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# A MODEL OF KNOWLEDGE MANAGEMENT IMPLEMENTATION IN IRAN INSURANCE COMPANY ON THE BASIS OF ENVIRONMENTAL AND ORGANIZATIONAL FACTORS

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Resumen: El objetivo principal de esta investigación es estudiar los factores críticos de éxito en el despliegue de la gestión del conocimiento (KM) en Iran Insurance Company. Esta investigación es una investigación aplicada por propósito y un estudio descriptivo de la encuesta por la recopilación de datos. La población de investigación es Iran Insurance Company, una muestra que consta de 170 empleados que fueron elegidos sobre la base de un método de muestreo disponible. En esta investigación, en un intento de medir el nivel de preparación de la organización para la implementación exitosa de la gestión del conocimiento, se utilizó estadística descriptiva para información demográfica y se utilizó estadística inferencial para el análisis de datos, así como la prueba de hipótesis. Para ser específico, para la prueba de hipótesis, se utilizó la prueba de comparación media (T. Student) y la prueba de varianza de Friedman para priorizar los desafíos, y la prueba de correlación de Pearson para la realización e investigación de la relación entre las principales variables de investigación y las ecuaciones de regresión. Los hallazgos de la investigación sugirieron que se confirmaron cuatro hipótesis de las seis hipótesis anteriores, a saber, los efectos de las características individuales, las características de la gestión del conocimiento, las características y características organizativas y la infraestructura de la tecnología de la información y las otras dos hipótesis.

**Palabras clave:** Características individuales, características de la gestión del conocimiento, características y características organizativas, infraestructura de la tecnología de la información, factores ambientales, factores culturales, despliegue de la gestión del conocimiento

**Abstract:** The main purpose of this research is to study critical success factors in the deployment of knowledge management (KM) in Iran Insurance Company. This research is an applied research by purpose and a descriptive survey study by data collection. The research population is Iran Insurance Company, a sample consisting of 170 employees who were chosen based on an available sampling method. In this research, in an attempt to measure the readiness level of the organization for successful implementation of knowledge management, descriptive statistic was used for demographic information and inferential statistic was used for data analysis, as well as hypotheses test

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To be specific, for hypothesis test, the mean comparison test (T. Student) was used, and Friedman's variance test was used to prioritize challenges, and Pearson correlation test for realization and investigation of the relationship between main research variables and regression equations. The research findings suggested that four hypotheses out of the six foregoing hypotheses namely effects of individual characteristics, characteristics of knowledge management, organizational characteristics and features, and information technology infrastructure were confirmed and the other two hypotheses namely environmental factors and cultural factors were rejected.

**Keywords**: individual characteristics, characteristics of knowledge management, organizational characteristics and features, information technology infrastructure, environmental factors, cultural factors, deployment of knowledge management

#### 1. INTRODUCTION

Today, knowledge is seen as an invaluable and strategic resource and the most important all-around growth variable in organizations and economic enterprises, as the growth engine of organizations is not reduced to human capital and force. As knowledge takes on importance in knowledge-oriented economy, many organizations like tangible organizational resources systematically approach knowledge. As a result, these organizations have got into the field of knowledge management in order to improve and maintain their competitive power. Knowledge management includes processes that lead creation, organization, distribution, and application of knowledge for organizational goals (Shahroughi, 2009).

### 2. STATEMENT OF THE PROBLEM

Organizations are now aware of the importance of knowledge and recognize it as a valuable resource, so by considering this a process of knowledge management should be initiated as well as process of knowledge management. Although in Iran few companies started practical initiatives for that matter, the importance of knowledge manage is evident to all, so the need for research initiatives is felt in this regard (Kamrani, 2004). An important issue the implementation of knowledge preceding management in an organization is an investigation into organization's readiness for implementing this project. Readiness for knowledge management can be defined as a series of essential prerequisites for implementation knowledge successful of management.

In the present age, the concept of knowledge has changed in such a way that postmodernism theorist Lyotard refers to it as new commodity of postmodernity era. Accordingly, it is a while since many scientists in management and organization put great effort into systematizing the use of knowledge in organization through opening up a new horizon for management, i.e. knowledge management. Survival of organizations in the present knowledge-based societies calls for creating knowledge in all organizational processes (Ehsani, 2006).

In many organizations and institutions, one of the main concerns is that there is no sufficient information about the level of individual's knowledge. Focusing on solutions for the entire system including organization, human resource and technology, effective knowledge management is considered the most important instrument for fixing this problem. To design a system of knowledge management or promote it in an organization, it is needed to pay special attention to the grounds and foundations for its achievement and how to maintain a balance and an interaction between these factors initially by a thorough understanding of the nature and the importance of knowledge management in organization as well as understanding of its components and functions, in an attempt to achieve advantages brought by the implementation of knowledge management in organization (Shafizadeh, 2007).

The successful implementation of knowledge management calls for a comprehensive view of different organizational factors. The main challenge confronting organizations is understanding of knowledge management and how to implement it in the form of a yet unknown knowledge management system. Knowledge management system is a kind of

information system that upholds knowledge processes in creating, collecting, organizing and disseminating effective knowledge (Baht, 2002).

On the other hand, knowledge management system lays an emphasis on knowledge processes that enhance learning abilities. These are built on organizational pillars, learning from acquisition, publication, commercial information interpretation and optimization perspectives. Knowledge management system builds up learning through improving the ability to gather, organize and disseminate information and knowledge (] Radling. 2004).

However, the design and implementation of knowledge management without readiness measurement are deemed to be useless, because in some organizations or firms it is just organization or company name decorated by knowledge management slogan due to lack of needs assessment and assessment of readiness for implementation of a comprehensive knowledge management system, and there is no place for it in practice. Hence, prior to the design, deployment and implementation, it should be definitely born in mind that the readiness of a group comprehensive knowledge implementing management should be studied, which includes capabilities, infrastructures and other factors.

Pressures of new economy have induced organizations to focus on innovation as a means of survival. They have markedly had tendency for information technology in order to support and employ their programs for change. Knowledge management is a set of processes of understanding and applying strategic knowledge resources in an organization, and a structured approach that offers methods for recognizing, evaluating, organizing, storing, and applying knowledge in an attempt to meet needs and achieve organizational goals. Insurance organizations have unique structure in that knowledge management needs to be established and eventually operated. Transition from industrial age to knowledge and information age has been prove to be extremely important and correlation between information management and knowledge acquisition is vastly important. Knowledge management should be regarded as a strategic approach to achieving organizational goals in insurance firms. Under such an environment, the use of knowledge management requires, among operational structures, the process of comprehensible and reliable knowledge,

knowledge creation and process of converting it should be on a par with the pace of military operations. Knowledge management is seen as an important instrument for gathering existing knowledge, giving dynamism and order, spreading it throughout organization. Knowledge management lay stress on human being, structure and technology, and aim at achieving organizational goals by providing proper technologic structure and infrastructure required in organization and focusing on human being and preparing him. Knowledge management is an approach to the creation of the learning organization, the one whose members can acquire, share and create knowledge and take advantage of it in their decision making (Casset, 2005).

Writers who pursued key factors in the success of knowledge management implementation in different resources managed to identify critical dimensions influential in the implementation of knowledge management. these concepts are fallen into different categories; organizational culture, managerial dimensions, resources, organizational human dimensions, education, leadership, and modelling. Characteristics of knowledge management technology composed of information and performance measurement, continuous learning, trust, risk-taking space in organization, collaboration and communication. Human resource management consists of features such as staff involvement and understanding, job enrichment, teamwork, and job security. Management dimensions consist of senior executive's support and commitment, leadership, change management, strategy, systematic approach to knowledge management and appointment of senior knowledge director. Organizational dimensions are composed of company's readiness for knowledge management, organizational infrastructures, support, consistency of knowledge management and current system and dynamic and flexible organizational structure. Properties of knowledge management are certain activities directly associated with functions of knowledge management such as knowledge sharing, knowledge standards, knowledge knowledge creation, knowledge storage knowledge management systems. Given the above, some studies were conducted into successful factors in the deployment of knowledge management in different organizations, which are categorized into four categories; technology, processes, individuals, and strategic commitment (Lia, 2008; 97).

With regard to research on successful factors in the deployment of knowledge management in various organizations, factors identified as common factors in most studies include organizational culture, organizational structure, human resource, information technology, knowledge processes, and leadership.

In this research, an attempt is made to study key factors in the success of the deployment of knowledge management in Iran Insurance Company and their effects on how knowledge management is implemented in accordance with Li-Su Huang and Cheng-Po Lai (2014) model. The variables of the model include individual characteristics, knowledge management characteristics, organizational characteristics, information technology infrastructure, environmental factors, and cultural factors. This model is presented in the following figure;



Figure. 1. Conceptual model of the present research based on Li-Su Huang and Cheng-Po Lai (2014) model

According to the above model, the research hypotheses can be addressed as follows;

- 1. Environmental factors has a significant effect on the deployment of knowledge management in Iran Insurance Company.
- 2. Individual characteristics has a significant effect on the deployment of knowledge management in Iran Insurance Company.
- 3. Characteristics of organizational knowledge management has a significant effect on the deployment of knowledge management in Iran Insurance Company.
- 4. Organizational characteristics has a significant effect on the deployment of knowledge management in Iran Insurance Company.
- 5. Information technology infrastructure has a significant effect on the deployment of knowledge management in Iran Insurance Company.

6. Cultural factors has a significant effect on the deployment of knowledge management in Iran Insurance Company.

### 3. A BRIEF RESEARCH BACKGROUND

## 3.1. Research background in Iran

- 1. in the research conducted by Khajavi (2009) and entitled "designing a model for implementing knowledge management system in state-owned organizations (case study of Tehran Municipality), following an analysis the situation of leadership in Tehran Municipality was estimated to be appropriate for deployment of knowledge management and human resource indicators, structure, knowledge processes, technology and culture took the next priorities.
- 2. In Amoee (2007), it was found that information technology is an influential factor in the deployment of knowledge management, but organizational culture, organizational learning and human resource made no difference to the deployment of knowledge management.
- 3. The results of Kazemzadeh (2007) "study of components of knowledge management" indicated that the most important components of knowledge management are culture, technology, human capital and structure, respectively.
- 4. Hassanzadeh (2009) concludes that the situation of ministries and Iran Planning and Management Organization is not optimal in general in regard to providing sixth-fold infrastructural factors of knowledge manage, and there is no significant difference between ministries concerning transsectoral infrastructural factors, but in terms of sectoral infrastructural factors associated with every single office there was a significant difference. Moreover, the necessity and importance of organizational culture promotion, which suggested its conceivable weakness in state-owned organizations, was addressed in the development of knowledge management.
- 5. Mosakhani et al (2010) concluded that culture factor consisting of trust, collaboration, learning and open organizational space has the greatest importance and takes priority among influential factors in knowledge management from expert's perspective, followed by information technology infrastructure, organizational structure and change management,

respectively. Furthermore, Iran Statistic Center has sufficient readiness for knowledge management regarding all factors and indicators.

### 3.2. Research background in other countries

- 1. Vitam and Roi (2009) came to the conclusion that there is a relationship between dimensions of knowledge management and creativity, and members' motivation for knowledge management projects is supported, and there is a positive relationship between knowledge management and organizational performance. They also found that internal rewards mostly involve knowledge management.
- 3. Alhemad et al. (2009) studied knowledge sharing in Jordan universities. They determined seven components namely bilateral relationship. organization work processes, sense of solidarity, creativity, positive feeling to knowledge sharing, passion for knowledge sharing and knowledge sharing behavior, in an attempt to measure knowledge sharing. The results indicated that education employees have lower tendency for knowledge sharing than administrative employees. Education employees have also lower interest in bilateral relationships, teamwork and knowledge sharing. In addition to this, young employees are not encouraged to demonstrate creativity in their work. Concerning the analysis of demographic factors, no relationship was found between male and female employees in knowledge sharing.
- 4. Stank and Mentzer (2008) demonstrated that the deployment of knowledge management requires change in organizational culture and organizational culture is considered a robust lever for the implementation of knowledge management. Moreover, organizations with strong corporate culture for knowledge and information acquisition and analysis of complicated situations work more successfully.
- 5. Kahn Guss's (2006) PhD dissertation is entitled "assessment of the relationship between organizational culture and knowledge management innovations. Findings show that in organizational culture knowledge management may serve as an efficient strategic innovation, result in long-term relationship, development of values, and contribute to the increase of organizational competitive earnings.

## 4. RESEARCH METHOD

This research is a quantitative descriptive research by data collection method, and an applied research by purpose. As complementary resources for theoretical foundations, library and internet resources including books, journals and case studies were used. To confirm or reject hypotheses, field study method was used. Additionally, in this research in order to collect field information, a standardized questionnaire is used. Moreover, it should be noted that in the present research for analysis of information common statistical methods are utilized. For data analysis, descriptive statistic indicators such as frequency, frequency percentage, tables, and frequency distribution graphs as well as inferential statistic tests including Kolmogorov-Smirnov test, Spearman or Pearson rating correlation coefficient and regression tests are used. Throughout the stages of the analysis, analysis, information obtained questionnaire was elicited and fit into a table. Afterward, all information was analyzed by SPSS and computer. To determine the type of the test for research hypotheses, normal or non-normal study of data relating to hypotheses should be undertaken in the first place. Subsequently, using these results, proper parametric or non-parametric statistical methods are used for testing the hypotheses.

## 4.1. Data collection:

The method of data collection is different in various stages of this research, which include

- a) library method; for collection of data relating to research background and research literature, specialized books, journals, theses, and internet databases were used.
- b) field study: to collect data required for key factors in the success of knowledge management in Iran Insurance Company, a standard questionnaire was used, which is distributed among employees of Iran Insurance Company. These questionnaires are available in table 1;
- c) research population, sampling method and sample size

sample size has a determining effect on research results and the general rule in this regard lays emphasis on selection of greatest sample size. By studying select sample, researcher aims at acquiring information about population from which sample is chosen, so the larger a sample we select, the stricter estimation of a population the statistical indicators

offer (Delavar, 1997; 124-125). In this research, the statistical population consists of all staff working in Iran Insurance Company, among whom the researcher selected his sample units. With respect to the vast size of the statistical population and lack of a possibility of data collection from all individuals, a number of 170 individuals were chosen as sample size from the 300-individual population on the basis of Morgan's table, then some phases are chosen among different units by random sampling.

## 5. METHODS AND DATA ANALYSIS INSTRUMENTS

Following managers' and experts' responses to the questionnaire by using common and foregoing statistical techniques including regression etc., analysis of information is performed by SPSS. At the beginning of the questionnaire, items on demography are raised and analyzed as descriptive statistic. Afterward, to test the hypotheses, inferential statistic is used, and in order to determine the type of the test used for the research hypotheses we need to examine normality or non-normality of data relating to hypotheses in the first place. After this, using the results of this test, proper parametric or nonparametric statistical methods are used for testing the hypotheses. Inferential statistic used in this research includes Kolmogorov-Smirnov test for checking data normality, regression, Pearson correlation coefficient (for determining the extent of the relationship between variables), coefficient of determination, and multiple correlation coefficient are utilized to explain key factors in the success of the deployment of knowledge management in Iran Insurance Co. This research is an applied research by purpose, because the purpose of this study is to get an essential understanding or knowledge in

order to determine an instrument by which certain need can be met; likewise, by considering that the present research is an important requirement of organizations before the implementation of knowledge management, this research is an applied research. Moreover, this study is descriptive survey in terms of data collection because of using questionnaire. At some point in this study with the help of documents and articles a conceptual model was designed. Moreover, at some point the research had no choice but to go out in order to collect data and meet people or contact with the environment as well as contacting with individuals and respective organization directly by means of in-person

interview, so that necessary information can be gathered and the goal which is discovering the relationship between variables in the structure of real organization can be achieved. For this reason, the first part of this research is library-type study as the second part is field study.

### 5.1. Questionnaire

The questionnaire is a set of questions formerly developed and respondents pick up their own answers from a range of given options. When researcher knows what information he needs and how variables of interest are measured, questionnaire will be an effective and useful collection tool.

In the present research, most of the data is obtained via questionnaire. This questionnaire is composed of 26 items on the basis of five-point Likert scale, which is shown in table 1.

### 6. RESEARCH FINDINGS

At this point, a review of demographic characteristics and research hypotheses is presented.

## 6.1. A summary of demographic characteristics

Descriptive information of respondents to the questionnaire of this research was come into question in terms of gender, education, age and seniority. In terms of gender, the greatest frequency is related to male respondents, 68%, which suggests that the majority of the respondents are male in this research. By age, 6% of the respondents are in the age group of 20 to 30, 54% were 31 to 40, 32% were 41 to 50 years of age, and finally 8% were older than 50. By education, 4 respondents held associate degree, which is the lowest frequency, i.e. 2 percent, while 82 respondents had bachelor degree, which is the greatest frequency, i.e. 84%. In the end, by job tenure, the greatest frequency is related to 10-17 years of tenure (55%), and the lowest job tenure is 1 to five years, which is seven percent.

### 6.2. Reviewing research hypotheses

At this point, final hypotheses and results are presented.

Hypothesis 1: environmental factors is considered a key success factor in the implementation of knowledge management in Iran Insurance Company.

The rate of the calculated effect of environmental factor variable as a key success factor in the

implementation of knowledge management in Iran Insurance Company is equal to 0.018, which is rejected by considering 0.63 significance level which is more than 0.05, with 0.95 probability of researcher claim about "environmental factor is seen as a key success factor in the implementation of knowledge management in Iran insurance Company". With regard to positive beta coefficient, it can be said that environmental factor variable has a direct and positive effect on the implementation of knowledge management in Iran Insurance Company, but this rate is not significant. moreover, the result of Friedman's test indicated that environmental factor variables is ranked fifth among six components as key success factors, and this outcome also suggests that this factor is not of high priority.

The value of Friedman's test for this variable is 2.85, which is not an optimal value. To enhance the effect of environmental factor as a key success factor in the implementation of knowledge management in Iran Insurance Company, the management is recommended to improve the following areas in this institution:

- ➤ Attention to level of competition and identification of main competitors in insurance industry
- ➤ Adequate attention to current trends in this industry
- Attention to complexity of governmental rules and regulations at insurance industry level and identification of better paths to its optimization
- Considerable development in the field of information technology of insurance industry on the part of administrators in knowledge management
- With regard to positive beta coefficient, it can be said that knowledge procedures variable has a direct and positive and significant effect on the implementation of knowledge management in Iran Insurance Company. Moreover, the result of Friedman's test indicated that knowledge procedures variables is ranked second among six components as key success factors. The value of Friedman's test for this variable is 4.64, which is an optimal value. To enhance the effect of knowledge procedures as a key success factor in the implementation of knowledge management in Iran Insurance Company, the management is recommended to improve the following areas in this institution;

<u>Hypothesis 2: knowledge procedures are</u> <u>considered a key success factor in the</u> <u>implementation of knowledge management</u> <u>in Iran Insurance Company.</u>

Table 1. Variable distribution and research indicators

indicator	The number of item	Variable	
Level of competition in respective industry			
Existing trends in this industry		Environmental factors	
Complexity of governmental rules and regulations at insurance industry level	4		
field of information technology in insurance industry			
Level of individual innovation in industry		Individual characteristics	
Employee's attitude toward knowledge management in organization	3		
Employee's work personality			
transfer and distribution channels reward level for knowledge management activists Level of disclosure of knowledge		Knowledge management characteristics	
Level of participation in all- around development of knowledge management department Time schedule and level of access	5		
to guidelines and manuals			
Size of organization in question  Governing organizational structure		Organizational	
Organizational strategy and policy	4	characteristics	
Employee turnover			
Software infrastructure Compatibility of system with sale and marketing system		Information	
Level of function of all knowledge management components	4	technology infrastructure	
maintenance			
Employee encouragement of helping each other Employee encouragement of interaction with others	4	Cultural factors	
Level of recognition of knowledge nature or identity in organization Level of knowledge sharing in	3	Implementation of knowledge management system	
	Level of competition in respective industry  Existing trends in this industry  Complexity of governmental rules and regulations at insurance industry level  Considerable development in the field of information technology in insurance industry  Level of individual innovation in industry  Employee's attitude toward knowledge management in organization  Employee's work personality  Level of progress in knowledge transfer and distribution channels reward level for knowledge management activists  Level of disclosure of knowledge management activists  Level of participation in all-around development of knowledge management department  Time schedule and level of access to guidelines and manuals  Size of organization in question  Coverning organizational structure  Organizational strategy and policy  Employee turnover  Software infrastructure  Compatibility of system with sale and marketing system  Level of data updating and maintenance  Team-work culture  Employee encouragement of helping each other  Employee encouragement of interaction with others  Level of recognition of knowledge nature or identity in organization	Level of competition in respective industry  Existing trends in this industry  Complexity of governmental rules and regulations at insurance industry level  Considerable development in the field of information technology in insurance industry  Level of individual innovation in industry  Employee's attitude toward knowledge management in organization  Employee's work personality  Level of progress in knowledge transfer and distribution channels reward level for knowledge management activists  Level of disclosure of knowledge resources in organization  Level of participation in all-around development of knowledge management department  Time schedule and level of access to guidelines and manuals  Size of organization in question  Coverning organization in question  Coverning organization in question  Coverning organization in develop faccess to guidelines and manuals  Size of organization in question  Coverning organization in develop faccess to guidelines and manuals  Employee turnover  Software infrastructure  Compatibility of system with sale and marketing system  Level of function of all knowledge management components  Level of data updating and maintenance  Team-work culture  Employee encouragement of helping each other  Employee encouragement of interaction with others  Level of recognition of knowledge nature or identity in organization	

The rate of the calculated effect of environmental factor variable as a key success factor in the implementation of knowledge management in Iran Insurance Company is equal to 0.446, which cannot be rejected by considering 0.000 significance level

which is less than 0.05, with 0.95 probability of researcher claim about "knowledge procedures are seen as a key success factor in the implementation of knowledge management in Iran insurance Company". To measure (evaluate) level of progress in knowledge distribution and transfer channels

- ➤ To determine level of reward for activists in knowledge management
- ➤ To give attention to level of disclosure of knowledge resources in organization
- ➤ To give attention to level of participation in the all-around development of knowledge management department
- ➤ To support time schedule and level of access to instructions and guidelines

Hypothesis 3: individual characteristics are considered a key success factor in the implementation of knowledge management in Iran Insurance Company

The rate of the calculated effect of individual characteristics variable as a key success factor in the implementation of knowledge management in Iran Insurance Company is equal to 0.228, which cannot be rejected by considering 0.000 significance level which is less than 0.05, with 0.95 probability of researcher claim about "individual characteristics are seen as a key success factor in the implementation of knowledge management in Iran insurance Company". With regard to positive beta coefficient, it can be said that individual characteristics variable has a direct and positive and significant effect on the implementation of knowledge management in Iran Insurance Company. Moreover, the result of Friedman's test indicated that individual characteristics variables is ranked fourth among six components as key success factors, and it shows this factor has a relatively optimal priority. The value of Friedman's test for this variable is 3.33, which is an optimal value. To enhance the effect of individual characteristics as a key success factor in the implementation of knowledge management in Iran Insurance Company, the management recommended to improve the following areas in this institution;

- Attention to level of employee's individual innovativeness
- Attention to employee's work attitude to knowledge management in organization

Consideration of work personalities suitable for active workforce working in the field of knowledge management in organization

Hypothesis 4: information technology infrastructure is considered a key success factor in the implementation of knowledge management in Iran Insurance Company

The rate of the calculated effect of information technology infrastructure variable as a key success factor in the implementation of knowledge management in Iran Insurance Company is equal to 0.519, which cannot be rejected by considering 0.000 significance level which is less than 0.05, with 0.95 probability of researcher claim about "information technology infrastructure is seen as a key success factor in the implementation of knowledge management in Iran insurance Company". With regard to positive beta coefficient, it can be said that information technology infrastructure variable has a direct and positive and significant effect on the implementation of knowledge management in Iran Insurance Company. Moreover, the result of Friedman's test indicated that information technology infrastructure variables is ranked first among six components as key success factors, and it shows this factor has quite a high priority. The value of Friedman's test for this variable is 4.70, which is an optimal value. To enhance the effect of information technology infrastructure as a key success factor in the implementation of knowledge management in Iran Insurance Company, the management is recommended to improve the following areas in this institution:

- ➤ To create proper software infrastructure in Iran Insurance Company in accordance with various services that can be offered
- ➤ To provide compatibility of Iran Insurance Company software system with sale and marking system
- ➤ To measure and evaluate level of performance of all knowledge management components in Iran Insurance Company in order to identify critical points in organization's knowledge management
- ➤ To keep up data updating and maintenance by Iran Insurance Company's software systems

Hypothesis 5: cultural factor considered a key success factor in the implementation of knowledge management in Iran Insurance Company

The rate of the calculated effect of cultural factor variable as a key success factor in the implementation of knowledge management in Iran Insurance Company is equal to -0.075, which is rejected by considering 0.091 significance level which is more than 0.05, with 0.95 probability of researcher claim about "cultural factor is seen as a key success factor in the implementation of knowledge management in Iran insurance Company". With regard to negative beta coefficient, it can be said that cultural factor variable has a direct and negative effect on the implementation of knowledge management in Iran Insurance Company, but it is not significant and is close to zero. Moreover, the result of Friedman's test indicated that cultural factor variables is ranked sixth among six components as key success factors, and it shows this factor has very low priority. The value of Friedman's test for this variable is 1.24, which is not an optimal value. To enhance the effect of cultural factor as a key success factor in the implementation of knowledge management in Iran Insurance Company, the management is recommended to improve the following areas in this institution;

- > To contribute to the creation of teamwork among employees
- ➤ To encourage employees of knowledge management field to help each other and support this
- ➤ To encourage employees of knowledge management field to interact with each other in Iran Insurance

Hypothesis 6: organizational characteristics are considered a key success factor in the implementation of knowledge management in Iran Insurance Company

The rate of the calculated effect of organizational characteristics variable as a key success factor in the implementation of knowledge management in Iran Insurance Company is equal to 0.292, which cannot be rejected by considering 0.000 significance level which is less than 0.05, with 0.95 probability of the researcher claim about "organizational characteristics are seen as a key success factor in the implementation of knowledge management in Iran insurance Company". With regard to positive beta coefficient, it can be said that organizational characteristics variable has a direct and positive and significant effect on the implementation of knowledge management in Iran Insurance Company. Moreover, the result of Friedman's test indicated that

organizational characteristics variables is ranked third among six components as key success factors, and it shows this factor has very high priority. The value of Friedman's test for this variable is 4.27, which is an optimal value. To enhance the effect of organizational characteristics as a key success factor in the implementation of knowledge management in Iran Insurance Company, the management is recommended to improve the following areas in this institution:

- > To give attention to determination of firm size in most departments of Iran Insurance
- > To redevelop and redesign organizational structure of Iran Insurance
- > To determine strategies and organizational policies at business and duty level
- > To give attention to employee's job leave in recent years

The main results of this research can be also presented in Table 2 as follows.

row	Variable	Effect rate	Significance value	Rejection or confirmation	Friedman's test value	Friedman s test rank
1	Environmental factor	0.018	0.63	rejected	2.85	5
2	Knowledge procedures	0.446	0	confirmed	4.64	2
3	Individual characteristics	0.228	0	confirmed	3.33	4
4	Information technology infrastructure	0.519	0	Confirmed	4.7	1
5	Cultural factor	0.075-	0.091	rejected	1.24	6
6	Organizational factors	0.292	0	Confirmed	4.27	3

Table 2. Results about Hypothesis 6

### 7. DISCUSSION AND INTERPRETATION

The importance of knowledge management and its deployment in contemporary organizations have been increasingly stressed in such a way that Iran Insurance Managers regard them as binding strategy rather than a voluntary choice without reservation. In this research, main indicators of knowledge management for deployment of knowledge management were offered, that each has components. The results of this research suggest that the indicator information technology infrastructure takes the top priority and the best position in organization, followed indicators namely knowledge procedures, organizational characteristics and human (individual) resource characteristics. Moreover, the effect of environmental components and cultural factors on the implementation of knowledge

management system was not elicited. In other words, by studying and testing the hypotheses, it was found that the indicators environmental factor and cultural factor have no optimal situation for the deployment of knowledge management.

- A) To improve the situation of organizational culture in order to establish knowledge management at Iran Insurance level, the following suggestions are presented;
- 1- to nurture and train knowledge management employees, managers and leaders.
- 2- To value and attach importance to knowledge sharing and give reward for knowledge management career, and to establish a system of proper and efficient evaluation associated with knowledge for employees in order to increase their motivation and interest in knowledge sharing.
- 3- To create an optimal work culture among employees of Iran Insurance, including nurturing generosity, forbearance, sense of collaboration, enhancing creative thinking and power of taking criticism, so that a collaborative environment can be provided for the implementation of objectives, methods, understanding, and new ideas.
- B) The situation of information technology in Iran Insurance Company remains at a good level for deployment of knowledge management. Moreover, to optimize the situation of information technology situation, it is suggested
- 1- To properly implement information systems on the basis of Iran Insurance Company knowledge-based, to effectively utilize investment in information technology and information infrastructure.
- 2- to set up knowledge map system; that is to say, setting up information banks that determines which employee has special knowledge in what subject and what department, so he can be available when needed and we can make the best use of them for solving organization problems.
- 3- To promote employees' technical and professional skills in using information system and acquaint them with applications and advantages of each of information system (software group, intranet, extranet, etc.).
- 4- To investigate and approach performance of information center of Iran insurance Company in

- order to increase services and activities relating to users
- C) For elevating and improving the situation of knowledge processes, it is suggested that;
- 1- Iran Insurance Company should realize the cost of employee's knowledge and search for ways of sharing this knowledge with others in order to achieve competitive advantage. This idea is recommended for companies to develop interactive environments where ideas are developed.
- 2- To determine qualitative measures of knowledge evaluation, form and type of knowledge required for each department
- 3- To build places for informal and friendly interaction
- 4- To use experienced staff optimally, particularly individuals approaching retirement
- 5- To pursue updating process of knowledge resource
- 6- To determine a given index to get rid of useless functions
- 7- to safeguard and protect knowledge components; preventing competitors from getting access to key information gives an overarching superiority so that one can communicate and take part safely across geographical and organizational boundaries.
- 8- To incorporate knowledge components (links, videos, documents, simulations, encyclopedias) into standard business processes and provide access for those who need to know
- 9- To use legal and standard organizational rules and processes throughout Iran Insurance Company. Institutionalized business processes and rules can be replicated, which can reduce learning curves and promote quality of fixed services and products.
- D) For optimizing human resource situation, Iran Insurance Company is recommended to;
- 1- Be ready for financial and time investment in order to train knowledge-oriented employees and involve them in learning situations as in workshops and seminars.
- 2. Empowerment; managers should provide employees with power and the foundations for using knowledge.

- 3. Attraction and retention; Iran Insurance Company should seek attraction and retention of workforce.
- 4. Assessment; managers should take into consideration knowledge acquisition, knowledge growth and knowledge sharing in the process of employee assessment.
- 5. Promotion: following assessment, managers should support and promote the development of knowledge assets.
- 6. an amendment to salary, payment and incentive system; Iran Insurance Company should make a few amendments to knowledge-oriented employee's salary and payment in order to support management of knowledge cycle.
- 7. An amendment to payment and reward system is very essential and critical to the progress of knowledge-based culture. Managers should identify knowledge-based employees and respond to them not simply because of adding to organization's knowledge assets, but because of using and recruiting knowledge assets.
- E) For improving the situation of this variable in Iran Insurance Company, it is suggested to implement an organizational structure with high flexibility.
- F) For improving the situation of management variable in Iran Insurance Company, it is suggested to
- 1. Support senior managers of Iran Insurance Company
- 2. Serious attention to knowledge manager's role
- 3. Recruit and employ effective and creative workforce or reorganize employees in order to address knowledge gap made in Iran Insurance Company.
- 4. Senior managers should ensure compatibility between organization task and knowledge strategy by means of a clear definition of knowledge goals having to do with operational strategies.
- 5. Another important factor that top executives of Iran Insurance Company should take notice of is knowledge auditing.

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