Investigating application of knowledge management in Bank Mellat (Case study: management of independent branches of Tehran)

[1]Davoud Abedini, [2]Ali Asghar Rahmani

[1]Department of Management, Arak Branch, Islamic Azad University, Arak, Iran

[2]Department of Management, Firoozkooh Branch, Islamic Azad University, Firoozkooh, Iran

Abstract

Today, pioneer organizations have realized that organizational knowledge is an important asset and it must be managed and they should not leave their most important and most valuable asset that is organizational knowledge unmanaged. The main purpose of this article is to identify the status of knowledge management in Bank Mellat of Iran and secondary objectives of this article include: identifying the status of creation and production of systematic and permanent knowledge in Bank Mellat, identifying a structure in Bank Mellat which can organize and store organizational knowledge in the organizational memory, identifying the status of distribution of knowledge in Bank Mellat and identification of the status of reward system to apply knowledge in Bank Mellat. In this paper, the independent variable is the knowledge management system and its components include: creation and production of organizational knowledge, organization and storage of organizational knowledge, sharing and distribution of organizational knowledge and application of organizational knowledge. In this paper, by considering the theory of knowledge management and its components –which include: creation and production of organizational knowledge, organization and storage of organizational knowledge, sharing and distribution of organizational knowledge and application of organizational knowledge- we evaluated the issue of knowledge management across independent branches and after conducting statistical tests, it was found that components of knowledge management are not being applied in the studied banks. In this regard, suggestions are provided in order to empower and to pay more attention to the issue of knowledge management in the Bank Mellat.

Keywords: knowledge, knowledge management, creation of knowledge, organization and storage of knowledge, sharing knowledge and application of knowledge

1.Introduction

In recent years the role of knowledge in the development of organizations has become more and more identified and by recognizing this important issue, most organizations have seriously tended towards knowledge management.

Knowledge management is a new branch of management which realizes organizational goals and maintains and enhances its competitive advantages through creating a proper and necessary coordination between different aspects of "scientific knowledge", "technology" and "human communication" (Hislop, 2013). This idea that personal experiences, technologies and techniques can alone expand and develop knowledge in an organization, is an inaccurate idea and we must create a new process by combining these three elements, through knowledge management in order to establish a rich and updated organizational knowledge across the organization and to make it readily available to all (Aggestam, L., 2015). In most organizations acquiring the knowledge necessary for implementation of different roles seems to be difficult to some extent and this is because of lack of a system to oblige employees to document their work experiences and knowledge and to prepare and develop up to date sciences, related to the jobs and offer them to the employees (Gagnon, M. et.al, 2015) Most employees and especially the managers use outdated procedures, experiences and knowledge and since there is no knowledge management, updating knowledge is not possible and it is not very common. Knowledge workers or those who have valuable experiences are usually disregarded and perhaps they are not being applied in appropriate positions. Up to-date knowledge and information in various fields shortens required time to do jobs, helps us to make the best decisions, reduces additional costs resulting from ignorance and bobbles and give employees the power and ability to do their jobs better, faster and more accurate. Now these questions are raised: what is the effect of application of management on organizational knowledge in the independent branches of Bank Mellat? Whether its position is recognized in the organizational structure and the management and staff are familiar with the process? Whether the organizational knowledge is being systematically produced, stored, updated, shared and applied? The aim of this article is to respond to these questions.

2.Related Works

A summary of previous researches conducted in the area of knowledge management is presented below:

(A. Samadian and Seyyed Alavi, 2012) in a study entitled "The impact of knowledge management on the level of creativity of employees of Tehran broadcasting" investigated the impact of knowledge management on the level of creativity of employees of Tehran broadcasting. This study was a survey research. The required information was collected by using field study method and through applying a questionnaire. The sample consisted of 384 persons and the study population consisted of 1150 male and female employees of broadcasting organization. Findings indicated that by increasing participation in knowledge

within a unit, the level of creativity will increase at the rate of 499%. Also by increasing knowledge organization within a unit, creativity will increase at the rate of 396%. By increasing application of knowledge within a unit, creativity will increase at the rate of 351%. By increasing knowledge performance evaluation within a unit, creativity will increase at the rate of 488%. By increasing discovery and creation of knowledge within a unit, creativity will increase at the rate of 317%. Finally, they concluded that participation in knowledge, knowledge organization, and application of knowledge and knowledge performance evaluation affect creativity of employees.

In another study (Edwards et. al., 2004) in a descriptive-quantitative study investigated the effectiveness of knowledge management in improvement of planning and decision making in different types of higher education institutions. The results showed that the performance of knowledge management in higher education institutions was not developed as in commercial companies and it had a mediocre effectiveness in improvement of planning and decision-making.

(Rezghi, 2009) conducted a study which was entitled "the role of knowledge management in the performance of managers of Islamic Azad University of district 8 of Tehran". Although the results confirmed positive impact of applying knowledge management in the improvement of performance of managers, however there was a significant difference between knowledge-based thinking among low-level managers and senior managers and this problem must be addressed. The main elements of knowledge management must be trained and institutionalized within a theoretical and practical cycle and knowledge must be converted to its true form, in acceptable standards and transferable to the current and future needs of Islamic Azad University.

Also the results suggest considering items such as establishment and improvement of incentives and rewards system in order to develop the level of knowledge, continuous revision of knowledge management systems and its continuous evaluation across different branches of Islamic Azad University.

(Azari, Barimani & Haji Gholikhani, 2011) conducted a study which was entitled "investigating the role knowledge management on creativity of teachers in secondary schools".
It was a descriptive and correlation research. In this study 350 teachers were selected as sample, by using stratified cluster sampling method. Two questionnaires were used for data collection. The reliabilities of knowledge management questionnaire and creativity questionnaire were measured by calculating Cronbach's alpha which were 0.85 and
0.72 respectively. To analyze the data SPSS software and descriptive and inferential statistical methods were used. The results of investigating research questions showed that there are relationships between knowledge management, knowledge revision, knowledge organization, knowledge application and knowledge promotion and creativity of teachers and there is no relationship between knowledge perceptions and creativity of teachers and there are no significant differences between the effect of knowledge management on creativity of female and male teachers.

(Ebrahimzadeh, 1384) in his study entitled "the effect of knowledge management on learning organization" concluded that companies need to continuously move towards innovations in management and they should acquire principles of innovation through continuous learning. These principles are specified through sharing knowledge and information with customers and other within learning activities such as training, knowledge sharing and personal studies. Different learning activities lead to different sharing functions and controlling each function to share knowledge, in order to increase the performance of knowledge management and to create a learning organization is an essential issue. Kouchakzadeh and Namaki (1383) in a study entitled "knowledge management in a learning organization" at first explained the relationship between data, information and knowledge and then they enumerated different levels of knowledge (personal, group and organizational), all kinds of knowledge (explicit and implicit) and the mechanism of its production through applying SECI model and in this way they described knowledge management and its process. Then, given the importance of learning and its fundamental role in the production and acquisition of knowledge, they defined learning, expressed different levels of learning (personal, group and organizational) and the interaction between learning and production, storage and application of knowledge and finally they expressed different types of learning (single loop, etc.). Then they provided a definition of learning organization with an integrated approach. Furthermore, they offered a proposed model for learning organization and studied the position and interaction of knowledge management with all levels of the organization. In the end, it concluded that learning organization with the management of organizational learning process provides a suitable ground for implementation of knowledge management and on the other hand, knowledge management that is the facilitator of organizational learning, is located in the center of learning organization and contributes to its more effectiveness and more success.

3.Proposed method

Knowledge management discovers and improves an organization's knowledge assets with a view that propels organizational goals. A knowledge which must be managed involves hidden and obvious knowledge. Knowledge management is an attempt to discover hidden assets. Knowledge management seeks to acquire information and knowledge, integrate and create knowledge and tries to investigate the impact of knowledge on innovation and retention of the role of personal and organizational factors and by integrating these factors, we can produce, create, acquire and identify knowledge. This is while above mentioned factors lead to classification, storage, documentation, dissemination and application of knowledge. According to these discussions, we can illustrate the knowledge management model schematically as showed in figure 1.
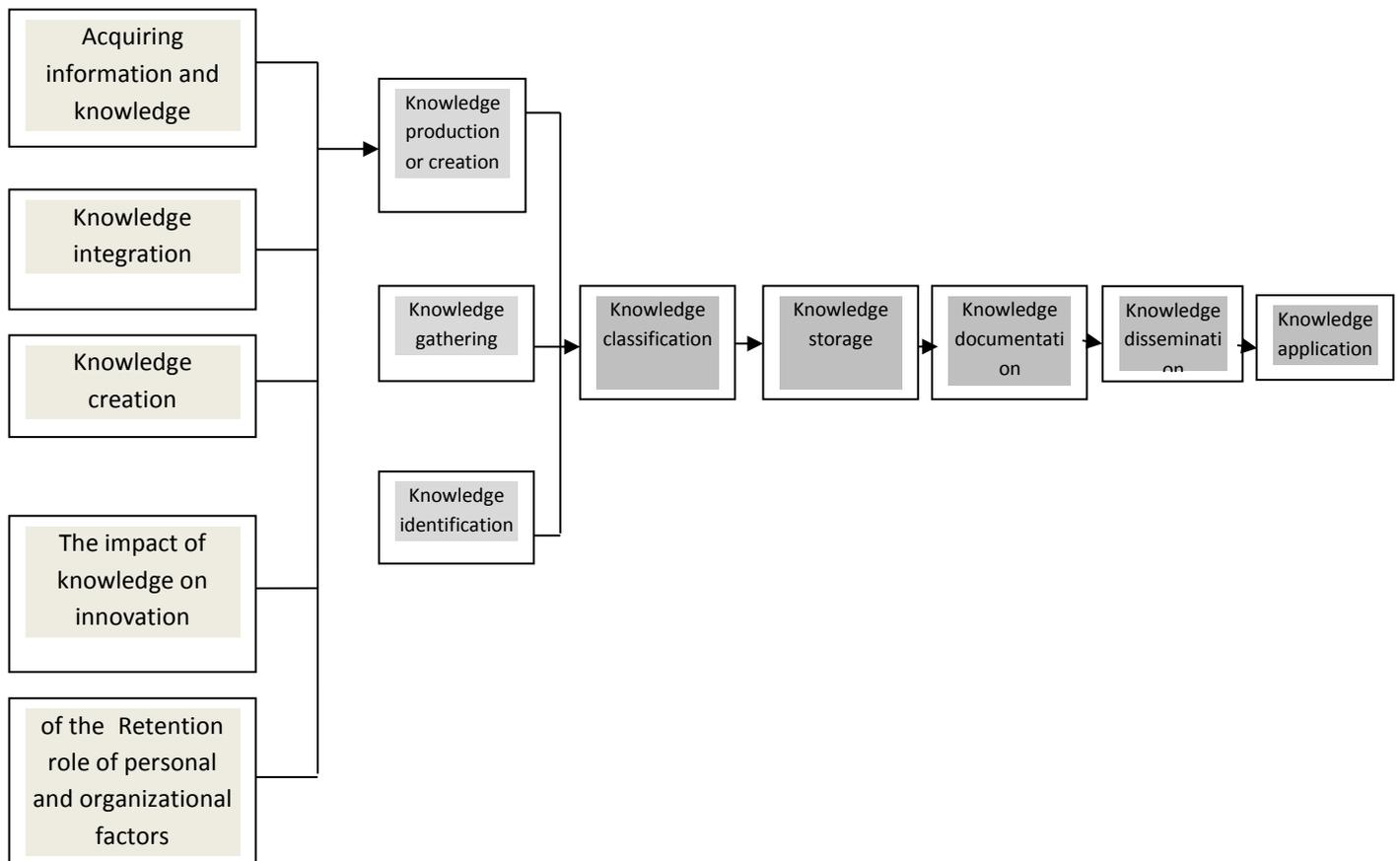
Figure1. Knowledge management process

Knowledge management leads to the formation of professional development of employees, improving per-
formance through increasing efficiency, productivity and ... improving decision-making, financial value and
competitive advantage. It should be noted this paper doesn't covers the results of knowledge management
raised in the following model and it merely investigates factors which cause knowledge management and in
fact it tries to move toward knowledge management by measuring these factors in Bank Mellat (Figure 2).
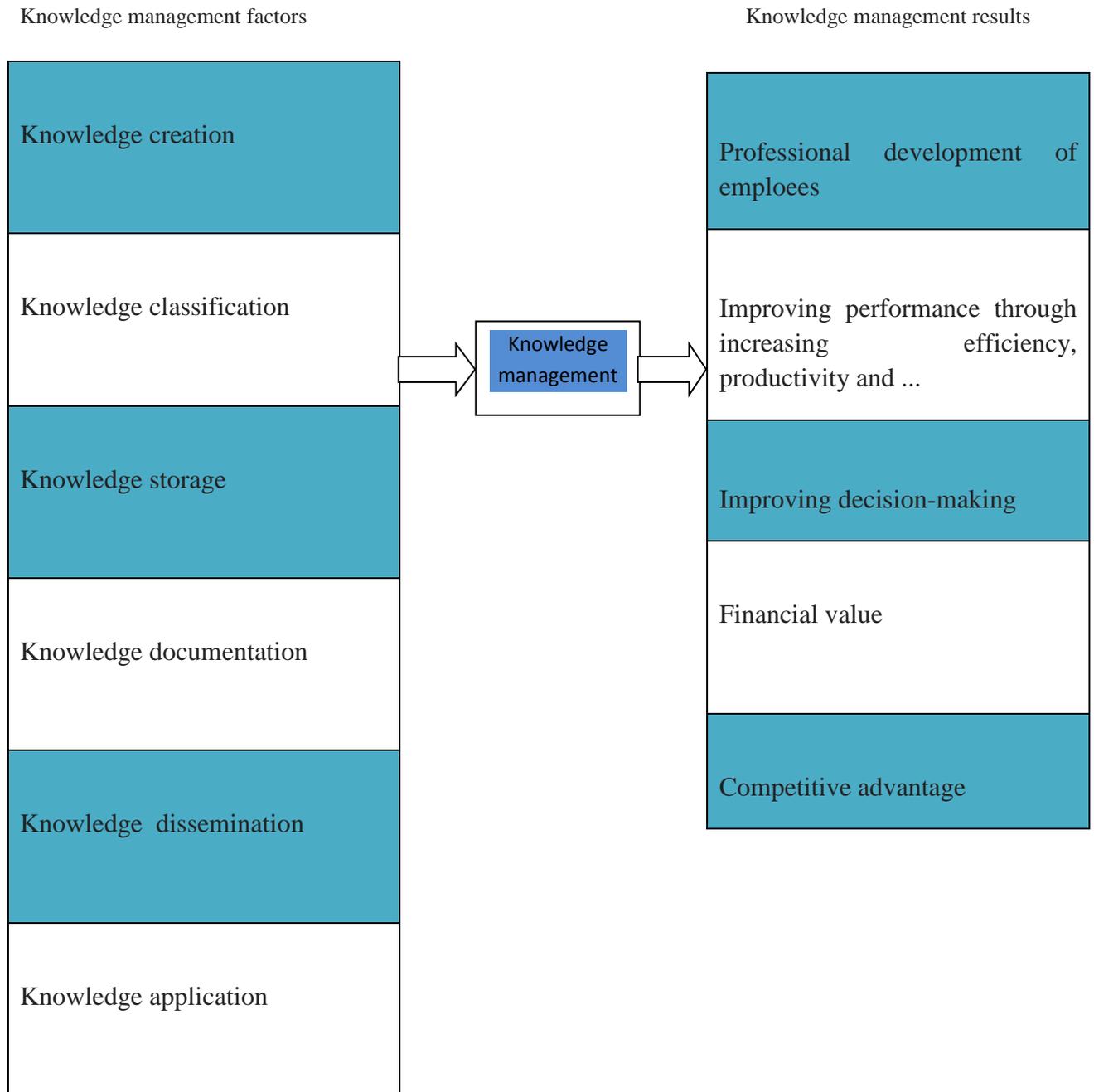
Knowledge management factors   Knowledge management results

Knowledge creation		Professional development of emploees
Knowledge classification	Knowledge management	Improving performance through increasing efficiency, productivity and ...
Knowledge storage		Improving decision-making
Knowledge documentation		Financial value
Knowledge dissemination		Competitive advantage
Knowledge application		

Figure2.Factors and Results of Knowledge management

4.Experiments and results

The scope of this article is line and staff domain of independent branches of Bank Mellat and the number of these branches is 14 and they have been particularly selected to conduct VIP affairs for special customers in Tehran in 1391. Most of these branches are central and are located in northern Tehran. Independent branches of Bank Mellat use 359 employees -which 140 of them have a bachelor or a higher degree- and try to better

perform their Banking and financial services across Tehran. This organization's business has a complex nature and in fact it is a knowledge-based business. Among other features of this business we can refer to complexity of phenomena, complexity of technologies, continuous production of data, information and knowledge and increasing expectations of customers regarding the quality of final product and etc. In this paper, due to the homogeneity of study population simple random sampling was used and by using Krejcie and Morgan table, 100 persons were selected. Therefore, since the main tool of this paper is questionnaire, so researcher designed questionnaires and before distributing them among selected people, he distributed 30 copies among expert and informed individuals to conduct test per test and they were asked to complete the questionnaires and to express their opinions about them. Then, after receiving the responses and fixing problems and writing comments raised by expert respondents (such as supervisors, students studying in relevant areas, managers and other experts) the questionnaire was prepared for distribution among sample members. In this paper, researcher has used test-retest method to assess research reliability. Then by using the results of two tests which have been conducted with a 20 days interval on 30 sample members Cronbach's alpha was calculated by using SPSS software which was 0.89, so it was acceptable and therefore the questionnaires were distributed among selected sample.

5.Data analysis

Kolmogorov-Smirnov test was used to evaluate the normality of research variables. In this test the null hypothesis indicates the normality of variables. The results of this test are shown below:

Variables	Knowledge creation	Knowledge production	Sharing knowledge	Knowledge application
Test statistics	0.865	0.989	1.021	0.805
Sig.	0.062	0.082	0.158	0.063

Table1. The results of Kolmogorov-Smirnov test

According to the above table, all the values are larger than 5% error level, so there is no reason to reject the null hypothesis or the normality of variables. So we can say that knowledge management components have a normal distribution. Equation 1 is used to test the hypotheses.

$$t = \dfrac{\overline{x} - \mu_0}{\dfrac{s}{\sqrt{n}}}$$

Equation 1:

And it has a t distribution with (n-1) degree of freedoms.

Hypothesis 1

- H0: Organizational knowledge is being created and produced systematically and continuously.

- H1: Organizational knowledge is not being created and produced systematically and continuously.

The results of observations of sample indicate a mean of 2/32 and a standard deviation of 0/0984. Since the test statistic (-6.93) is located in the area of rejection of H0, so H0 is rejected. So the hypothesis is confirmed at 0.05 error level; meaning that organizational knowledge is not being created and produced systematically and continuously.

Hypothesis 2

- H0 :There is a system with the capability of organizing and storing organizational knowledge within its organizational memory.

- H1: There is no system with the capability of organizing and storing organizational knowledge within its organizational memory.

Since the sample size is larger than 30 (n> 30) the distribution of this statistic can be considered almost normal (according to the central limit theorem). According to the results of the observations of sample the values of mean and standard deviation are 2/20 and 1/054 respectively. Since the test statistic (-7.59) is located in the area of rejection of H0, so H0 is rejected. So the hypothesis is confirmed at 0.05 error level.

Hypothesis 3

- H0: There is a system with the capability of distributing organizational knowledge across the organization and encouraging employees to share their knowledge or experiences with others.

- H1: There is no system with the capability of distributing organizational knowledge across the organization and encouraging employees to share their knowledge or experiences with others.

According to the results of the observations of sample the values of mean and standard deviation are 1/96 and 0/0984respectively. Since the test statistic (-10.56) is located in the area of rejection of H0, so H0 is rejected. So the hypothesis is confirmed at 0.05 error level.

Hypothesis 4

- H0: There is a system with the capability of encouraging employees to apply organizational knowledge in performing their tasks and their work procedures.

 - H1: There is no system with the capability of encouraging employees to apply organizational knowledge in performing their tasks and their work procedures.

The test statistic (-13.52) is located in the area of rejection of H0, so H0 is rejected. So the hypothesis is confirmed at 0.05 error level.

6.Conclusion

Organizations like Bank Mellat and its subsidiary organizations are among knowledge-based organizations. These organizations deal with an important business with sophisticated technology and knowledge, where decisions should be very smart and based on sufficient
information and knowledge. The results of this study reflect the following issues about Bank Mellat:

Organizational knowledge is not being created and produced systematically and continuously; meaning that there is no such a capability in the organization to urge employees to document work instructions and problem-solving methods and continuously convert data into information and information into knowledge.

There is no system with the capability of organizing, refining, updating and storing organizational knowledge within the organizational memory. Meaning that currently there is no system to organize organizational knowledge continuously, revise them and discard unnecessary information, continuously update them and store them within the organizational memory by using coding techniques.

There is no system with the capability of distributing organizational knowledge across the organization and encouraging employees to share their knowledge or experiences with others. This indicates that there is no system to urge employees to share their knowledge or experiences with others and to make it possible for all to acquire their desired organizational knowledge.

There is no system with the capability of encouraging employees to apply organizational knowledge in performing their tasks and their work procedures. There is no system to encourage employees to apply organizational knowledge in performing their tasks and employees mostly rely on their personal interests or on the opinions of other people or unimportant information and insufficient documentation in performing their duties.

7.References

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