

## Investigating the Factors Affecting the Implementation of Knowledge Management in Aghajari Oil and Gas Exploitation Company

Abolghasem Sheikhi<sup>1\*</sup>, Nasser Molaei<sup>2</sup>

<sup>1</sup>Department of Management, Shushtar branch, Islamic Azad University, Shushtar, Iran; <sup>2</sup>Iran National Oil Company

\*E-mail: ghasemsheikh@yahoo.com

Received for publication: 01 February 2016.

Accepted for publication: 20 June 2016.

### Abstract

Knowledge management is one way to improve the survival of organization. Therefore, the identification and study of factors affecting the deployment of knowledge management can help organizations to implement and enforce it better. When factors affecting the deployment of knowledge management to be identified and analyzed previously and an appropriate platform to be provided for its deployment, knowledge management is successfully implemented in organizations. Because the management of the existing knowledge of organization is a humanistic matter and is completely related to human resources, organizations to deploy successful knowledge management should provide appropriate organizational culture, strategic thinking, right staff training and suitable technology and act accordingly. Aghajari Oil and Gas Exploitation Company with respect to the determined objectives and policies of the ministry and more emphasis on the issue of knowledge-based operation process of oil and gas resources and according to its task at oil exploitation, production and sending and protection of the facilities and oil tanks as well as rapid advances in technology and increasing employees' level of education, considers knowledge management. This research is conducted in line with the goals and policies set by the Ministry of Petroleum. For this purpose, one main hypothesis, four sub-hypotheses and two side-hypotheses are developed. The results of hypotheses testing implied the endorsement of main hypothesis namely, it was found that organizational factors influence the management deployment in Aghajari Oil and Gas Exploitation Company. Four research hypotheses were confirmed as well thus, it became clear that organizational factors (including organizational culture, strategic thinking, employees' training and technology) affect the management deployment in Aghajari Oil and Gas Exploitation Company. Also according to the results, the first side-hypothesis that "The different education level of employees has different effects on the implementation of knowledge management in Aghajari Oil and Gas Exploitation Company" was confirmed. But the second side-hypothesis that "different professions (technical and non-technical) have different effect on the deployment of knowledge management in Aghajari Oil and Gas Exploitation Company" was rejected.

**Keywords:** knowledge management, organizational culture, strategic thinking, employees' training, technology

### Introduction

Development, survival principle and knowledge are prerequisite for entering into the competition area. If organizations in the micro size and nations in macro size neglect development, they will lose economics and wealth creation to competitors. Nations are competing in the new economy entitled knowledge-based economy. Knowledge-based economy is an economy in which knowledge is the most important resource and learning is considered as its main process. In other words, research and development are the first pillar to join to the global economic. Thus, for a

country like Iran that in its twenty-year vision document intends to win competition from its neighbors in economy and trade, knowledge-based management should be the most strategic tool (Forqani, 2005).

By studying and analyzing the knowledge and importance of its features regarding the organizations' operations it can be found that enjoying the knowledge and updated information for the survival of organizations is an undeniable necessity. Especially if the process of changing in the knowledge of society to be carefully evaluated, this conclusion is drawn that today's post-industrial society is an information society in which gradually amplifier technologies are replaced by knowledge increasing technologies.

Therefore, the only competitive advantage that organizations will have in the twenty-first century is what they know and how they will use it (Civi, 2000: 93). Hence, the new developments in information technology have supported innovation in knowledge management (Jaehun, J. and sang M.2009: 36).

In high-tech industries and knowledge-based organizations, new areas are emerged, evolved and matured and very quickly become outdated. Therefore, managers not only make strategic decisions based on structured information, but should decide based on incomplete, dynamic and ambiguous information. Therefore, the knowledge management framework should be used to make aware the managers about the process of their changes and speed (R.Bafiares-Alcantara et al., 2003). In other words, broad developments in the 80's and 90 reveal the truth that the knowledge based era and the importance of knowledge management have become increasingly clear and now competitive advantage of organizations should be sought in their strategic knowledge management. On the other hand, the complexities inherent in the concept of and knowledge management are in a way that although knowledge-based more or less controls the accelerating and unique developments of today's world and every day dimensions and instances of decisions, activities and knowledge-based phenomena are encountered to people more than ever, these concepts are still in need of definition, explanation and interpretation.

### **Significance of the study**

By studying and analyzing the knowledge and importance of its features regarding the organizations' operations it can be found that enjoying the knowledge and updated information for the survival of organizations is an undeniable necessity. Especially if the process of changing in the knowledge of society to be carefully evaluated, this conclusion is drawn that today's post-industrial society is an information society in which gradually amplifier technologies are replaced by knowledge increasing technologies (Ahamdpour Dariyani, 2002). Therefore, organizational management by relying on superior knowledge should provide the possibility of making more reasonable decisions on important issues and improving knowledge-based performance.

Therefore, knowledge management is a concept more important than the knowledge itself that organization is looking for to explain and clarify how to convert individual and organizational information and knowledge to the individual and collective knowledge and skills. The flow of tendency to knowledge and learning in human's soul has caused that even in the early centuries also learn something that is useful for him. But over time, we are witnessing the increasing importance of knowledge and learning in social systems. Not superfluous that "Tom Stewart" in 1994 in an article in Fortune Magazine remembers the companies that pay attention to what they know more than what they have and "Peter Drucker" introduces knowledge as the foundation of competition in the super-capital belief community (Zanjirchi, 2006).

Today, organizations have realized that knowledge more than everything else can put them in a favorable competitive world. Therefore, the organization's employees as knowledge owners and

most important asset of the organization have been considered more than anything else and knowledge management as a tool that can gather existing knowledge and give it dynamic order and spread it across the organization is very important. But the experience of many companies has failed in knowledge management and this is due to the fact that they consider knowledge management as a temporary and fleeting matter. While today the necessity of considering knowledge management is proposed as a strategic tool to improve organization and success in the competition area. This implies that regardless of the principle of knowledge management and identification of organization, it cannot be utilized in the organization (Seif, 2006). In Iran, in recent years, much attention is paid to the issue of knowledge management and various organizations have attempted to conduct extensive research in this field in a way that companies such as Iran Khodro considers knowledge management and its establishment as one of its strategic goals. Aghajari Oil and Gas Exploitation Company considers knowledge management with respect to the determined objectives and policies of the ministry and the emphasis on the issue of knowledge-based operation process of oil and gas resources with 2832 people of human capital and according to its task at oil exploitation, production and sending and protection of the facilities and oil tanks as well as rapid advances in technology and increasing education level of employees.

#### **Research objectives**

- Explaining and considering the factors affecting the implementation of knowledge management in Aghajari Oil and Gas Exploitation Company.
- Explaining the current status of in Aghajari Oil and Gas Exploitation Company.
- Explaining the necessary infrastructures for knowledge management deployment in Aghajari Oil and Gas Exploitation Company.
- Providing a suitable framework for knowledge management deployment in Aghajari Oil and Gas Exploitation Company.
- Putting the research findings available to managers for decision-making.
- The prioritization of independent variables affecting the implementation of knowledge management in Aghajari Oil and Gas Exploitation Company.
- The study of the role of intervening variables (type of technical or non-technical jobs and education level of employees) in the implementation of knowledge management in Aghajari Oil and Gas Exploitation Company.

#### **Background of Study**

Karami (2005) studied the relationship between organizational culture and knowledge management deployment at Bahman Motor Center and then the status of organizational culture existing at the Bahman Center. The results show that the individual autonomy and giving independence of action to the people has an important role in the acquisition and development of knowledge. Organizational culture has effective and robust relation with knowledge management.

Tehrani (2006) conducted a study entitled "The system of the study of how to measure the financial performance of industrial companies by using knowledge management" and concluded that the "self-assessment" is the most important factor of EFQM on the assessment of financial performance of company and the lack of knowledge workers as the main factor of knowledge management leads to the limitation of the implementation of knowledge management and also, the triangular that each of its corners is knowledge management, organizational excellence and financial performance of an organization is effective in increasing its productivity.

Shirvani (2010) conducted a study entitled "The study of the relationship between organizational culture and knowledge management in Masjed Soleiman Oil and Gas Exploitation Company" in which considered the relationship between organizational culture from the perspective

of Robbins and knowledge management in mentioned company and found a significant and positive relationship between organizational culture and its components with knowledge management in Masjed Soleiman Oil and Gas Exploitation Company.

Ian Finn van (2011) in a study entitled "Effective assessment model for knowledge management" provided a model for measuring the effectiveness rate of knowledge management in high-tech enterprises in Taiwan by using hierarchical process of problem analysis (AHP) and a survey questionnaire of quantitative and qualitative evaluation methods. This study by using hierarchical process of problem analysis (AHP) clarified that knowledge management in high-tech firms is very effective.

### **Research Hypotheses**

*The main hypothesis:* Organizational factors influence knowledge management deployment in Aghajari Oil and Gas Exploitation Company.

#### ***Sub-hypotheses***

- The appropriate organizational culture influences knowledge management deployment in Aghajari Oil and Gas Exploitation Company.
- Having strategic thinking is effective on implementing knowledge management in Aghajari Oil and Gas Exploitation Company.
- Training employees is effective on the implementation of knowledge management in Aghajari Oil and Gas Exploitation Company.
- Technology affects the implementation of knowledge management in Aghajari Oil and Gas Exploitation Company.

#### ***Subsidiary hypotheses***

- The different education level of employees is effective on the implementation of knowledge management in Aghajari Oil and Gas Exploitation Company.
- Type of different jobs of employees (technical and non-technical) influences the knowledge management deployment in Aghajari Oil and Gas Exploitation Company.

### **Methodology**

This research method is descriptive because without any intervention in the status quo describes the relationships between variables from the perspective of employees. This research method from the perspective of environmental studies is survey, in terms of applicability is an applied one and in terms of the relationship between variables is correlational and given that the sample is used to generalize the findings to the community and inference, therefore, is an analytical study.

#### ***Data collection tools***

Due to the purpose of the study and its characteristics, questionnaires and the database are used to collect the required information.

#### ***Statistical population and sampling method***

The population of study is 1767 employees with diploma and higher degree that 316 of them are selected by using the chart provided by three scientists named Cohen, Morgan and Krejcie and through stratified random sampling so that the sample size is chosen according to the number of employees working in various management of the company.

#### ***Hypotheses testing***

The main hypothesis: "organizational factors (organizational culture, strategic thinking, education, technology) influence the implementation of knowledge management in Aghajari Oil and Gas Exploitation Company."

**Table 1: Chi square test for Organization factor& knowledge management**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.914	3	.000
Likelihood Ratio	1.813	3	.000
Linear-by-Linear Association	162.576	1	.000
N of Valid Cases	320		

Since the calculated alpha ( $\alpha$ ) (Pvalue=0.000) is less than  $\alpha$  of table (0.05) and on the other hand, the calculated  $\chi^2$  ( $\chi^2=9.91$ ) is more than  $\chi^2$  of the table ( $\chi^2=7.81$ ) therefore, H0 is rejected and H1 is accepted. Therefore, at reliability level of 95% it can be said that there is a relationship between organizational factors and implementing knowledge management in Aghajari Oil and Gas Exploitation Company.

***Sub-hypothesis testing***

*Organizational culture influences the knowledge management deployment in Aghajari Oil and Gas Exploitation Company.*

Given that the SPSS software is used for data analysis therefore, test statistic is determined by the amount  $\alpha$ . If the calculated  $\alpha$  to be smaller than 0.05 ( $\alpha$  of research), thus the test statistics is placed in H1 area. Otherwise, the test statistic will be in the area of H0. Finally, data analysis shows that alpha test ( $p=0.000$ ) is smaller than 0.05. The results are shown in Table 2.

**Table 2: Chi-square test for Culture building & Knowledge management**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.12	2	.000
Likelihood Ratio	1.47	2	.000
Linear-by-Linear Association	189.151	1	.000
N of Valid Cases	320		

Since the calculated alpha ( $\alpha$ ) (Pvalue=0.000) is smaller than  $\alpha$  of table (0.05) and on the other hand, the calculated  $\chi^2$  ( $\chi^2=6.12$ ) is greater than  $\chi^2$  of the table ( $\chi^2=3.84$ ) thus, H0 is rejected and H1 is verified. Therefore, at reliability level of 95% it can be said that there is a relationship between organizational culture and knowledge management deployment in Aghajari Oil and Gas Exploitation Company.

***The second sub- hypothesis testing***

The second sub-hypotheses: Strategic thinking influences the implementing knowledge management in Aghajari Oil and Gas Exploitation Company.

**Table 3: Chi-square test for strategic thinking & knowledge management**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.668	2	.000
Likelihood Ratio	1.252	2	.000
Linear-by-Linear Association	118.923	1	.000
N of Valid Cases	320		

Since the calculated alpha ( $\alpha$ ) (Pvalue=0.000) is smaller than  $\alpha$  of table (0.05) and on the other hand, the calculated  $\chi^2$  ( $\chi^2=4.66$ ) is greater than  $\chi^2$  of the table ( $\chi^2=3.84$ ) therefore, H0 is rejected and H1 is confirmed. Thus, at reliability level of 95% it can be stated that there is a relationship between strategic thinking and knowledge management deployment in Aghajari Oil and Gas Exploitation Company.



***The third sub- hypothesis testing***

The third sub-hypothesis: Employee training influences the implementation of knowledge management in Aghajari Oil and Gas Exploitation Company.

**Table 4: Chi-square for Learning & Knowledge management**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.438	2	.000
Likelihood Ratio	1.085	2	.000
Linear-by-Linear Association	121.397	1	.000
N of Valid Cases	320		

The calculated alpha ( $\alpha$ ) (Pvalue=0.000) is smaller than  $\alpha$  of table (0.05) and on the other hand, the calculated  $\chi^2$  ( $\chi^2= 4.43$ ) is greater than  $\chi^2$  of the table ( $\chi^2=4.66$ ) consequently, H0 is rejected and H1 is accepted. Thus, at reliability level of 95% it can be stated that there is a relationship between employee training and knowledge management deployment in Aghajari Oil and Gas Exploitation Company.

***The fourth sub- hypothesis testing***

The fourth sub-hypothesis: Technology influences the implementing knowledge management in Aghajari Oil and Gas Exploitation Company.

**Table 5: Chi-square test for Technology & Knowledge management**

$$\text{Table } \chi^2_{\alpha,df} = \chi^2_{0/05,4} = 3/84$$

$$df=(c-1)(r-1) = (2-1)(2-1) = 1$$

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.937	2	.000
Likelihood Ratio	1.089	2	.000
Linear-by-Linear Association	121.392	1	.000
N of Valid Cases	320		

The calculated alpha ( $\alpha$ ) (Pvalue=0.000) is smaller than  $\alpha$  of table (0.05) and the calculated  $\chi^2$  ( $\chi^2= 5.93$ ) is greater than  $\chi^2$  of the table ( $\chi^2=3.84$ ) consequently, H0 is rejected and H1 is accepted. Thus, at reliability level of 95% it can be stated that there is a relationship between technology and knowledge management deployment in Aghajari Oil and Gas Exploitation Company.

***Subsidiary hypotheses***

- The first Subsidiary hypothesis: The different education level of employees is effective on the implementation of knowledge management in Aghajari Oil and Gas Exploitation Company.

The analysis of results shows that the calculated test statistic ( $Z= -2.023$ ) is greater than statistics of table ( $Z= \pm 1.96$ ) therefore, the test statistic is located in the H1 area. The results are shown in Table 6.

**Table 6: The first Subsidiary hypothesis testing**

	Knowledge managment
Mann-Whitney U	10734.000
Wilcoxon W	28689.000
Z	-2.023
Asymp. Sig. (2-tailed)	.043

Since the calculated test statistic ( $Z=-2.023$ ) is greater than the statistics of table ( $Z= \pm 1.96$ ) in other words, it is located out of the critical value, thus, H0 is rejected and H1 is accepted. Consequently, alpha is significant at 0.05 level. As the obtained significant amount (Sig=0.043) is

also smaller than the alpha level of 0.05. Therefore, at reliability level of 95%, it can be stated that there is a relationship between the different educational level of employees (Associate Degree and lower or Bachelor and higher) in the implementation of knowledge management in Aghajari Oil and Gas Exploitation Company, and this difference is statistically significant.

The second subsidiary hypothesis: Type of different jobs (technical and non-technical) influences the knowledge management deployment in Aghajari Oil and Gas Exploitation Company.

**Table 7: The second subsidiary hypothesis testing**

	Knowledge Management
Mann-Whitney U	8614.000
Wilcoxon W	36344.000
Z	-1.880
Asymp. Sig. (2-tailed)	.060

The calculated test statistic ( $Z=-1.880$ ) is less than the statistics of table ( $Z=\pm 1.96$ ) and in other words, it is located inside the critical value, thus, H1 is rejected and H0 is accepted. Consequently, alpha is not significant at 0.05 level. As the obtained significant amount (Sig=0.06) is also more than the alpha level of 0.05. Therefore, at reliability level of 95% and due to the difference between ranks it can be stated that the different jobs (technical and non-technical) do not influence the knowledge management deployment in Aghajari Oil and Gas Exploitation Company.

Prioritizing the dimensions of organizational factors affecting the implementation of knowledge management (Friedman's test)

Organizational factors is effective on knowledge management deployment in Aghajari Oil and Gas Exploitation Company.

**Table 8: Mean rank of questions of organizational factors**

Organizational factors	Mean Rank
Training	3.22
Strategic Thinking	2.64
Technology	2.45
Organizational culture	1.68

Table 8 indicates the meaningful results of Friedman test by using chi-square statistic. The results shows significant difference among the four organizational factors in knowledge management deployment from the perspective of staff. Because the obtained Chi-square value (239.24) with 3 degrees of freedom is significant at 0.05 alpha level. As significance level (sig =0.000) is less than the mentioned alpha level. Therefore, at reliability level of 95% it can be stated that the idea of employees about organizational factors affecting the implementation of knowledge management is not the same and the coefficient of importance of each factor is significantly different. Thus, with 95% reliability, the null hypothesis (H0) is rejected and research hypothesis (H1) is accepted. This means that from the perspective of employees all organizational factors are not equally effective in the implementation of knowledge management.

**Table 9: The meaningful results of Friedman test by using chi-square statistic**

Statistical indices	Obtained value
Number (N)	320
Chi-square $\chi^2$	239.24
Df	3
significance level	0.000

## Results

### *The main findings of the study*

*Organizational culture and knowledge management:* The first sub-hypothesis is about the relationship between organizational culture and knowledge management deployment in which it is alleged that organizational culture influences the implementing knowledge management in organization. Results from the analysis of findings confirm this hypothesis. These results show that first, "there is a significant relationship between organizational culture and implementing knowledge management in Aghajari Oil and Gas Exploitation Company" and second, this relationship has been positive and its amount has been determined 74% based on the Spearman correlation coefficient. The result is that at 95% reliability level it can be claimed that "the appropriate organizational culture has an impact on implementing knowledge management in organization". In other words, by increasing organizational culture of employees the necessary background for knowledge management deployment in the organization is also increased.

*Strategic thinking and knowledge management:* The second sub-hypothesis is about the relationship between strategic thinking and knowledge management deployment and accordingly it is claimed that strategic thinking influences the implementing knowledge management in organization. The research findings confirm this hypothesis and indicate a positive and significant relation between strategic thinking and knowledge management deployment and its value based on the Spearman correlation coefficient is determined 51%. Consequently, at 95% reliability level it can be said that "the strategic thinking has an impact on knowledge management deployment in organization". In other words, the enhancement of strategic thinking in organization increases the appropriate condition for knowledge management deployment in the organization as well.

*Staff training and knowledge management:* The third sub-hypothesis considers the relationship between staff training and knowledge management deployment which indicates the effective impact of staff training on the implementing knowledge management in organization. Therefore, the research findings results analysis shows a positive and significant relation between staff training and knowledge management deployment and its value based on the Spearman correlation coefficient is determined 46%. Consequently, at 95% reliability level it can be said that "the staff training influences knowledge management deployment in organization" and an increase in staff training leads to the enhancement of suitable condition for knowledge management deployment in organization.

*Technology and knowledge management:* The relationship between technology and knowledge management deployment is examined in fourth sub-hypothesis which demonstrates a positive and significant relation between technology and knowledge management deployment and its value based on the Spearman correlation coefficient is determined 54%. Therefore, at 95% reliability level it can be said that "technology influences knowledge management deployment in organization" in a way that an increase in applying technology leads to the enhancement of suitable condition for knowledge management deployment in organization.

*Organizational factors and knowledge management:* Based on the results of the analysis of the findings the main hypothesis of study regarding the existence of a positive and significant relationship between organizational factors (organizational culture, strategic thinking, employee training and technology) and the establishment of knowledge management is verified and its value based on the Spearman correlation coefficient is determined 68%. In other words, this hypothesis covers all the mentioned sub-hypotheses. Thus, at 95% reliability level it can be said that "organizational factors influence knowledge management deployment in organization" so that an increase in applying organizational factors leads to the enhancement of necessary background for knowledge management deployment in organization.



*Prioritizing influential factors on implementing knowledge management:* The results of the research findings show that staff training compared to the other variables has the greatest impact on the establishment and implementation of knowledge management in the organization and then strategic thinking, technology and organizational culture are next priorities respectively.

**Table 10: The correlation among variables of study and knowledge management**

Organizational Culture	74%
Strategic thinking	51%
Staff training	46%
Technology	54%
All organizational factors	68%

#### ***Other findings of the study***

Level of education and the establishment of knowledge management: the results of the analysis of research findings have verified the first side-hypothesis which shows a significant relationship between education level and deployment of knowledge management in the organization. Thus, at 95% reliability level, it can be said that "there is a significant difference among employees with Associate Degree and lower and employees with Bachelor degree and higher in the implementation of knowledge management".

*The various careers (technical and non-technical) and implementation of knowledge management:* the results of the analysis of research findings have rejected the second side-hypothesis which demonstrates that there is no significant relationship between different professions (technical and non-technical) and knowledge management deployment in the organization. Thus, at 95% reliability level, it can be said that the existence of different effects between technical and non-technical staff in the implementation of knowledge management is rejected.

#### **Conclusion**

By considering the research findings, the study of Yahyapour regarding the existence of a positive and significant relationship between organizational factors and knowledge management was accepted. Therefore, the results of the main hypothesis of this study have also confirmed the study result of Yahyapour. Also, by considering the effective factors on the knowledge management deployment the research findings showed a very good and positive correlation among the factors affecting the deployment of knowledge management.

The existence of strong positive and significant relationship ( $r=68$ ) among organizational factors and knowledge management is one of the interesting findings of this study and past studies of researchers also affirmed the existence of relationship between organizational factors and knowledge management. Studies of Karami, Hosseini, Ramazani, Shirvani and Long are confirmed regarding the existence of positive and significant relationship between organizational culture and knowledge management. Therefore, result of the first sub-hypothesis has also confirmed the studies of mentioned researchers.

The study done by Yaghoubi about the existence of positive and significant relationship between staff training and knowledge management was accepted. Thus, the result of the third sub-hypothesis has also confirmed the research finding of the mentioned researcher. Also, the study of "Ian Finn van" regarding the existence of positive and significant relationship between technology and knowledge management was accepted and the result of fourth sub-hypothesis has also confirmed the study result of this researcher.

Finally, about the consideration of the role of intervening variables of various occupations (technical and non-technical) and educational level in the present study we reached different conclusions.

The conducted studies in the field of education level of employees was accepted this means that there is a significant difference among employees with Associate Degree and lower and employees with Bachelor degree and higher in the implementation of knowledge management".

But conducted studies in the field of various jobs of employees (technical and non-technical) were not accepted namely, there is not any different effects between the technical staff and non-technical staff in the implementation of knowledge management.

### **Recommendations of the study**

#### ***Recommendations based on the research findings***

- According to the findings of the first hypothesis about high positive correlation between organizational culture and implementing knowledge management in organizations, it is recommended to officials of Aghajari Oil and Gas Exploitation Company to pay attention to the different dimensions of organizational culture including individual creativity, risk tolerance, orientation, integrity, relationship of management, supervision, membership, reward system, compromise with conflict phenomenon and communication patterns among staff of organization in order to strengthen the organizational culture to provide available space for implementing knowledge management in organization.

- The findings of the second sub-hypothesis indicated high positive correlation between strategic thinking and implementing knowledge management in organization and accordingly, it is recommended to officials of Aghajari Oil and Gas Exploitation Company in order to strengthen the strategic thinking in the organization they should consider its dimensions including holistic view, creativity, using innovation of employees, and promoting strategic dialogue among employees of organization to provide space for implementing knowledge management in organization.

- The findings of the third sub-hypothesis showed high positive correlation between staff training and knowledge management deployment in organization and accordingly, it is suggested to officials of Aghajari Oil and Gas Exploitation Company in order to strengthen the staff training in the organization they should pay attention to its dimensions including need assessment and educational planning, implementation and evaluation of training among staff of organization to provide space for implementing knowledge management in organization.

- The results of fourth sub-hypothesis examination showed high positive relation between technology and knowledge management deployment in organization and accordingly, it is suggested to officials of Aghajari Oil and Gas Exploitation Company to pay attention to its dimensions including technology implementation, technology development and technology transfer among staff of organization to efficient use of technology in the organization. Especially, internal network access, establishing internal intranet system, preparing software related to the work and creating organizational systems like Management Information System should be facilitated to provide space for implementing knowledge management in organization.

- The results of the prioritization of independent variables in the establishment of knowledge management indicates that the variable of staff training has a top priority for implementing knowledge management in organizations. Accordingly, it is suggested to officials of Aghajari Oil and Gas Exploitation Company to pay attention to different dimensions of staff training as to achieve the objectives of every organization whether big or small, it should have qualified and competent employees who in addition to general information should have specialized and professional training to obtain technical knowledge and required skills to perform the assigned

duties well and this training helps employees to play more proactive and effective role in achieving the organizational goals. For example, special attention should be paid to the staff training in the onset of employment to know the organization, duties, rules and the existing procedures of the organization.

- The results of the first side-hypothesis examination showed a meaningful difference among employees with Associate Degree and lower and employees with Bachelor degree and higher in the implementation of knowledge management and this difference also indicates that the background for the knowledge management deployment among employees with Bachelor degree or higher is lower. Accordingly, it is suggested to officials of Aghajari Oil and Gas Exploitation Company to provide the necessary condition for establishment and development of knowledge among employees with Bachelor degree or higher.

- The results of the second side-hypothesis consideration showed that there is no significant difference between technical and non-technical staff in the implementation of knowledge management. Given that it is suggested to officials of Aghajari Oil and Gas Exploitation Company to establish knowledge management in the organization merely do not pay attention to being technical or non-technical employees and consider identical the background of knowledge management deployment in the organization between the two groups.

### **Suggestions of the study**

Three key elements in the implementation of knowledge management include: human, structure and technology.

Knowledge management tries to achieve organizational objectives by creating an appropriate structure, processes and necessary IT infrastructures, and by focusing on human, preparing him as knowledge workers with the acquisition and production and proper use of the source of knowledge. The development of knowledge-based culture along with the encouragement of behavior such as creation and sharing knowledge which is one of the objectives of knowledge management projects in the organization. Therefore, it is recommended to:

- Establish conditions and provide necessary education for increasing tolerance of conflict among the staff, and officials should indicate more tolerance for implementing knowledge management in organizations.

- Managers should have more communications with staff and assist them as much as possible and apply staff comments on the organizational matters. According to the cross-organizational life of employees, the attempts to solve the inside and outside problems of organization is regarded as one of the aspects of management support.

- Given that in this study employees have a sense of belonging to the company and working in the organization is honor for them, therefore, organization should use this potential for careful planning and proper management implementation to provide better services.

- To give the necessary opportunity to people to demonstrate new ideas and thoughts. They should be given the freedom of action to manifest the creativity and also, they should be given opportunity to provide new solutions and ideas by using their effort and thought. Encouragements can be effective in this way.

### **References**

- Ahamdpour Dariyani, M. (2001). Entrepreneurship definitions, opinions, patterns, Tehran: Fara Publication.
- Bafiores-Alcantara, R. et al., (2003). A knowledge management platform to information from the web extract and process. Process Systems Engineering.

- Civi, E. (2000). Knowledge management as a competitive asset: A review. *Marketing Intelligence and Planning*, 18, 4, 166–174.
- Jaehun, J., & Sang M. Lee (2009). Adoption of the Semantic Web for overcoming technical limitations of knowledge management systems. *Expert Systems with Applications*, 36, 7318–7327.
- Karimi, N. (2006). The application of knowledge management in today's organizations. *Nama Electronic Magazine*, 6 (3), 23-27.
- Ramezani, Y. (2009). Examining the relationship between knowledge management process and organizational culture indices from the perspective of Robbins, *Proceedings of the Second National Conference on Tehran Knowledge Management*
- Robbins, A. (2006). *Organizational Behavior of concepts, theory and applications*, 3.
- Seif, M.H., Alinezhad, H., & Salehi, M. (2006). Systems and future of knowledge management, *Devise Journal*, 171.
- Tehrani, M.H. (2006). Thesis Master of Industrial Management. Faculty of Management, Central Branch of Tehran Azad University.
- Yahyapour, A.A. (2003). Identification and formulation of factors affecting the life cycle business industry system of ERP enterprise and its analysis in the automotive industry with knowledge management approach (Case: Iran Khodro Company). MA thesis of executive management of Industrial Management Institute.
- Yuan, Feng Wen.(2011). An effectiveness measurement model for knowledge management, [www.elsevier.com](http://www.elsevier.com).
- Zanjirchi, M. (2006). Approach to knowledge creation. *Journal of Devise*, 175.