

# Evaluation of the Impact of Contextual Factors of the Organization on Organizational Knowledge Innovation

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## Abstract

Insurance industry has become one of the fast-growing sectors in the economy, and the advancement of insurance innovation will lead to the development of knowledge. Also, contextual factors of organizations play a significant role in acquiring new knowledge and innovation, and the success of any organization in implementing any strategy, including knowledge management, largely depends on the support of contextual factors. In line with this, the present study aims to investigate the effect of contextual factors of the organization on organizational knowledge innovation. The research method is descriptive-correlational and the data were collected through a standard questionnaire consisting of 24 items in a five-point Likert scale. The statistical population consisted of managers and experts of the Physical Damage Funding Organization among whom 100 people were selected using Cochran formula. Descriptive statistics, correlation coefficients, and regression analysis were used for data analysis. The results showed that contextual factors of learning culture, human resource management, employee independence, and information technology systems, respectively, had a significant effect on knowledge exploration. Also, the contextual factors affecting knowledge exploitation were learning culture, supportive leadership, human resource management, and information technology systems in the organization, respectively. Therefore, learning culture was the most influential contextual factor affecting both dimensions of knowledge exploration and exploitation.

**Keywords:** contextual factors, knowledge innovation, exploration, exploitation

## INTRODUCTION

Growth of technology, modernization of organizations' knowledge, and consequently, the organizations becoming more complex force managers to increasingly attempt to recognize how they can innovate their organizations and lead them toward growth and success [1]. Most organizations today believe that organizations should seek effective ways to disseminate organizational knowledge across different levels of human resources throughout the organization [2]. Knowledge is one of the important organizational resources that through innovation can lead to organizational improvement, and knowledge management is one of the effective models in management sciences. Innovation and knowledge management are among the relatively new topics proposed in the field of management science. This new managerial approach was quickly welcomed by management professionals and an extensive effort was made to exploit the potential power of people's knowledge for organizational efficiency. Knowledge management is, in fact, a method based on which the hidden knowledge findings of individuals which in many cases are of considerable value can be obtained. This managerial approach strives to foster the spirit of partnership and integration in organizations and to propose the system of collective thinking and idea-sharing broadly and to lead to innovation in knowledge. Managers also try to rely on information and knowledge of individuals and to store

and disseminate it in order to achieve knowledge that will help them in achieving organizational efficiency [3].

Those organizations will be successful that respond more quickly to new conditions and customer needs and are always looking for innovative solutions and continuous improvement in services and processes. Today's organizations must continually adapt, develop, and innovate. Today, there is much emphasis on knowledge as one of the factors of organizational success. Thus, organizations try to manage knowledge effectively and efficiently to improve their performance [4].

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Tremendous advances that have occurred in recent years at a global level have, either intentionally or unintentionally, affected all areas of business in Iran, including insurance and its affiliated funds. To resolve the resulted challenges, it is inevitable to explore and find new effective solutions; and the key to solve these problems is to institutionalize innovation as a long-term solution in insurance and damage funding sector.

In this regard, contextual factors of organizations play a significant role in acquiring new knowledge and innovation in this field. The most important contextual factors of organizations include human resources, structural and cultural factors, and information technology. The success of any organization in implementing any strategy, including knowledge management, largely depends on the support of the contextual factors. Organizations' attempts to become a knowledge-oriented organization will be successful if the cultural characteristics needed for the implementation of knowledge management exist in the organization. Information technology plays an important role in the implementation of knowledge management. Perhaps, one of the most important factors affecting knowledge innovation is the development of appropriate infrastructures for information technologies and organizational structure [5].

Physical Damage Funding Organization of Central Insurance is a non-governmental entity established to protect victims of motor vehicle accidents that, for any reason, are not covered by third party insurance. Given the sensitivity of activities of Physical Damage Funding Organization of Central Insurance and given that it deals with damaged people, evaluation of the level of knowledge of the organization and its employees is of particular importance. The present study intends to investigate the contextual factors affecting knowledge innovation in the Physical Damage Funding Organization so that these studies will be a basis for the implementation of knowledge management in this organization and similar insurance organizations. The hypotheses include the following:

1. Human resource management affects knowledge exploration.
2. Human resource management affects knowledge exploitation.
3. Supportive leadership affects knowledge exploration.
4. Supportive leadership affects knowledge exploitation.
5. Learning culture affects knowledge exploration.
6. Learning culture affects knowledge exploitation.
7. Employee independence affects knowledge exploration.
8. Employee independence affects knowledge exploitation.
9. Information technology systems affect knowledge exploration.
10. Information technology systems affect knowledge exploitation.

## Review of literature

Heirani *et al.* (2018) analyzed the technological innovation system with an emphasis on the role of contextual factors in natural gas underground storage technology [6]. Their study has attempted to use the technological innovation system approach in order to provide a framework for analyzing the problems and barriers leading to stopping the mentioned technology development process in the country. Also, the role of out of the system and underlying problems in this regard has been investigated and the relationship between the underlying structural and functional problems of the technological innovation system in natural gas underground storage has been analyzed through structural equation modeling. The results showed that contextual factors through affecting the structure of technological innovation system, directly and indirectly, have an important and influential role in functional problems existing in the system around this technology, to the extent that the severity of the effects of these factors on the emergence of the existing problems is even greater than the severity of the effect of structural factors within the innovation system itself.

Hedayati *et al.* (2016) examined the mediating role of knowledge management in the relationship between learning culture and innovation [7]. A sample of 189 people was selected from among the staff of Babol University of Medical Sciences using the available sampling method. Results of correlation analysis showed that variables of learning culture, knowledge management, and organizational innovation are correlated two by two. By applying structural equation modeling in order to test the impact of learning culture on organizational innovation through the mediating variable of knowledge management, it was found that the proposed model has a good fit and that organizational innovation, when knowledge management is dominant in the organization, is affected by learning culture.

Khodaverdian (2011) in his MA thesis evaluated the contextual factors for the establishment of knowledge management in the Marine Industry Research Organization [8]. The method used is descriptive correlational survey. According to the results of the model analysis, among the variables, processes have the greatest impact on the effectiveness of knowledge management establishment with a beta coefficient of 49%. This means that the extent of deviations in the effectiveness of knowledge management establishment is created by processes variable with 49%. 22% of deviations ineffectiveness are caused by human resource variable and 11% are caused by information technology. Modification of processes of identification, acquisition, compilation, and sharing of knowledge plays a more important role in the effective establishment of knowledge management.

Gonzalez and de Melo (2018) examined the impact of contextual factors of the organization on exploration and exploitation of knowledge innovation in the Brazilian automotive industry [5]. The data was collected by a questionnaire from 234 employees and managers of

companies and was analyzed by descriptive-correlational method. The results showed that contextual factors have different effects on knowledge innovation. Learning culture, autonomy, and information technology systems affected exploration; and supportive leadership and learning culture also affected exploitation.

Lin (2014) evaluated the impact of contextual factors on knowledge management in small and medium-sized enterprises in Taiwan [9]. The data was collected from owners and managers of companies in the form of 119 questionnaires and was analyzed by least squares regression. The considered contextual factors included information technology factors, organizational factors (senior management support, collaborative culture, and reward system), and environmental factors (competitive pressure). Results showed that factors of information technology and collaborative culture had the most impact on knowledge management.

Donate and Guadamillas (2011) examined the moderating role of organizational factors in the relationship between knowledge management and innovation in Spanish firms [10]. Organizational factors included cultural values, leadership, and human resource management. The data was collected from 111 innovative industries and was analyzed by multiple regression. The results showed that culture, leadership, and human resources moderate the relationship between knowledge exploration and exploitation and innovation. Knowledge management itself has a significant role in innovation, and this effect increases by the use of organizational factors.

## RESEARCH METHOD

The present study is applied in terms of purpose and is a descriptive-correlational study. It is a survey research in terms of data collection method. The data was collected through a questionnaire consisting of 24 items in the form of a five-point Likert scale. The questionnaire consists of two parts of contextual factors of organization and organizational knowledge innovation (Table 1).

**Table 1:** Dimensions of the questionnaire

Number	Dimensions	Components	Number of items
1	Contextual factors	Human resource management	5
2		Supportive leadership	3
3		Learning culture	4
4		Employee independence	3
5		Information technology systems	3
1	Knowledge innovation	Exploration	3
2		Exploitation	3
	<b>Total</b>		<b>24</b>

Source: Gonzalez and de Melo, 2018

Cronbach's alpha method was used to determine the reliability of the questionnaire, and Cronbach's alpha value was calculated to be 0.7 for all parts of the questionnaire, indicating good reliability of the questionnaire. The statistical population of the study consisted of managers and experts of the Physical Damage Funding Organization among whom 100 people were selected using the Cochran formula. Descriptive statistics, correlation coefficients, and regression analysis using SPSS 22 software were used for data analysis, and Excel 2010 software was used for drawing the graphs.

## Theoretical foundations of research

### Data analysis

In the present study, after collecting the data from experts through the questionnaire, the data were analyzed using descriptive statistics, correlation analysis, and regression analysis.

### 1. Examination of the respondents' characteristics

#### • Age

According to Table 2, the mean age of the experts was 36.34 years with a standard deviation of 6.36. Minimum age of the respondents was 27 years and the maximum age was 52 years, and most respondents were between 31 and 40 years old.

**Table 2:** Mean and standard deviation of the sample age (year)

Age	Mean	SD	Minimum	Maximum
	36.34	6.36	27	52

#### • Gender

According to the results shown in Table 3, 70 males and 30 females constituted the statistical sample of the study. The results show that 70% of the respondents are male and 30% are female.

**Table 3:** Gender frequency and percentage of frequency of the sample

Gender	Frequency	Percentage of frequency
Male	70	70
Female	30	30
Total	100	100

#### • Education

According to Table 4, educational status is categorized into five groups of high school degree, associate degree, bachelors' degree, masters' degree, and PhD. Among the respondents, 2 had a high school degree, 25 had associate degree, 36 had bachelors' degree, 34 had masters' degree, and 3 had PhD. According to results, most managers and experts have bachelors' and masters' degrees.

**Table 4:** Frequency and percentage of frequency of education

Educational level	Frequency	Percentage of frequency
High school	2	2
Associate degree	25	25
Bachelors' degree	36	36
Masters' degree	34	34
PhD	3	3

- Work experience**

The average work experience of managers and experts of the organization is 9.82 years with a standard deviation of 5.32. Minimum work experience is 2 years and maximum is 27 years (Table 5).

**Table 5:** Mean and standard deviation of work experience (year)

Experience	Mean	SD	Minimum	Maximum
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9.82	5.32	2	27
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## 2. Descriptive analysis

### 2.1. Descriptive analysis of contextual factors of organization

Mean and standard deviation of the components of the contextual factors of Damage Funding are given in Table 6. The mean of all components was above average (3). Among the contextual factors, employee independence with a total mean of 3.47 had the lowest mean and supportive leadership along with learning culture with a total mean of 3.68 had the highest mean. This shows that among contextual factors in Damage Funding, supportive leadership and learning culture have gained the highest ratings from the viewpoint of experts in the organization.

**Table 6:** Descriptive analysis of the components of contextual factors in Damage Funding Organization

Contextual factor	Number	Component	Mean	SD	Minimum	Maximum
Human resource management	1	Alignment between skills and knowledge of employees and core competencies needed by the company in the selection process	3.71	0.96	1	5
	2	Systematic and structured process of evaluating employee skills in the company	3.79	0.89	2	5
	3	Training the employees to fix deficiencies	3.92	0.96	2	5
	4	Possibility of professional growth based on employee performance	3.52	0.97	2	5
	5	Employee rewards based on their success	3.38	0.85	1	5
		<b>Total</b>	3.66	-	-	-
Supportive leadership	6	Sharing ideas, knowledge, and skills of employees	3.91	0.97	2	5
	7	Encouraging employees to share experiences and things learned	3.68	1.02	1	5
	8	Encouraging employees to discover new opportunities	3.36	1.03	1	5
	9	Investigating any errors by employees and taking action to improve them through learning process	3.77	0.88	2	5
		<b>Total</b>	3.68	-	-	-
Learning culture	10	Sharing ideas, knowledge, and skills of employees	3.91	0.97	2	5
	11	Encouraging employees to share experiences and things learned	3.68	1.02	1	5
	12	Encouraging employees to discover new opportunities	3.36	1.03	1	5
	13	Investigating any errors by employees and taking action to improve them through learning process	3.77	0.88	2	5
		<b>Total</b>	3.68	-	-	-
Employee independence	14	Capability of self-management and self-organization of employees	3.41	0.95	1	5
	15	Power of decision making in everyday work and problem solving	3.45	0.99	1	5
	16	Employee involvement in planning and targeting process related to their specialty	3.56	0.99	1	5

		<b>Total</b>	3.47	-	-	-
<b>Information technology systems</b>	17	Facilitating knowledge distribution and maintenance	3.7	1.83	1	5
	18	Searching information through information systems	3.45	1.04	1	5
	19	Communication of employees through IT systems with other employees inside and outside the organization to share knowledge and ideas	3.39	0.96	1	5
	<b>Total</b>		3.51	-	-	-

## 2.2. Descriptive analysis of organizational knowledge innovation

According to the results shown in Table 7, all exploration and exploitation components have obtained an average higher than 3 and the company has been rated as desirable in terms of knowledge innovation. Among exploitation components, providing a plan of ideas and suggestions to employees in order to advance in company operations (3.75) and among

exploration components, easy access of the company to new technologies through partnerships with other companies, universities and consulting centers (3.66) have obtained the highest average. The total mean of exploitation has been calculated to be equal to 3.66 and the total mean of exploration as equal to 3.54. Therefore, the exploitation of ideas and suggestions and the use of knowledge and skills of the employees to improve the organization's activities are prioritized.

**Table 7: Descriptive analysis of components of organizational knowledge innovation**

Component name	Number	Component	Mean	SD	Minimum	Maximum
<b>Exploitation</b>	1	Use of knowledge and skills of employees to improve activities	3.65	0.89	1	5
	2	Employees' use of their own knowledge and skills to solve problems	3.58	0.90	1	5
	3	Providing a plan of ideas and suggestions to employees in order to advance in company operations	3.75	0.88	1	5
	<b>Total mean</b>		3.66	-	-	-
<b>Exploration</b>	1	Easy access of the company to new technologies (through partnerships with other companies, universities, and consulting centers)	3.66	0.85	2	5
	2	Investment by the company in new technology research and development sector in order to improve and develop product and process	3.46	1.08	1	5
	3	Application of new technologies in processes and product	3.5	0.81	1	5
	<b>Total mean</b>		3.54	-	-	-

## 3. Correlation analysis

Results of correlation analysis between research variables (Table 8) show that there is a positive and significant relationship between some of the contextual factors. The correlation between learning culture and human resource management (0.26) and between learning culture and supportive leadership (0.24) has been positive and significant. There was a positive and significant correlation between employee independence and human resource management (0.25) and between employee independence and learning culture (0.29). Information technology systems also had a positive and significant relationship with learning culture (0.31).

Also, correlation coefficients between knowledge exploration and human resource management, learning culture, employee independence, and information technology systems were 0.21, 0.30, 0.20, and 0.24, respectively, indicating a positive and significant relationship between exploration and contextual factors. Also, correlation coefficients between knowledge exploration and human resource management, supportive leadership, and learning culture were 0.26, 0.24, and 0.34, respectively, indicating that there are positive and significant relationships between exploration and contextual factors. There was also a positive significant relationship between exploration and exploitation (0.22)

**Table 8: Correlation matrix of research variables**

Number	Variable	1	2	3	4	5	6	7
1	Human resource management	1						



2	Supportive leadership	0.12	1					
3	Learning culture	0.26*	0.24*	1				
4	Employee independence	0.25*	0.12	0.29	1			
5	Information technology systems	0.17	0.11	0.31**	0.11	1		
6	Exploration	0.21*	0.11	0.30**	0.20*	0.24*	1	
7	Exploitation	0.26*	0.24*	0.34**	0.04	0.11	0.22*	1

(\* P&lt; 0.05 and \*\* P&lt; 0.01)

#### 4. Regression analysis

Results of regression evaluation of the research and examination of the impact of contextual factors on organizational knowledge innovation are presented in tables 9 and 10. Among knowledge exploration variables (Table 9), learning culture with a coefficient of 0.24, human resource management with a coefficient of 0.22, employee independence with a coefficient of 0.20, and information technology systems with a coefficient of 0.19 were statistically significant ( $P \leq 0.05$ ). Supportive leadership variable with a coefficient of 0.09 and t-statistic equal to 0.85 had no significant effect on the dependent variable.

Therefore, contextual factors affecting exploration are learning culture, human resource management, employee independence, and information technology systems in the organization, respectively. These results indicate the importance of learning knowledge and skills and managing the employees of an organization in terms of skills and performance in achieving knowledge innovation and exploration. The coefficient of determination was 0.35 and the F statistic was 3.04 which indicate the significance of the whole regression. Degree of freedom is also calculated based on the number of coefficients minus one, and given that the number of coefficients was six, the estimated regression has a degree of freedom equal to 5.

**Table 9: Results of the first regression model (dependent variable: knowledge exploration)**

Independent variables	Coefficient	SD	T statistic	P-value
Intercept	2.63	0.78	3.34	0.001
Human resource management	0.22	0.14	2.35	0.012
Supportive leadership	0.09	0.10	0.85	0.395
Learning culture	0.24	0.11	2.66	0.002
Employee independence	0.20	0.09	2.09	0.003
Information technology systems	0.19	0.09	1.90	0.021
R <sup>2</sup>			0.35	
F statistic			3.04	
Sig.			0.017	
Degree of freedom			5	

According to the results of exploitation regression (Table 10), among the independent variables, learning culture with a coefficient of 0.33, supportive leadership with a coefficient

of 0.31, human resources management with a coefficient of 0.19 and information technology systems with a coefficient of 0.17 have been statistically significant ( $P \leq 0.05$ ). Employee independence variable with a coefficient of 0.16 and t-statistic of 1.59 had no significant effect on the dependent variable of exploitation.

Therefore, the contextual factors affecting exploitation are learning culture, supportive leadership, human resource management, and information technology systems in the organization, respectively. These results emphasize the importance of learning knowledge and skills and the role of leadership of organizational managers in achieving knowledge innovation and exploitation. The coefficient of determination was estimated as equal to 0.32 and F statistic as equal to 3.43 which indicate the significance of the whole regression. Degree of freedom of the estimated regression is equal to 5.

**Table 10: Results of the second regression model (dependent variable: knowledge exploitation)**

Independent variables	Coefficient	SD	T statistic	P-value
Intercept	1.17	0.81	1.43	0.153
Human resource management	0.19	0.15	1.96	0.018
Supportive leadership	0.31	0.11	2.90	0.005
Learning culture	0.33	0.12	2.96	0.004
Employee independence	0.16	0.10	1.59	0.114
Information technology systems	0.17	0.09	1.87	0.045
R <sup>2</sup>			0.32	
F statistic			3.43	
Sig.			0.007	
Degree of freedom			5	

Table 11 shows the result of testing the research hypotheses. Given the analysis, it was found that all the research hypotheses except Hypotheses 3 and 8 were confirmed. These results showed that human resource management, learning culture, and information technology systems had significant effects on both dimensions of knowledge exploration and exploitation. This is while supportive leadership had only a

significant impact on knowledge exploitation, and employee independence only on knowledge exploration.

**Table 11: Testing the research hypotheses**

Number	Hypothesis	Result
1	Human resource management has a significant impact on knowledge exploration.	Confirmed
2	Human resource management has a significant impact on knowledge exploitation.	Confirmed
3	Supportive leadership has a significant impact on knowledge exploration.	Rejected
4	Supportive leadership has a significant impact on knowledge exploitation.	Confirmed
5	Learning culture has a significant impact on knowledge exploration.	Confirmed
6	Learning culture has a significant impact on knowledge exploitation.	Confirmed
7	Employee independence has a significant impact on knowledge exploration.	Confirmed
8	Employee independence has a significant impact on knowledge exploitation.	Rejected
9	Information technology systems have a significant impact on knowledge exploration.	Confirmed
10	Information technology systems have a significant impact on knowledge exploitation.	Confirmed

## CONCLUSION AND RECOMMENDATIONS

The present study aimed to investigate the effect of contextual factors of the organization on organizational knowledge innovation in the Physical Damage Funding Organization.

## DISCUSSION AND CONCLUSION

The present study model is founded based on three structures related to organizational context including employees, organization, and information systems that are known as success factors of knowledge management. The study showed that human resource management, supportive leadership, learning culture, autonomy, and information technology systems influence innovation through knowledge exploration and exploitation. In the study model, exploration and exploitation are part of the innovation process, and the difference between these two determines the type of innovation. Knowledge exploration and exploitation can be guided by organizational values such as human resource management and development, supportive leadership practices, learning culture among employees, organizational members' independence, and information technology systems.

### • Interpretation of the first and second hypotheses

In these two hypotheses, the impact of human resource management on organizational knowledge innovation (exploration and exploitation) was evaluated. Given that the hypotheses were confirmed, it was found that human resource management had a positive and significant effect on both dimensions of knowledge exploration and exploitation. Human resource management, after learning culture, had the greatest impact on knowledge innovation. In the meantime, knowledge exploration compared to exploitation was more dependent on human resource management practices, indicating that organizations need appropriate human resource management in order to achieve a high level of new knowledge exploration and innovation so that they can provide relevant training to employees, develop problem-solving techniques, create incentives for teamwork, and target progress. This dependency of exploration to human resource management practices can help the organization's activities and employees can move between units inside and outside the organization, associations can be formed, and new technology training courses can be held for employees.

### • Interpretation of the third and fourth hypotheses

In these two hypotheses, the impact of supportive leadership on organizational knowledge innovation (exploration and exploitation) was evaluated and only the impact of supportive leadership on knowledge exploitation was confirmed. Leadership in the organization is more looking for maintaining and disseminating prior learning and knowledge among employees. Organizational leadership employs organizational policies and infrastructures to strengthen and facilitate the flow of knowledge. The role of leadership is also to encourage knowledge sharing among employees. All of these indicate that supportive leadership measures are focused on the exploitation process and seek to use and improve prior knowledge of the organization. This is while exploration practices require activities for new knowledge research, discovery, and development.

### • Interpretation of the fifth and sixth hypotheses

In these two hypotheses, the impact of learning culture on organizational knowledge innovation (exploration and exploitation) was evaluated. Given that the hypotheses were confirmed, learning culture has a positive and significant effect on knowledge innovation (knowledge exploration and exploitation). Examination of contextual factors of the organization revealed that learning culture has the most influence on knowledge exploration and exploitation. Organizational culture in the field of learning and sharing knowledge can serve as one of the main catalysts for the process of knowledge innovation. In an organizational culture that maintains knowledge management, there is mutual trust and employees are identified based on their relationship with the group and the whole organization, and ultimately, culture sustains the flow of knowledge transfer within the

organization. A real learning culture enables employees to challenge the status quo and have critical thinking. Such a culture ensures that team members do not get caught up in previous thinking and knowledge and it creates the capacity and adaptability required for change. This culture continually improves employee and organization performance and makes it easier to achieve business goals, innovate, and be able to cope with changes. The results of this part of the study are consistent with the studies by Corfield and Paton (2016) and Lin (2014) and stated that the existence of learning culture in the organization reduces resistance to change and leads to the implementation of knowledge management in the organization. This culture creates an environment that shares ideas and takes advantage of new innovation opportunities. Employees and managers clearly see how the acquisition of specific knowledge and skills helps the organization to succeed. This learning is not without a goal, and its reason is not learning of usual and routine practices and procedures of the organization for doing things, but its goal is to discover new knowledge in line with the strategic goals of the organization.

#### • Interpretation of the seventh and eighth hypotheses

In these two hypotheses, the impact of employee independence on organizational knowledge innovation (exploration and exploitation) was investigated. According to results, it was found that employee independence had a significant effect only on knowledge exploration. Employee independence in the organization is essential for the implementation and development of new knowledge in the exploration process, as employees in different sectors must have the ability and freedom to act in their own area of expertise to modify routine practices and research in new areas. Therefore, having this independence will play a significant role in innovation and exploration in the organization. On the contrary, it can be stated that the exploitation of knowledge does not require a high level of independence because changes in processes are not considered.

#### • Interpretation of the ninth and tenth hypotheses

In these two hypotheses, the impact of information technology systems on organizational knowledge innovation (exploration and exploitation) was evaluated. Given that the hypotheses were confirmed, information technology systems had a significant and positive impact on knowledge exploration and exploitation. Effective use of information technology systems leads to supporting the process of knowledge maintenance and dissemination and facilitates knowledge dissemination and exploitation. Information technology systems allow employees of different parts of the organization to integrate and communicate in order to exchange knowledge and information. In addition, information technology in an organization creates the possibility of exploring new knowledge and enables employees to communicate with other sectors and

organizations such as research centers, universities, customers, and suppliers. Therefore, the use of information technology systems as a facilitator in the formal processes of the organization can have a significant impact on knowledge exploitation, and also through the integration of operations and integration between systems and applications can have a significant impact on knowledge acquisition.

### Recommendations

Based on the results, practical suggestions for promoting innovation, and organizational knowledge exploration and exploitation through organizational factors are presented. In order to establish a learning culture within the organization, it is suggested that employees be encouraged in a variety of ways for new knowledge and skills they learn.

Regarding human resource management, it is suggested to hire and promote the employees who move forward for their own learning and growth; people who are motivated to learn, are always looking for opportunities to gain new knowledge and skills, learn from their successes and failures, take risks to learn, and continue to grow and nurture. Given the type of insurance activities of the Damage Funding Organization, it is recommended to select the employees from among qualified graduates in the field.

It is recommended to develop a comprehensive training program through needs assessment of the organizational members in various fields, in particular, strengthening the technical and specialized knowledge of members in the field of insurance and damage funding, and to provide the required conditions for its implementation.

It is also recommended to reward the employees when new learning is applied and helps the improvement of the organization's performance.

### REFERENCES

1. Taheri Lari, M. Status of knowledge management in organizational intelligence; First National Conference on Organizational Intelligence/Business Intelligence, December, Tehran, 2010.
2. Hassanpour, H. A.; Jahanshahi, H.; Ahmadi Ghavaghi, M.; Daneshpayeh, H. Identification and analysis of factors affecting universities' readiness for successful implementation of knowledge management; Specialized Journal of Parks and Growth Centers, 2012; 8(30): 43-50.
3. Geisler, E., Wickramasinghe, N. Principles of Knowledge Management: Theory, Practice, and Cases: Theory, Practice, and Cases. Routledge, 2015.
4. Hislop, D., Bosua, R., Helms, R. Knowledge management in organizations: A critical introduction. Oxford University Press, 2018.
5. Gonzalez, R. V. D., de Melo, T. M. The effects of organization context on knowledge exploration and exploitation. Journal of Business Research, 2018; 90, 215-225.
6. Heirani, H., Bagheri Moghaddam, N., Ghodsipour, S. H.; Vatani, A.; Tabatabaeeian, S. H. Analysis of technological innovation system with an emphasis on the role of contextual factors, case study of natural gas underground storage technology; Journal of Science and Technology Policy, 2018; 10(1): 441-451.
7. Hedayati, A.; Jamshidi, L.; Amin Beidokhti, A. A. The mediating role of knowledge management in the relationship between learning culture and organizational innovation of employees in Babol



- University of Medical Sciences; Journal of Executive Management, 2016; 8(15): 113-134.
8. Khodaverdian, M. Explanation and evaluation of contextual factors for the establishment of knowledge management in an industrial-research organization (case study of marine industry; masters' thesis, Faculty of Management and Accounting, Islamic Azad University, Central Tehran Branch), 2011.
  9. Lin, H. F. Contextual factors affecting knowledge management diffusion in SMEs. *Industrial Management & Data Systems*, 2014; 114(9), 1415-1437.
  10. Donate, M. J., Guadamillas, F. Organizational factors to support knowledge management and innovation. *Journal of knowledge management*, 2011; 15(6), 890-914.