



RESEARCH ARTICLE

THE EFFECT OF ESTABLISHMENT OF KNOWLEDGE MANAGEMENT ON SATISFACTION OF GOVERNMENTAL BANKS EMPLOYEES BY STATISTICAL INFERENCE (T-STUDENT)

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ABSTRACT

The current study is aimed at investigation of effective factors on successful implementation of knowledge management in Iranian public banks and its impact on job satisfaction of these employees. The increasing growth of knowledge and skills in information technology, globalization and competitive environment of the banking industry environment, as well as the rapid changes in this area have made it necessary to better organize and manage well-known and hidden organizational knowledge. Human resources management in all organizations should provide a bed for the management of knowledge in which the acquisition of information and knowledge and its sharing throughout the organization is institutionalized and a platform for increasing employee satisfaction is made. Therefore, the move towards the full realization of the knowledge management system has always been on the agenda of organizations, especially for the financial institutions. The tasks of human resources management in learning organizations are based on the attraction and maintenance of knowledge employees. The present study aimed to investigate the effect of knowledge management establishment on job satisfaction of employees. The statistical population of this study included employees who were aware of knowledge management. Using t-student test, it was found that the average of employees' opinions about the effect of knowledge management establishment on employee's job satisfaction is high, so all four research hypotheses were confirmed. The results showed that employees with a mean of 4.11 in Likert's 5-point scale believed that job satisfaction would increase if knowledge management was established.

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INTRODUCTION

Today, among the most important assets of an organization are intelligent and knowledgeable employees who move an organization towards a sustainable competitive edge by creating new organizational processes, new technologies and developing new products. Innovative efforts in the organization are the result of investing in the process of learning and promoting human resource management and knowledge management. By the innovative management of knowledge and the innovative use of information technology, the organization can provide employees with the opportunity to rely on their own experience and others', in organizational issues which require new solutions, and help the organization grow with the learning path. Knowledge management, process or activity to create, acquire, conquer, share, and apply knowledge, wherever it exists, to increase learning and performance in organizations (Shahbazi, 2007).

Knowledge Management

In order to provide individual knowledge for organizational purposes, organizations must create an environment for sharing, transferring, and exchanging the knowledge among members and educate individuals in terms of their interactions. To develop "knowledge of the collection", we must direct all activities in the development of the rational interaction between functions. In short, knowledge management refers to changing the culture of collaboration and business processes in order to make information sharing possible. It's like working in the cultural and social collections. Nunaka, in defining the knowledge management, believes it requires a sense of commitment to creating new knowledge, promoting it throughout the organization and turning it into products and services, systems, routines, culture and strategies. Knowledge management in capability, is not a simple question about how to store, retrieve and transfer information, but rather to convey and organize information from different angles. It is only by changing the organizational culture that the pattern of interaction between individuals, technologies and techniques

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within their organization can be gradually changed. When the environment is dynamic and complex, it is imperative for organizations to continually apply new knowledge in the form of creation and validation, and use it in their products and services. The concept of knowledge management has long been used in practice though informally. The lack of a general agreement on the specific definition of this concept has led to the emergence of disruptions that have been well reflected in the various studies carried out in this regard (Akhavan and Jafari, 2008).

Learning Organization

The concepts of the learning organization and knowledge management are closely interlinked and bipartitely support each other, however in reality they are not the same. The learning organization focuses on the learning process while the knowledge-based organization focuses on the results and output of the learning process. In fact, it can be said that knowledge management is a means for the development of and supporting a learning organization. It is accepted that a learning organization creates a new knowledge that retains its competitive edge. However, creating knowledge alone does not mean that knowledge is efficiently and effectively used or managed. The management of knowledge obtains the result of the learning organization, and ensures that the proper environment for the production and management of the permanent capital of knowledge is properly created. Despite the synergies between learning organization and knowledge management, the challenge ahead is to further develop these concepts and increase the use of the combination of these disciplines (Nowruzi, 2008).

Benefits of Knowledge Management

The major achievable benefits of knowledge management are as follows:

- Improving the quality and skills of decision making, avoiding time spoils and duplication;
- Improving customer satisfaction; encouraging employees to share knowledge and classification of access to information;
- Increasing the level of support for employees who participate in the production and exchange of knowledge;
- Improving the effectiveness of individuals, functions, products and services;
- Improving the providence and efficiency status. Processes are more efficient and the need to recreate ways to do work is a continuous task;
- Continuity of organizational knowledge. In an organization where employee turnover is high, knowledge management is an effective tool that can transfer knowledge from experienced staff to new employees in order to maintain continuity of work (Sharifzade, 2012).

Job Satisfaction

The study of job satisfaction is important in two aspects: firstly, from the human aspect that it is proper to treat the employees equitably and with respect. Secondly, from a behavioral point that attention to job satisfaction can guide employees' behavior in such a way that affects their function and organizational

tasks and leads to positive and negative behaviors from them (Jupta and Andersson, 2000). Considering the key role of job satisfaction in the organization, today it has been proven that job satisfaction and satisfaction with life are positively and relatively interlinked. In other words, employees with a positive attitude to work and life, compared to those who have a negative attitude toward them, enjoy higher job and life satisfaction and they are less likely to be dissatisfied with their work (Allameh and Zamani, 2010). Job Satisfaction is important because it can lead to positive or negative behaviors. The importance of job satisfaction comes from the fact that most people spend about half their waking hours in the workplace. Job satisfaction is in fact a measure of the positive feelings and attitudes that people have about their job. When one says he has high job satisfaction, this means that he really loves his job, he has good feelings about his job, and values his job (Chen and Chen, 2006). The factors that make up job satisfaction are divided into three main factors: global factors of organization: Variables that are widely applicable to most employees, such as salaries, promotion opportunities, and security ..., the inseparable factors of the occupational environment: the variables that make up the occupational groups. Such as the way of supervision and the quality of relationships with colleagues ..., Content factors or occupationally active tasks: such as the amount of diversity, independence and responsibility in the job, and the clarity of the role of individuals in the organization (Gatchsalk, 2006).

Importance of the Subject

Today, organizational knowledge management and its processes are considered as an urgent and futuristic strategy in order to safeguard the survival and improve individual and organizational performance and, in general, become a learning organization in a dynamic and highly variable environment. Knowledge-based organizations especially count on their employees and consider them to carry the pivotal sense of knowledge. An organization's culture in which "creativity and innovation" is considered to be a prevalent value is one of the leading elements of knowledge management. Therefore, when organizational policies and practices are geared toward approaching knowledge to advance their goals, efforts will be made to change the nature of the work and knowledge of its foundation and to apply knowledge among the organization. This automatically identifies the need for an effective assessment of the establishment of such a system (knowledge management) on employee satisfaction. The ever-increasing advances in information technology and the need for IT in the organization, reveal the need for major changes in business enrichment; In this regard, the complexity of jobs will lead to a decline in employee morale. Hence, it is necessary to examine a system that is effective in increasing the satisfaction of employees.

Method and Statistical Population

The statistical population of this study is 35 employees who know about knowledge management. To determine the sample size, the following formula was used. The sample size was obtained as 30. 35 questionnaires were distributed to collect data of which, 30 questionnaires were returned.

$$n' = \frac{NZ^2P(1-P)}{d^2(N-1) + Z^2P(1-P)}$$

The questionnaire and library-based studies were used to collect data. The calculated alpha value for the present study, which actually shows the reliability of the research, is 0.906, which indicates the high reliability of the questionnaire.

Table 1. Results of the test of reliability of the dimensions of the research model

Frequency	Cronbach's Alpha
30	0/906

The Kolmogorov-Smirnov test was used to test the data distribution and one-sample T-test was used to confirm the hypotheses.

RESULTS

The results showed that 57.1% of respondents were in the age range of 31-40% and 45.2% had a master's degree.

Table 2. Descriptive information related to research indicators

	Mean	Standard Deviation	Variance
Global factors	4/02	0/47	0/22
Occupationally inseparable	4/09	0/63	0/41
Environmentally peripheral	4/3	0/33	0/11
Job satisfaction	4/11	0/36	0/13

Table 3. Descriptive information about research indicators

	Mean	Standard Deviation	Variance
All components	4/13	0/43	0/187

The Kolmogorov-Smirnov test can be used to study the distribution of data in the statistical population. This test is one of the tests that can be used to test descriptive hypotheses. For this purpose, the test was used to check the normality distribution of data. Considering that the significance level of the components of the research model in the population under study was above 0.05, it is concluded that the distribution of society data has a normal distribution.

Table 4. Reviewing the status of data distribution

	Total
N	30
Average normal parameters	4/13
Standard deviation	0/43
Kolmogorov-Smirnov test statistics	0/961
Significance level in two domains	0/314

Research Hypotheses Testing

- Establishment of knowledge management affects the global factors of the organization (rights and opportunities for promotion, and security, etc.).
- Establishment of knowledge management affects the inseparable factors of the work environment (supervisory style and quality of relationships with colleagues, working and workplace conditions, etc.).
- Establishment of knowledge management affects the content factors or professional activities (diversity, autonomy and responsibility in the job, etc.).
- Establishment of knowledge management affects the employee job satisfaction.

For testing the hypotheses, we use a single-sample t-test. A single-sample t-test is used when we have a sample of society and we want to compare its mean with a common, standard, or even an assumed and expected number. In other words, in this test, it is assumed that we have chosen a sample of the volume n and the mean m or (\bar{x}) of a society and we want to know whether this sample can be a random sample of a society whose mean μ is known.

The First Hypothesis

To test the first hypothesis of the research, we first consider the assumed mean of 3, because the scale used in the questionnaire is a 5-option Likert scale, the mean of which is 3.

H0: $\mu < 3$ the average effect of knowledge management's establishment on global factors is lower than the assumed mean (3).

H1: $\mu \geq 3$ the average impact of knowledge management's establishment on global factors is higher than the assumed mean (3).

To test the above two hypotheses we use the t-test, the results of which are given in the following table. According to the above table, the significance level is less than 0.05 and the value of t is 11.1721 which is outside the range of the confidence interval determined in a confidence level of 99%. Therefore, there is no reason to reject the H1 hypothesis.

Second Hypothesis:

H0: $\mu < 3$ the average impact of knowledge management's establishment on the inseparable factors is lower than the assumed mean (3).

H1: $\mu \geq 3$ the average effect of knowledge management's establishment on inseparable factors is higher than the assumed mean (3).

According to the above table, the significance level is less than 0.05 and the value of t is 9.256 which is outside the range of the confidence interval determined in a confidence level of 99%. Therefore, there is no reason to reject the H1 hypothesis.

Third Hypothesis

H0: $\mu < 3$ the average effect of knowledge management's establishment on environmental factors is lower than the assumed mean (3).

H1: $\mu \geq 3$ the average impact of knowledge management's establishment on environmental factors is higher than the assumed mean (3).

According to the above table, the significance level is less than 0.05 and the value of t is 21.237 which is outside the range of the confidence interval determined in a confidence level of 99%. Therefore, there is no reason to reject the H1 hypothesis.

Fourth Hypothesis

H0: $\mu < 3$ the average effect of knowledge management establishment on job satisfaction is lower than the assumed mean (3).

H1: $\mu \geq 3$ the average effect of knowledge management establishment on job satisfaction is higher than the assumed mean (3).

Table 5. T-student test

Assumed average = 3					
Dimensions	t	Degree of freedom	Significance level Sig. (2-tailed)	Confidence interval at 99% confidence level	
				lowerinterval	upper interval
Global factors	11/72 1	29	0/000	0/78	1/25

Table 6. t-student test

Assumed average = 3					
Dimensions	t	Degree of freedom	Significance level Sig. (2-tailed)	Confidence interval at 99% confidence level	
				lowerinterval	upper interval
Occupationally inseparable factors	9/256	29	0/000	0/76	1/41

Table 7. t-student test

Assumed average = 3					
Dimensions	t	Degree of freedom	Significance level Sig. (2-tailed)	Confidence interval at 99% confidence level	
				lowerinterval	upper interval
Global factors	21/237	29	0/000	1/13	1/46

Table 8. t-student test

Assumed average = 3					
Dimensions	t	Degree of freedom	Significance level Sig. (2-tailed)	Confidence interval at 99% confidence level	
				lowerinterval	upper interval
Global factors	16/836	29	0/000	0/93	1/29

According to the above table, the significance level is less than 0.05 and the value of t is 16.836 which is outside the range of the confidence interval determined in a confidence level of 99%. Therefore, there is no reason to reject the H1 hypothesis.

Model Fitness Test using Confirmatory Factor Analysis

The confirmatory factor analysis attempts to test the veracity of the factor structure for a set of observed variables. This technique allows the researcher to test the hypothesis according to which there is a relationship between obvious variables and latent structures. The conceptual model of the research is plotted in the form of a path diagram and is measured using various methods of its fitness. A complete model of the structural equation in fact represents a mixture of path diagrams and confirmatory factor analysis. In general, working with the LISREL program, any of the indicators obtained for the model alone is not the reason for the model's fitness or non-fitness; instead, these indicators should be interpreted alongside each other. The table below shows the most important of these indicators and shows that the pattern is in a good position to explain and fit. Given that all indicators are in the desired range, it can be said that the research model has a good fitness.

Conclusion

As it turned out, all four hypotheses of this study were confirmed by a high average. This suggests that, in terms of respondents, the establishment of knowledge management can be effective in increasing job satisfaction among employees. To accomplish this, banks should have opportunities to learn, such as training programs, and so on, so that employees can upgrade their personal capabilities. Also, officials should encourage employees to carry out activities that meet the needs of their growth and learning.

Authorities must provide a mechanism for learning from successful organizations. Moreover, programs can be created for employees to carry out their learning and development activities in teams and groups. This could lead to the exchange of information between employees and the transfer of experiences. By establishment of knowledge management and knowledge of affairs and activities, it is possible to increase the diversity and enrichment of the job and provide the ground for facilitating the occupation. Also, officials should create a mechanism for accessing information from within and outside the organization (scientific publications, training programs and job rotation, etc.) for all employees.

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