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Review Article

EXAMINING THE KNOWLEDGE MANAGEMENT STATUS IN IRANIAN UNIVERSITIES: A REVIEW

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Abstract:

Introduction: Knowledge management is one of the most important tools for organizations to succeed under competitive conditions and in the information era. Therefore, this research examines the status of knowledge management in Iranian universities and provides a review.

Materials and Methods: The data of this review research have been collected through the search of published articles in Internet resources and scientific databases in Iran and abroad, and the words "knowledge management, university and Iran" without any language and date limitations.

Results: Totally, among 13 studies we can conclude that a university with the successful implementation of knowledge management and the use of its facilities for accelerating and facilitating access to information will be able to increase its knowledge-making capabilities and achieve the competitive advantage in comparison with other universities and research centers. One of the other capabilities that provides the right application of knowledge management at universities is the ability to conduct group and interdisciplinary research. In addition, knowledge management can provide the opportunity to share knowledge, carry out more extensive research and further advancement of science by providing scholars' communication with other universities and research centers. Also, using knowledge management, university administrators will be able to quickly and efficiently obtain the information they need to make a decision. In order to optimize the effective factors of knowledge management in the university and make necessary changes, it is necessary for the university to be aware of the status of these factors. **Discussion and Conclusion:** By implementing knowledge management, the storage, transfer and retrieval of the

existing knowledge as well as the possibility of interaction between researchers are facilitated and accelerated, which in turn can promote the level of research and increase the production of science, and help universities achieve their goals.

Keywords: Knowledge Management, University, Iran.

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INTRODUCTION:

Today, organizations are working hard to become leaders in knowledge management skills and earn for their efforts. This is possible through the use of knowledge for innovation purposes [1]. Today, leading knowledge organizations are known as the empowering [enabling] element that can transform the organization so that it can deliver outstanding capabilities from the point of view of productivity and efficiency. Knowledge management is a complex and widespread concept, and for this reason different thinkers have been considered it from different views [2].

The retirement of government employees as well as their transfer between different sectors create a new challenge for maintaining knowledge and preserving organizational memory and, consequently, training new staff. Over time, current government employees will retire in the next few years. This is a major problem facing many governments. Government organizations need to keep up the knowledge of senior staff by initiative, since otherwise it will be difficult to provide services to the public sector [3]. Therefore, gaining knowledge from senior staff, then transferring it to other employees, and updating the lessons learned over time are very important. Increasing the growing number of knowledge-based citizens forces the government to be placed at the forefront of the created and updated knowledge [4]. Knowledge management states that the most important valuable resources of each organization is the knowledge of its employees. This emphasis and focus is on account of the increasing acceleration of changes in the organization and community as a whole [5]. Knowledge management states that today almost all tasks require knowledge-based work, and therefore all employees should be transformed into knowledge-based employees in a way [The work done by the staff depends on their knowledge instead of their power. This means that the creation, sharing and use of knowledge is one of the most important activities of each person in each organization] [6].

Therefore, sharing and expanding knowledge are considered to be common stages. Knowledge is considered as a powerful tool for the participation of developing countries in the knowledge revolution, which has a decisive role in reducing the distance between countries [7]. In an age that is known as a knowledge-based and knowledge-based economy, the proper implementation of knowledge management is not just specific for organizations and enterprises, but also for universities as a center for knowledge creation and dissemination. In the competitive environment of today's communities, research

institutes compete with one another to attract the best researchers and investors; universities are also seeking to get the best investors, i.e. professors and students [8]. Universities and other higher education institutions, like other organizations involved in knowledge management, on the one hand face challenges such as financial pressures, rapid technological growth, the changing role of employees, competitive values and, in general, global change, and on the other hand, are trying to achieve their basic goals i.e. education, research, and service to the community [9]. Proper dealing with challenges and achieving goals is possible only if the university can knowingly and clearly manage processes related to the creation of knowledge and have an easy solution to accept beliefs and processes related to knowledge management which has been created in modern communities. In the competitive environment governing universities, and the efforts universities have in generating science and gaining a better rating, knowledge management provides a proper strategy for optimized utilization of the knowledge and intellectual power of individuals at universities [10]. Since universities are in the process of securing their status and gaining a top academic rank among national and international universities, therefore, this research examines the status of knowledge management in Iranian universities and provides a review.

RESEARCH METHOD:

This study has been conducted as a simple review in 2017 and in order to examine the status of knowledge management in Iranian universities. Research data have been collected through the search of published articles in Internet resources and scientific databases including SID, MAGIRAN, PubMed, Scupus, and ISI and the words "knowledge management, university and Iran" without any language and date limitations. In the original search, 94 related studies were found, of which 13 research papers completely related were used in this study.

RESULTS:

Karimi Monqi et al. [2014] conducted a review study aimed at examining the status of knowledge management and its aspects in medical sciences. In this regard, related articles were searched and reviewed in the Internet resources and international and Iranian scientific databases. The results of the review of 17 articles reviewed showed that the professors, employees and stakeholders of the health system, while converting tacit to explicit knowledge and applying it in clinical guides, through the creation, acquisition, sharing and application of knowledge make efforts for education, learning, research and community health promotion. Organizational learning is a continuous and ongoing stream of medical science universities. The inclusion of knowledge management products in the equipment and its use for patients' education and care, such as clinical decision support systems, is another key aspect of knowledge management in medical sciences. They believed that in order to implement knowledge management, it was necessary to create and sustain important knowledge management infrastructure, including leadership, culture, and knowledge management technology at universities. Finally, they concluded that KM is an approach that prepares advanced activities for professors, stakeholders and students through the creation, acquisition, sharing and application of knowledge for any change in academic environments. This means that KM encourages medical sciences universities to function more accurately, efficiently and effectively. It is necessary to promote the implementation of KM programs in medical sciences education [11].

Mirheidari et al. [2012] in a study conducted as a meta-analysis have examined the effect of organizational culture on the establishment of knowledge management in Iranian organizations. For this purpose, among 42 studies, 13 studies were chosen as methodologically acceptable, and metaanalysis was performed on them. The results of this study showed that the effect size of organizational culture on the establishment of knowledge management in organizations is 0.77. In their view, this effect size is very high according to Cohen's Table. One of the important suggestions of this research is to increase the amount of investment in order to expand the organization's cultural infrastructure. They also believe that organizational culture acts as a powerful lever to strengthen organizational behavior, and it helps individuals share and release their knowledge in an effort to maintain their personal strength and efficiency.

Shirvani et al. [2009] conducted a descriptive study aimed to determine the level of governance of knowledge management processes in Isfahan University of Medical Sciences. The statistical population of this research included personnel employed by 7 staff assistants of this university with Associate degree and higher and faculty members [totally n=1266]. Among them, the statistical sample size computed as systematically randomized was 295 subjects. In this research, to collect the information on the subject literature library method was used such as books and journals, and to collect the information necessary to confirm or reject the research hypotheses, a researcher-made questionnaire with closed questions [including 5 demographic questions and 33 main questions] The obtained results showed that in all six processes of knowledge management in Isfahan University of Medical Sciences, there are all grounds for deploying it below the average level. The researchers have concluded that one of the most important challenges faced by state organizations today is the use of organizational knowledge and its application with new management tools such as knowledge management that regarding the proper use of it has empowered organizations under the current competitive conditions and provides the basis for their success [13].

Bahrami et al. [2012] in a study have examined the relationship between overall quality management and knowledge management from the viewpoint of faculty members of Isfahan universities and Isfahan University of medical sciences. The statistical population of this study included all the faculty members of Isfahan universities [n=491] and Isfahan University of Medical Sciences [n=594] in the academic year of 2011-12. The sampling method was stratified-randomized proportional to the sample size [n=300]. The tool used in this study was the standard questionnaire of overall quality management based on Baldrige model and the standard questionnaire of knowledge management components based on Pastor model. The results showed that in Isfahan University besides leadership, strategic planning and human resource management and in Isfahan University of Medical Sciences except for focus on the customer, information analysis, strategic planning and process management, the mean of all overall quality management criteria was higher than the average level. Also in Isfahan University, the mean of all components of knowledge management, except for knowledge refinement, and in Isfahan University of Medical Sciences the mean of all components was higher than the average level. The correlation coefficient between the scores of overall quality management criteria and knowledge management components at the level of 0.05 was significant in the two universities as well as the results of multivariate regression showed that the relationship between overall quality management criteria and knowledge management was significant. The researchers have concluded that: Quality management criteria can be effective on the proper functioning of the organization, as well as its effect on knowledge management increases the efficiency of the organization [14].

Khatami [2009] conducted a study aimed to examine the status quo of knowledge management indicators in Islamic Azad University units in the 12th district. The statistical population of this research consisted of all faculty members and managers of the Islamic Azad University units of the 12th district, more than 2500 subjects. The statistical sample was obtained through the sampling by the single-stage cluster random sampling method. The sample size was n=350 according to Morgan Table. In order to collect information, a standard questionnaire was used including components of social aspect of knowledge management, technical aspect of knowledge management, organizational culture of knowledge creator, cultural factors, technological factors, political factors, knowledge portals, knowledge-based citizens, knowledge-based organizational processes, knowledge-based structure, knowledge leadership and knowledge sources. In order to determine the psychometric properties of the questionnaire, its content validity was confirmed by experts' survey. In addition, Cronbach's alpha calculation method was used in order to estimate the internal consistency between the questions and the components [social aspect of knowledge management 0.79, technical knowledge management aspect of 0.87. organizational culture of knowledge creator 0.78, cultural factors 0.82, technological factors 0.82, political factors 0.83, knowledge portals 0.76, 0.80, knowledge-based knowledge citizens organizational processes 0.72, knowledge-based structure 0.79, knowledge sources 0.82, knowledge leadership 0.77, and knowledge management general index 0.97]. The results of using t-test of one group showed that knowledge management indices in Islamic Azad University of the 12th district at the significant level of p <0.01 are not in a desirable status [15].

Akhavan et al. [2012] in a study have tried to present a model for examining the effect of different knowledge management strategies on the performance of universities and higher education institutions. They believe, because of the lack of specific models of knowledge management in higher education, the proposed models for non-educational environments can be used as a guide to present a new model that considers the various elements of knowledge management. In this research, strategies, critical success factors, knowledge management practices and organizational performance were identified as common elements in different models. The possibility of generalizing and interpreting each element alone and their relationship with higher education have been examined through qualitative data analysis of interviews. Interviews have been conducted with three top-level university managers with a minimum post of head of the faculty. The results showed that the analysis of qualitative data supported the existence of the main components and sub-components available in the model. The direct effect of knowledge management strategies on the performance of universities has not been confirmed and this effect is influenced by the critical success factors and the actions of knowledge management. It was also found that the effect of knowledge management strategies on knowledge management actions at the university was only influenced by the vital factors of success. They believe that this model can help understand the components of knowledge management and provide a practical guide for the successful deployment of knowledge management in higher education sector in Iran [16].

Feizi et al. [2010] conducted a study aimed to examine the status of knowledge management and learning organization at Islamic Azad University of Science and Research Branch and the relationship between knowledge management and its components with the aspects of the learning organization. The statistical population of the study was all students of Islamic Azad University of Science and Research Branch studying in the academic year of 2008-2009. They were randomly sampled. The results of this research have estimated the position of Azad University, science of Science and Research Branch from the perspective of the learning organization, weak and average, and from the perspective of knowledge management, good [17].

Hajizadeh and Hosseinpour conducted a study aimed to examine the application of components of learning organization among staff and directors of Ahvaz Jundishapur University of Medical Sciences and its relationship with knowledge management. The statistical population of this study included all staff and directors of Ahvaz Jundishapur University of Medical Sciences. 180 subjects were selected and studied by simple random sampling method. In this study, two questionnaires of learning organization and knowledge management were used as a tool for collecting data. The method of this research was descriptive and correlational. To analyze the hypotheses, single group t-test, Pearson correlation coefficient and multiple regression coefficient were used. The results of the analysis of hypotheses using single group t-test showed that the level of five components of the learning organization including individual capabilities, mental patterns, common goal, team learning and system thinking is less than average. Also, the results of correlation coefficient showed that a positive relationship was found between the five components of learning organization and knowledge management. The results of regression analysis showed that the two components

of system thinking and mental patterns are the best predictors of knowledge management. The acceptable significance level was considered to be 0.05 [18].

Zomoradiyan and Rostami [2010] in a study entitled "Establishment of a social capital-based knowledge management system in units of Islamic Azad University of the 8th District" have examined the aspects of knowledge management establishment including the factors of organizational culture, organizational structure, infrastructure, change content and supporting change with social capital. The results of the literature of the subject and the findings of field research showed that a significant relationship was found between social capital and the factors of organizational culture, organizational structure, infrastructure and change content. On the one hand, by studying the correlation the results of the study show that a significant difference was found between the current status of the five factors of knowledge management establishment. Therefore, it can be said the factors related to the readiness of knowledge management establishment do not have the same ranks, so that the most are related to the content of the change and the least are related to the organizational structure [19].

Adineh Ghahremani et al. [2011] in a study have examined the status of knowledge management infrastructure in Tabriz University from the viewpoint of faculty members. The method of this study was survey and its data have been collected using a questionnaire. The study population was all faculty members of Tabriz University. Among them, 169 subjects were selected using a proportional stratified method. In this research, first the level of familiarity of the research population with the concept of knowledge management has been measured. Then, the underlying factors were examined including organizational culture, organizational structure, human resources, processes, technology and financial resources. The results of the research showed that the level of familiarity of the research population with the concept of knowledge management is low. Among the examined underlying factors, four factors of organizational culture, organizational structure, processes and financial resources are in an inappropriate status, and two factors of human resources and technology are in a good status. Finally, some suggestions have been made to improve the status of the knowledge management infrastructure in Tabriz University [20].

Watife [2015] conducted a study aimed to examine the relationship between knowledge management and stress in Sistan and Baluchestan University. The statistical population of this study was 440 faculty members. The sample was 205 subjects selected based on Morgan's Table. Structural equation modeling techniques have been used to examine the relationships between research variables. The results of this study analysis showed that KM processes naturally increase stress and could affect the components of demand-control-supervisors' supportcommunication-change [21].

Boniesi [2017] conducted a study in order to examine the relationship between knowledge management and emotional intelligence with quality of work life among employees of Imam Khomeini University of Marine Sciences. The obtained results showed that 1] a significant relationship was found between knowledge management and quality of work life, and knowledge management explained 67.1% of the changes in the quality of work life through the aspects of knowledge creation, knowledge storage, knowledge organization, knowledge acquisition, knowledge application and knowledge release and 2] a significant relationship was found between emotional intelligence and quality of work life. Emotional intelligence explained 61.7% of changes in the quality of work life through the aspects of selfself-awareness, management, management of relationship, and social consciousness [22].

DISCUSSION AND CONCLUSION:

Universities have the main task of training committed, efficient, and expert human resource for solving different needs of the community [23 and 24]. On the other hand, due to a series of charm, many elites are attracted to universities every year by employing, studying and researching [25 and 26]. With a total of 11 studies, it can be concluded that by implementing knowledge management, the storage, transfer and retrieval of existing knowledge and the possibility of interaction between researchers are facilitated and accelerated, which, in turn, can promote the level of research, increase the production of science and help universities achieve their goals. A university, with the successful implementation of knowledge management and the use of its facilities to accelerate and facilitate access to information, will be able to increase its knowledge-based capabilities and achieve the competitive advantage in comparison with other universities and research centers. One of the other capabilities that provides the right application of knowledge management at universities is the ability to conduct group and interdisciplinary research. In addition, knowledge management by providing scholars' communication with other universities and research centers can provide the opportunity to share knowledge, carry out more extensive research and further advancement of science. Also, using knowledge management, university administrators will be able to quickly and efficiently obtain the information they need to make a decision. In order to optimize the effective factors of knowledge management in the university and make necessary changes, it is necessary for the university to be aware of the status of these factors.

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