

Analyze the Effects of Implementation of Knowledge Management to Improve Organizational Productivity in Social Security Organization of Kerman Province

¹Hamid Taboli, ²Hojat Shahheidaripour, ²Nasimeh Aminipanah,
²Mahboubeh Mokhtari, ²Nasir Shahabi Maskoun, ²Ali Mohiadinimasinani and
²Mohammad Reza Abazari Mahmood Abad
¹Payame Noor University, Tehran, Iran

²Department of Management, Rafsanjan Branch, Islamic Azad University, Rafsanjan, Iran

Abstract: This research was done with the aim of Analyze the effects of implementation of knowledge management to improve organizational productivity in social security organization of Kerman province from the viewpoint of the staffs and managers. The study is in survey method and the statistical society includes the staffs and managers in social security organization in Kerman province. The researcher-made questionnaire with 50 closed questions was used in order to collect information and the content validity of questionnaires was confirmed by the ideas of experts and their reliability was calculated based on Cronbach's Alpha which orderly obtained equal to 0.91 and 0.88; data analysis has been done through using the pearson correlation coefficient test and Kolmogorov-Smirnov test. The overall results of this study indicate that from the viewpoint of experts, each of the seven factors of infrastructures of establishment and development of knowledge management (support of senior managers, organizational culture, organizational structure, infrastructures of information systems, strategy of knowledge management, empowerment of staffs and staff incentive systems) affect the increase in staffs' efficiency. Creating and developing knowledge management system require necessary changes in processes, management, infrastructures, culture and the other aspects which include the organizational performance and all of these aspects cannot change at once. The desired changes require organizational ability to design and implement systems, structures, processes, cultures and necessary tools for improvement and support of the students for efficient decision making. Based on the findings of the current study, the future researchers are suggested to do studies in the field of knowledge management strategy and its impact on the efficiency of human force.

Key words: Knowledge management, knowledge management development and human force productivity

INTRODUCTION

The recent studied have indicated that the knowledge management influences the performance of companies with providing an efficient framework for implementation of the innovative strategy (Ciabuschi and Martin, 2012; Moustaghfir and Schiuma, 2013; Quintane *et al.*, 2011; Rasmussen and Nielsen, 2011). Therefore, it seems that the knowledge management is an efficient tool for increasing the innovative performance of an organization (Andreeva and Kianto, 2011; Chen *et al.*, 2010; Lee *et al.*, 2013; Lin *et al.*, 2008). Many researches have focused on the subjects such as obtaining knowledge, sharing knowledge, and creating knowledge (Chen *et al.*, 2010; Lee *et al.*, 2013) or knowledge-based assets such as human, structural and relational capital (Wang and Chen, 2013; Martin-de Castro *et al.*, 2013; Menor *et al.*, 2007; Aramburu and Saenz, 2011) and the

innovative performance of the company and very little studies have also been done about the impact of successful infrastructures of establishment and development on the performance (Theriou *et al.*, 2011). Thus, it is necessary to do wide studies in the field of the impact of infrastructures of establishment and development of knowledge management and the way of its influence on the financial and non-financial performances. Accordingly, it becomes necessary to investigate the impact of the infrastructures of establishment and development of knowledge management on the efficiency of human force as the most important factor of increase in the organization's performance.

On the other hand, efficiency is one of the most influential variables on profitability of economic productive activities and is from the key benefits for achieving of firms to competitive advantages. Now a

days, due to the lack of resources, development of competition levels, increasing diversification of customer's preferences, importance of productivity and necessity of its investigation are not secret for anyone. Position and significance of productivity has been expanded to the extent that it is considered as the synonym of rationalization of the organization (rational behavior of the organization) and even they introduce management as the knowledge of productivity and using the available resources and facilities to achieve the determined purposes. From the viewpoint of Grew and Benasi in managerial and economic approach, efficiency is generally a function of three variables of technology, human force and organization. Accordingly, one of the influential factors on performance and increasing efficiency of staffs in the work environment is the full mastery of the organization on knowledge management to be able to facilitate processes in this way and cause the organization move toward the learning organization.

One of the main aspects for implementation of knowledge management is the development of suitable organizational infrastructures and this means to create a set of roles and team to implement duties related to management (Wong, 2005). Among the various business policies, the following items are influential for creating a kind of infrastructure and suitable context in order to support the process of knowledge management; the human resources management policies which focus on attracting and maintaining talents, a kind of organizational culture which can receive new ideas and encourage learning, technical tools with the capability of collecting and publishing knowledge, a strategic approach to the knowledge and ultimately a kind of organizational structure which facilitates interpersonal interactions and relationships. Among the various organizational factors which are able to play a significant role in successful implementation of knowledge management, recognizing the technologic factors and organizational structure are necessary. Moreover, it is very important to understand how these components are combined to achieve organizational efficiency and productivity and obtain the organizational purposes. Creation and development of knowledge management system require necessary changes in processes, management, infrastructures, culture and the other aspects which include the organizational performance and all of these aspects cannot change at once. The desired changes require organizational ability to design and implement systems, structures, processes, cultures and necessary tools for improvement and support of the students for efficient

decision making. Hence, the main issue of this study is the impact of the infrastructures of establishment and development of knowledge management on promotion of human force efficiency and prioritizing them in the insurance branches of social security on Kerman.

Definitions:

Knowledge management: There is different definitions for knowledge management, but what is more desired is the process of discovering, obtaining, developing and creating, sharing, maintaining, evaluating and using suitable knowledge in suitable time and by the appropriate person in the organization which is done through creating link among the human resources, Information Technology and communication and creating an appropriate structure in order to achieve the organizational purposes (Hassan and AL-Kakim, 2011).

Infrastructures of establishment and development of knowledge management:

Generally, the commerce organizations fail in successful implementation of knowledge management because they are not able to identify the vital factors for successful implementation of knowledge management (Greiner *et al.*, 2007). Thus, systematic study of the successful factors to implement knowledge management is very important and development of knowledge management has led to identification of the key factors of success for accepting it (Wong, 2005). But despite of various studies done in order to discover and introduce the successful knowledge management, there is no agreed definition (Jennex, 2007). Success of knowledge management in the organization depends upon many factors introduced as the infrastructures of establishment and development of knowledge management.

Human force productivity: Mushkin and Sandifer believe that the human resources play a significant and vital role in efficiency as the main factor among the factors of producing outputs and its management. Any approach to the organizational productivity must include the personnel affairs because this is the humans who do the organization's works. Of course, the primary emphasis of the studies of human resources management or personnel affairs has been on the way of creating motivation in order to increase productivity, use the tools of performance evaluation and pay based on meritocracy. Ban, expressed today, the strategic approach has been adopted in human resources and productivity. Armstrong presented three items in describing the strategic role of human resources in the organization's success:

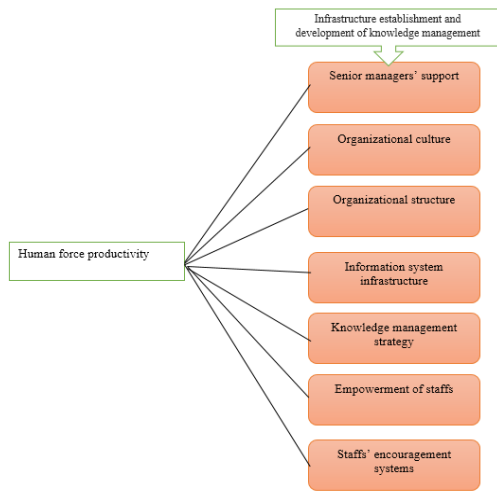


Fig. 1: The research's conceptual model

- Participation in added value
- Participation in competitive advantage
- The impact of human resources management on the performance of organization

Research hypotheses: Based on the review of research background and identification of the research's purposes and designing the questions, the research hypotheses for doing the field studies are as following:

The main hypothesis: The infrastructures of establishment and development of knowledge management have significant and positive impact on promotion of human resources productivity.

The first hypothesis: Support of the senior managers has a significant and positive impact on the human resources productivity.

The second hypothesis: Organizational culture has a significant and positive impact on the human resources productivity.

The third hypothesis: Organizational structure has a significant and positive impact on the human resources productivity.

The fourth hypothesis: Information system infrastructure has a significant and positive impact on the human resources productivity.

The fifth hypothesis: Knowledge management strategy has a significant and positive impact on the human resources productivity.

The sixth hypothesis: Empowerment of staffs has a significant and positive impact on the human resources productivity.

The seventh hypothesis: Staffs' encouragement systems has a significant and positive impact on the human resources productivity (Fig. 1).

MATERIALS AND METHODS

The current study is from the kind of applicable researches and is a descriptive measuring study in terms of the type of data which its results may directly be used in investigating the impact of the infrastructures of establishment and development of knowledge management on the promotion of organizational productivity in the other organizations of the country. The statistical society of this research includes all of managers and experts of social security organization in Kerman. Totally, 158 managers and experts work in the social security organization of Kerman and since it was a hard work to access the managers and experts, the questionnaire was randomly given the manager or expert of business unit or both of them. According to a scientific formula (Morgan formula) the statistical sample of this society equals to 112 and these people were selected as the sample for investigation and the questionnaire was distributed among them and finally 103 questionnaires were collected and analyzed. In this study, sampling was done in simple method. The questionnaire was used in order to quantitatively analyze data and also collect and use the viewpoints and attitudes of experts and managers of social security organization. The combined or rank scale is used to measure and investigate the aspects of "infrastructures of establishment and development of knowledge management" and "organization's productivity" and its validity and reliability has been confirmed. In this study, the descriptive and inferential statistics methods have been used to analyze the data obtained from the samples.

RESULTS AND DISCUSSION

Inferential statistics: In this study, pearson correlation coefficient has been used for the relationship of the aspects of infrastructures of establishment and development of knowledge management with the human force productivity to investigate the questions of the study and then, to be assured from the obtained results and the existence of linear relationships among the

Table 1: The correlation coefficient between the support of senior managers and the human force productivity

Pearson correlation coefficient	Significance level	Dependent variable	Independent variable
0.225	0.002	Human force productivity	Senior managers support

Table 2: The correlation coefficient between the Organizational culture and the human force productivity

Pearson correlation coefficient	Significance level	Dependent variable	Independent variable
0.284	0.004	Human force productivity	Organizational culture

variables when they simultaneously affect the dependent variable, we investigated them and referred the impact of each of the independent variables on the dependent variable; to this end, we used the multiple regression in order to investigate the simultaneous impact of aspects of the infrastructures of the establishment and development of knowledge management on the human force productivity and prioritizing them and the results of data analysis are as following:

The main hypothesis: In order to investigate the main hypothesis, we should firstly investigate the relationships between the two variables and this has been done by designing sub-hypotheses.

The first hypothesis: support of the senior managers has a significant and positive impact on the human resources productivity.

The correlation test between the support of senior managers and human force productivity indicated that in the significance level of lower than 0.01% and the obtained correlation coefficient (0.225) there is a direct and significant relationship between these two variables shown in Table 1.

The second hypothesis: Organizational culture has a significant and positive impact on the human resources productivity. The correlation test between the Organizational culture and human force productivity indicated that in the significance level of lower than 0.01% and the obtained correlation coefficient (0.284) there is a direct and significant relationship between these two variables shown in Table 2.

The third hypothesis: Organizational structure has a significant and positive impact on the human resources productivity.

The correlation test between the organizational structure and human force productivity indicated that in the significance level of lower than 0.01% and the obtained correlation coefficient (0.141) there is a direct and significant relationship between these two variables shown in Table 3.

Table 3: The correlation coefficient between the organizational structure and the human force productivity

Pearson correlation coefficient	Significance level	Dependent variable	Independent variable
0.204	0.002	Human force productivity	Organizational culture

Table 4: The correlation coefficient between the Information system infrastructure and the human force productivity

Pearson correlation coefficient	Significance level	Dependent variable	Independent variable
0.204	0.002	Human force productivity	Information system infrastructure

Table 5: The correlation coefficient between the Knowledge management strategy and the human force productivity

Pearson correlation coefficient	Significance level	Dependent variable	Independent variable
0.167	0.009	Human force productivity	management strategy knowledge

The forth hypothesis: Information system infrastructure has a significant and positive impact on the human resources productivity.

The correlation test between the Information system infrastructure and human force productivity indicated that in the significance level of lower than 0.01% and the obtained correlation coefficient (0.204) there is a direct and significant relationship between these two variables shown in Table 4.

The fifth hypothesis: Knowledge management strategy has a significant and positive impact on the human resources productivity.

The correlation test between the Knowledge management strategy and human force productivity indicated that in the significance level of lower than 0.01% and the obtained correlation coefficient (0.167) there is a direct and significant relationship between these two variables shown in Table 5.

The sixth hypothesis: Empowerment of staffs has a significant and positive impact on the human resources productivity.

The correlation test between the Empowerment of staffs and human force productivity indicated that in the significance level of lower than 0.01% and the obtained correlation coefficient (0.225) there is a direct and significant relationship between these two variables shown in Table 6.

The seventh hypothesis: Staffs' encouragement systems has a significant and positive impact on the human resources productivity.

The correlation test between the Staffs' encouragement systems and human force productivity indicated that in the significance level of <0.01%

Table 6: The correlation coefficient between the empowerment of staffs and the human force productivity

Pearson correlation coefficient	Significance level	Dependent variable	Independent variable
0.350	0.00	Human force productivity	Empowerment of staffs

Table 7: The correlation coefficient between the staffs' encouragement systems and the human force productivity

Pearson correlation coefficient	Significance level	Dependent variable	Independent variable
0.271	0.006	Human force productivity	Staffs' encouragementsystems

Table 8: The results related to variance analysis and model summary

Multiple regression coefficient	The determination coefficient R2	The adjusted determination coefficient	Significance level
0.648	0.538	0.531	0.003

and the obtained correlation coefficient (0.271) there is a direct and significant relationship between these two variables shown in Table 7.

Regression test: To further ensure from the obtained results, we investigated and tested the hypotheses based on the existence of mutual relationships between the dependent and independent variables. In this section, we try to investigate the existence of linear relationships between the variables when they simultaneously influence the dependent variable and also to refer the prioritization of the impact of each of the independent variables on the dependent variable.

As it is shown in Table 8, the significance level equals to 0.003 which is smaller than the significance level of 0.01. Thus, the linear relationship between the variables is confirmed. The adjusted determination coefficient of the model equals to 0.531; thus, it can be concluded that 53.1% of changes of dependent variable is attributable to the changes of the independent variables and rest of changes of dependent variable (promotion of human force productivity), that is to say that 56.9% are caused by factors except the independent variables. Multiple regression coefficients-as shown in the table-are equal to 0.648. This means that the intensity of the relationship of independent variables with dependent variable equals to 64.8%.

CONCLUSION

According to the above and the results obtained from the research, it can be said that the infrastructures of establishment and development of knowledge management influence the promotion of human force productivity. Since the basic condition of durability of organization in a dynamic and developing environment is

paying attention to the human resources, thus, if the human is paid attention to more than the other factors, the achievement to promotion of productivity will be more; this is because this is only human who can promote the quality and quantity of his work by increasing motivations. Accordingly, one of the influential factors on the performance and increase in the staff's productivity in work environment is the full dominance of organization on knowledge management so as to it be able to facilitate the processes through this way and move the organization toward the learning organization. Among the various business policies, the following items are influential for creating a kind of infrastructure and suitable context in order to support the process of knowledge management; the human resources management policies which focus on attracting and maintaining talents, a kind of organizational culture which can receive new ideas and encourage learning, technical tools with the capability of collecting and publishing knowledge, a strategic approach to the knowledge and ultimately a kind of organizational structure which facilitates interpersonal interactions and relationships. Among the various organizational factors which are able to play a significant role in successful implementation of knowledge management, recognizing the technologic factors and organizational structure are necessary. Moreover, it is very important to understand how these components are combined to achieve organizational efficiency and productivity and obtain the organizational purposes. Creation and development of knowledge management system require necessary changes in processes, management, infrastructures, culture and the other aspects which include the organizational performance and all of these aspects cannot change at once. The desired changes require organizational ability to design and implement systems, structures, processes, cultures and necessary tools for improvement and support of the students for efficient decision making.

According to the results of the current study, some suggestions are offered for the branches of social security organization as flowing:

- Empowerment of employees to acquire and promote knowledge
- Creation of values and norms to support the organizational learning and expansion of knowledge in the organization
- Change and upgrade of staffs' encouragement systems to acquire and expand knowledge
- Provision of the possibility of more interactions through creating chat rooms
- Creation of the staffs' encouragement system based on sharing knowledge

- Encouragement of the organization's personnel to team work and also encouraging them to acquire new knowledge and experience

REFERENCES

- Andreeva, T. and A. Kianto, 2012. Does knowledge management really matter? Linking knowledge management practices, competitiveness and economic performance. *J. Knowledge Manage.*, 16: 617-636.
- Aramburu, N. and J. Saenz, 2011. Structural capital, innovation capability and size effect: An empirical study. *J. Manage. Organiz.*, 17: 307-325.
- Chen, C.J., J.W. Huang and Y.C. Hsiao, 2010. Knowledge management and innovativeness: The role of organizational climate and structure. *Int. J. Manpower*, 31: 848-870.
- Ciabuschi, F. and O.M. Martin, 2012. Knowledge ambiguity, innovation and subsidiary performance. *Baltic J. Manage.*, 7: 143-166.
- Greiner, M.E., T. Bohmann and H. Krcmar, 2007. A strategy for knowledge management. *J. Knowledge Menege.*, 11: 3-15.
- Hassan, S. and L.A.Y. AL-Hakim, 2011. The relationships among critical success factors of knowledge management, innovation and organizational performance: A conceptual framework. *Proceedings of the International Conference on Management and Artificial Intelligence*, April 1-3, 2011, Bali, Indonesia, pp: 94-103.
- Jennex, M.E., 2007. *Knowledge Management in Modern Organizations*. IGI Publishing, Hershey, PA., USA., ISBN-13: 9781599042633, Pages: 418.
- Lee, V.H., L.Y. Leong, T.S. Hew and K.B. Ooi, 2013. Knowledge management: A key determinant in advancing technological innovation? *J. Knowledge Manage.*, 17: 848-872.
- Lin, C., J.M. Yeh and S.M. Tseng, 2005. Case study on knowledge-management gaps. *J. Knowledge Manage.*, 9: 36-50.
- Martin-de Castro, G., M. Delgado-Verde, J. Amores-Salvado and J.E. Navas-Lopez, 2013. Linking human, technological and relational assets to technological innovation: Exploring a new approach. *Knowledge Manage. Res. Pract.*, 11: 123-132.
- Menor, L.J., M.M. Kristal and E.D. Rosenzweig, 2007. Examining the influence of operational intellectual capital on capabilities and performance. *Manuf. Serv. Operat. Manage.*, 9: 559-578.
- Moustaghfir, K. and G. Schiuma, 2013. Knowledge, learning and innovation: Research and perspectives. *J. Knowledge Manage.*, 17: 495-510.
- Quintane, E., R.M. Casselman, B.S. Reiche and P.A. Nylund, 2011. Innovation as a knowledge-based outcome. *J. Knowledge Manage.*, 15: 928-947.
- Rasmussen, P. and P. Nielsen, 2011. Knowledge management in the firm: Concepts and issues. *Int. J. Manpower*, 32: 479-493.
- Theriou, N., D. Maditinos and G. Theriou, 2011. Knowledge management enabler factors and firm performance: An empirical research of the Greek medium and large firms. *Eur. Res. Stud.*, 14: 97-134.
- Wang, D. and S. Chen, 2013. Does intellectual capital matter? High-performance work systems and bilateral innovative capabilities. *Intl. J. Manpower*, 34: 861-879.
- Wong, K.Y., 2005. Critical success factors for implementing knowledge management in small and medium enterprises. *Ind. Manage. Data Syst.*, 105: 261-279.