the view of identifying the main bottlenecks encountered with to take an appropriate action and investigate the effectiveness of knowledge sharing.

Therefore, giving sufficient attention to identify these factors and the take timely action for strengthening or limiting them lead to create a background in organizations which contributes to strengthen the knowledge sharing. In other words, appropriate approach can convert them into facilitators of knowledge sharing.

According to Rige (2005), knowledge sharing, as a complex activity but a value making one; is a fundamental to multitude of knowledge management strategies in organizations. Therefore, as much as this issue is effective in the success of any organization to create a competitive advantage, for the identification of factors influencing on it, it is necessary to create a more suitable condition for sharing the knowledge. Because, overcoming the willingness of employees to accumulate knowledge, requires an understanding of the factors influencing the knowledge sharing and the considering how an organization can be managed using these factors. And sharing of knowledge at work could be effected by motivational and individual or organization factors (Banke, 2010).

Knowledge Management

Here we provide a general definition of knowledge management:

"Knowledge management is a set of processes in order to prevent wasting

knowledge through dissemination of existing knowledge and creating new knowledge for achieving certain goals" (Knott, 2004).

Organizational Knowledge Sharing

Knowledge sharing is one of the virtual (intangible) activities that people cannot be

forced to do it. Therefore, it is the duty of senior managers to create such attitude among employees that: knowledge is not the power, but to share is a power (Habibi, 1387: 27).

Table 1. Some definitions of knowledge sharing (Tan & et al, 2010)

Definitions	Authors
Knowledge sharing can be defined as a culture of social interaction which covers the exchange of knowledge, experiences and skills of employees across departments or organizations.	Lin, Lee, Wang (2009)
Knowledge sharing can be defined as a social and voluntary process for transmission, absorption and reusing the existing knowledge in planning and carrying out the organization's services.	Harder (2008)
A systematic process for creating, acquiring, combining, learning, sharing and applying the knowledge and experiences to achieve organizational goals. This knowledge can come from the staffs' minds, notes stored in files or stored in electronic formats.	Sethumadhavan (2007)
The process of taking or transferring knowledge from the source unit to the receiver unit.	Bircham - Connolly, Corner and Bowren (2005)
The two-way exchange of knowledge between individuals (receiver and the sender of knowledge).	Hooff and Weenen (2004)
The exchange of knowledge in a mutual process following the creation and re-using knowledge in a new concept.	Willem (2003)
The way of identifying knowledge in the thought processes through understanding and learning something that is only in the mind and interacting with other people in the world outside the mind of the staffs.	Wilson (2002)
The interpretation of knowledge during the periods of performance and distinguishing it from information issues which have a mediate relationship with performance.	Malhorta (2001)
Knowledge sharing is a process that each of the units is affected by means of sharing the experience of others. In this regard, a unit can be an individual, a group, or an organization.	Linda Argote and Ingram (2000)

Theoretical framework

In the present study, variables are divided into two categories: exogenous and endogenous. In this research, organizational knowledge sharing is an endogenous variable with three dimensions of attitude, concept and behavior which are used to complete the theoretical framework of the planned behavior developed theory of Eigen (2006).

Exogenous variables are factors affecting organizational knowledge sharing that the institutional factors are taken from Banke thesis (2010), it is to be mentioned that in recent research, little attention is given to organizational factors and personal factors in Fan Lin research (2007) with respect to their growing importance in the current knowledge-based economy.

Table 3. Literature Review (Author)

Experts	Index	Component	Concept
Lu et al. (2006), Buck et al. (2005), Jochen and Van Hang (2010), Lumitnianin(2007), Fan Lin (2007)		Self-efficacy	Individual factors
Yu et al. (2010), Fan Lin (2007),		Satisfaction of helping others	
Buck and et al (2005), Kim Valley (2006), Lu et al. (2006), Cabrera (2006), Cancan Halley (2005), Dong William (2010), Ming Bawa (2010), Banke (2010)	Outter	Organizational bonuses	Organizational factors
Lumitnianin(2007), Fan Lin (2007), Way and colleagues	Internal		

(2008), Lu et al. (2006), William Dong (2010), Min Bawa (2010), Banke(2010)			
Banke (2010), Fan Lin (2007), Bowlin (2008), Buck and et al (2005)	Colleague	Internal support	Organizational factors
Banke (2010), Fan Lin (2007), Bowlin (2008), Buck and et al (2005)	Supervisor		
Lumitnianin (2007), Banke(2010)	Knowledge sharing norms		
Banke (2010), Eigen (1981), Sovobulogo (2005), Buck et al (2005)		Attitude to sharing behavior	Organizational knowledge sharing
Banke (2010), Eigen (1981), Sovobulogo (2005), Buck et al (2005)		The Concept of Knowledge Sharing	
Banke (2010), Eigen (1981), Sovobulogo (2005), Buck et al (2005)		Knowledge Sharing Behaviors	

Methodology

The aim of this study was to examine the organizational knowledge sharing variable with three dimensions of attitude, concept and knowledge sharing among the organizational employees, in situations and problems of real organizational life, with the effect of factors such as individual factors (satisfaction of helping others, self-efficacy Knowledge), and organizational factors (organizational bonuses, internal support). Based on the nature and method of the research, this study is a descriptive correlational research.

The statistical population

In this study, because of the limitation of the statistical population and the total population equality to whole sample, the sampling method was done as census sampling of staffs in Fars Industrial Estates Company.

A) Methods and tools for data collection and its relationship with the research model

Data collection for the study was performed by a combination of four questionnaires and as a closed type; the measuring scale for all parts of the model was based on Likert scale. After obtaining the required licenses and introducing correspondences the permission was issued to distribute 160 questionnaires in Fars Industrial Estates Company.

155 questionnaires were gathered of 160 questionnaires which were distributed among the employees, including 4 questionnaires that were incomplete, thus; the number of questionnaires which were used reached to 151 questionnaires.

Testing the assumptions of the research

Since this study was to assess the variables' mediator and predictor role and also to determine the direct effects of these variables, in order to estimate the direct effects and the path coefficients between the variables in the model; the Path analysis method, which were in fact the standardized coefficients (direct effects), was used and the results are presented in a separate table.

Table 5: direct and indirect effects, total and t values for variables affecting on organizational knowledge sharing

T values	Total effects	Indirect effects	Direct effects	Effects
-----	-----	-----	-----	Satisfaction of helping others
2/09	0/15	0/01	0/14	organizational knowledge sharing
-----	-----	-----	-----	Self-efficacy of the Knowledge
3/58	0/35	0/03	0/33	Organizational knowledge sharing
-----	-----	-----	-----	Organizational bonuses
3/67	0/10	0/01	0/09	Organizational knowledge sharing
-----	-----	-----	-----	Internal support
2/68	0/32	0/06	0/26	Organizational knowledge sharing

As it can be observed in Table (5) among all the variables in the study (endogenous - exogenous); self-efficacy of the Knowledge has the most direct effect (33/0) and internal support has the most indirect effect (06/0) on organizational knowledge sharing. Most of the total impact on organizational knowledge sharing was related to internal support (68/2). The rate of explained variance and error variance in organizational knowledge sharing variable were respectively (70/0 and 30/0). The greatest total effect on organizational Knowledge sharing was related to internal supports (38/0).

Evaluation of findings of the research

To examine the relationship between employees’ sex and knowledge sharing; independent t test was used, the results of which are presented in the following table:

Table (7): independent t test between employees’ sex and sharing organizational knowledge

The level of significance	Degrees of freedom	Statistic value oft	Mean	Number	Sex
0/728	149	0/384	91/619	130	Men
			90/346	21	Women

The results of the independent t test (384/0) with 149 freedom degrees is smaller than the table value in the significance level (05/0 P). Therefore, it can be said with 95% confidence that there was no significant difference between employees’ sex and sharing organizational knowledge.

To examine the relationship between age and the education level and employees’ service record; one-way variance analysis was used to test the knowledge sharing, the results of which are presented in the following table:

Table (8): One-way variance analysis test between the age of employees and organizational knowledge sharing

The level of significance	Statistic value of F	Mean squares	Degrees of freedom	Sum of squares	Sources of variation	
0/445	0/877	210/877	3	632/630	Intergroup	Employees’ age and organizational knowledge sharing
		240/497	147	35353/039	Within the group	
			150	35985/669	Total	
0/624	0/588	142/159	3	426/478	Intergroup	employees level of education and organizational knowledge sharing
		241/899	147	35559/191	Within the group	
			150	35985/669	Total	
0/333	1/145	273/927	3	821/780	Intergroup	employees service record and organizational knowledge sharing
		239/210	147	35163/889	Within the group	
			150	35985/669	Total	

As it is observed in the table (8), the observed value of F (877/0) with 3 and 147 degrees of freedom is smaller than the table value in the level of significance (05/0 P). Therefore, there is no significant difference between the employees’ age and organizational knowledge sharing.

The observed value of F (588/0) with 3 and 147 degrees of freedom is smaller than the table value at the significant level (05/0 P). Therefore, there is no significant difference between education level of employees and sharing organizational knowledge.

The observed value of F (145/1) with 3 and 147 degrees of freedom is smaller than the

table value at the significance level (05/0 P). Therefore, there is no significant difference between employees' service records and organizational knowledge sharing.

Discussion and Conclusion

It was observed, through investigating the research hypotheses that there was no difference among the employees of Fars Industrial Estates Company in terms of age, gender, education level and service history in the use of organizational knowledge sharing; this fact shows the importance of organizational knowledge sharing so that any person in any conditions and in any situation has the ability to share knowledge if there is a coherent structure; and this feature is of the modern world technologies such as cell phones which is becoming widespread in all social classes and it can be easily understood for any ages and in any educational background.

This result can be a motivation for the managers and authorities in sharing organizational knowledge and making emphasize on it; since according to the results organizational knowledge sharing is a pervasive issue and is not specifically for a particular class of employees with special features.

About the results of the demographic hypotheses, that indicated no significance, it can be said that they were consistent with previous results of Banke (2010); Yousef and Ismael (2009), Vasco and Faraj (2005) research and inconsistent with Swang (2006), Herndon (2009) and Constant (1999).

By summarizing the results of the above hypotheses and their confirmation, we could conclude at the beginning that the answer to the main research question is yes. Therefore, the scientific model presented, in addition to its good fitness, has a potential to be applied in the studied population. Therefore, it could be ascertained that the tiny percentage remained of the factors are a subset of these factors.

Suggestions for managers and decision makers

In this study, it was tried to provide a clear concept of organizational knowledge sharing, structures, processes, and factors affecting on them; which helps to increase the understanding of managers and employees of the organization and development of organizational knowledge sharing to establish a knowledge management successfully through providing a conceptual model, with an integrated management view. In this regard, the following recommendations are presented to managers:

1. Invite the computer systems designers and planners in order to share organizational knowledge or develop coherent structures for them in a way that is consistent with the duties of the employees in the organization.
2. Training and upbringing architects and experts of organizational knowledge sharing structures so that along with changes and developments in the organization, update the information system of organizational knowledge sharing according to the needs of the organization and promote a flexible and user friendly format.
3. Training staffs and users to participate in organizational knowledge sharing activities so that it could fit to their duties in each part of the organization.
4. Preparing guidelines and surveillance programs for employees who gain information and experiences during their service in the organization and take decisions the measures to deal with problems and issues to share them coherently as part of their duties to be maintained and institutionalized in the organization as experiences to be adhered in future uses.
5. Providing bindings and incentives policies for staff to share their knowledge and to use the experiences

of their cooperators which were prepared by the past staff.

6. Developing the information system of organizational knowledge sharing to contractors and groups that are contractually affiliated with the organization and obligate them to share information about making decisions in the project.

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