

The effect of organizational culture and leadership style on knowledge management in selected research organizations

Peyman Akhavan¹, Mohamad Reza Zahedi², Akram Dastyari^{3*}, Ali Abasaltian⁴

¹Associate Professor, Faculty of management, Malek Ashtar University of Technology, Tehran, Iran.

²Ph.D. Student of Industrial Engineering, Malek Ashtar University of Technology, Tehran, Iran.

^{3*}Islamic Azad University, Poldokhtar Branch, Iran.

⁴Ph.D. Student of Management, Engineering Research Center of Natural Disasters and Passive Defense, Isfahan, Iran.

Available online at: www.IJSMD.Com

Received 1th April 2014, Revised 24th April 2014, Accepted 4th May 2014

Abstract

Knowledge management is a comprehensive approach for organizations to achieve organizational effectiveness and is of an increasing importance as the most principal competitive advantage amongst organizations. The successful implementation of the knowledge management process can affect the organization's performance. In accordance with the theoretical and conceptual issues, organizational culture and leadership style are considered as the factors influencing on the knowledge management activities. The main propose of the current paper is to identify the role of organizational culture and leadership style in the knowledge management process (KMP). To this end, this process as a dependent variable is made up of four dimensions, which can be named as knowledge creation, organization, sharing, and application. On the other side, the organizational culture and leadership style are considered as independent variables. Organizational culture consists of four dimensions, i.e. participatory, innovative, rational, and stability culture, while leadership style comprises of two dimensions, which are supportive and command leadership. This research is a descriptive survey. The sample size was 224 employees in four selected research centers and a questionnaire containing 52 questions was employed. The questionnaire's reliability coefficients were obtained by Cronbach alpha coefficients and the questionnaire validity was confirmed by knowledge management experts. In each organization, the sample volume was calculated based on the Cochran's formula. The statistical sample consisted of experts, researchers, and managers from four selected research organizations. It can be claimed that by considering the obtained results and the knowledge management status in these organizations, their competitive advantage can be enhanced. The analysis results indicated the type of organizational culture and it was shown that the leadership style is of a significant effect on the dimensions of knowledge management process. The findings confirmed that participatory culture influences on the knowledge management process. It was also perceived that the stability culture has a positive and significant relationship with knowledge organization. Moreover, based on the findings, the rational culture has a significant positive effect on two dimensions of the knowledge management process. The results demonstrated that command leadership has a great effect on the KM process. In addition, supportive leadership style is positively correlated with the three dimensions of the knowledge management process.

Key Words: Knowledge management process, organizational culture, supportive leadership, command leadership

Introduction

The increasing developments of information technology (IT) have caused many changes in the global economic system, which have heightened the importance of paying attention to knowledge (Chattopadhyay, 2007; Tseng, 2009). Such changes have caused that in today digital age, information is playing a vital role in the organizational success (Viitala, 2004). Since knowledge is the most valuable type of information (Kebede, 2010), it appears to be essential to organize knowledge appropriately in order to direct the organization to create a sustainable competitive advantage (Birasnav et al., 2011; Politis, 2011). Knowledge management involves the process of identifying, selecting, organizing, and classifying information in organizations, which can improve the employees' performance and develop the competitive advantage in comparison with other organizations (Wilso, 2002). One of the key points for successful knowledge management is to breed an organizational culture to generate and share knowledge (Ooi et al., 2003; Ford and Chan, 2009; Detiene and Jackson, 2001). Hence, organizational culture plays a vital role in knowledge management (Fahey and Prusak, 1998). On the other hand, it is

worthwhile to express that organizational leadership can take a vital part in paving the ground to achieve a proper culture and to improve the existing knowledge management process inside the organizations. Few studies have conducted on investigating the role of leadership in improving knowledge management process. For instance, the studies by Viitala (2004) and Lakshman (2009) can be indicated. As mentioned previously, the crucial point for knowledge management success is to develop an organizational culture that can effectively generate and share knowledge (Ooi et al., 2003; Ford and Chan, 2009; Detiene and Jackson, 2001). If an organization lacks a proper culture for knowledge sharing, its knowledge management process may be difficult and restricted to operate (Simonin, 1999).

Prior to acquisition of a new technology, a complete comprehension and also integration of such technologies with human and cultural aspects are necessary to ensure the success of knowledge management plans. Eisner believed that almost all strategic activities are influenced by organizational vision and culture (Pauleen and Mason, 2002). On the other side, it seems that organizational leadership needs to conduct organizations and meet their environmental needs in order to benefit from such a phenomenon as knowledge management. Therefore, as an efficient guideline, it appears that the modern leadership styles

*Correspondent Author: Akram Dastyari (Akram.Dastyari@gmail.com)
Manuscript No: IJSMD-KINA-2014-209

are able to mitigate the problems of organizations and their personnel and such styles can establish knowledge-oriented organizations.

It is important to study the impact of leadership styles on knowledge management due to the remarkable effect of the knowledge management process on organizational performance. It is also of significant importance to determine that acquiring the best leadership style is an effective step towards improving the knowledge management process and promoting the organizational performance. Hence, the present paper attempts to study the relationship between four aspects of knowledge management process (knowledge generation, reserving and organizing, sharing, and application). Prior to that, the theoretical basics of organizational culture and leadership style variables will be fully clarified.

Literature review

Knowledge management process

The authors of the current paper have identified many aspects of the knowledge management process, including generating, using, transferring, acquiring, developing, identifying, sharing, exploiting and retaining knowledge (Nikbakht et al., 2010; Spende, 1996; Skryme and Amidon, 1998). Probst (1998) also expressed four aspects for knowledge management: generating, reserving/reviving, transferring, and applying knowledge. In recent years, various researchers have asserted that there are four broad scopes in the knowledge management process including generating and acquiring, reserving and organizing, transferring, and applying knowledge (Park, 2006; Alavi and Leidner, 2001). Likewise, Jashapara (2004) believed that knowledge management is a four-step process: an effective learning process along with knowledge generation, knowledge organization, knowledge sharing, and knowledge application, which all can improve the organizational performance.

Knowledge Creation

Knowledge generation is a process that produces, gathers, and integrates the new and current knowledge (Shu et al., 2013). According to Nonaka and Takeuchi (1994), knowledge is generated through converting the implicit and explicit knowledge and vice versa.

Knowledge organization

It can be defined as the process of sorting the knowledge elements inside a structure (Soergel, 2008).

Knowledge sharing

Knowledge sharing is called to the voluntary diffusion of the acquired skills and experiences to other people (Low, 2008). It is also defined as the process of knowledge giving and taking (Bircham, 2005; McDermott, 2001).

Knowledge application

Knowledge application refers to this fact that the acquired knowledge regardless of its source can be certainly used if it is fruitful. This would indicate mixing the knowledge with practice, utilizing it, and its reflection in services (Kwakman, 2004). In 1998, Davenport announced that an effective knowledge

utilization can increase the productivity and decrease the costs (Davenport and Klahr, 1998).

Leadership style

As a simple definition, leadership can be called as the process of orienting and influencing over the followers (Banai and Reisel, 2007). In another definition, leadership is to penetrate among people in order to accompany them to achieve a common goal (Koontz and O'Donnell, 1959).

One of the most well-known theories on leadership is the situational leadership theory by Hersey and Blanchard. It consists of three aspects, two of which show the leaders' behaviors towards their followers (i.e. command and supportive). These two kinds of behavior have provided four leadership styles as elaborated below:

1. Educational leadership: when both command and supportive behaviors are intense.
2. Command leadership: when command behavior is intense and supportive behavior is weak.
3. Supportive leadership: when supportive behavior is intense and command behavior is weak.
4. Authoritative leadership: when both command and supportive behaviors are weak (Hersey and Blanchard, 1984).

Command behavior

In command behavior, the way of organizing the activities of working groups, identifying the functions, and performing the tasks are totally clear and the aims are always under emphasis (Burke et al., 2006). In other words, command leadership consists of task-oriented behaviors along with a paramount focus on the aims and a tight control over subordinates (Wendt et al., 2009) and as a result, command leaders use their organizational position to pose pressure on their subordinates in order to prevent them from refusing their commands (Schyn, 2009).

Supportive leadership

In this leadership style, the leader has a special attention to the followers and therefore, such leaders look for building a friendly ambience and resolving the tensions (Wendt et al., 2009). Skeens asserted that supportive leaders think on the welfare and the needs of their followers and building a favorable environment, which could persuade capability development in the organization (Schyns et al., 2009).

Organizational culture

Feraru defined organizational culture as what people normally think and act (Tseng, 2010). It is considered as a radical criterion of social behavior. In fact, organizational culture expresses the personality of an organization and conducts employees in establishing relationships and organizing their behaviors (Tseng, 2011). In other words, as people are of unique traits, trading organizations have also a unique culture (Susan, 2002). In the meantime, organizational culture impacts particularly on organizational structure, procedures, monitoring, and control (Germain, 2001). In other words, organizational culture consists

of laws, behavioral principles, and confirmed methods shaped by public beliefs (Culverson, 2002). Almost, every author has a different definition for organizational culture due to his/her special insight (Bali, 1999). Douglas (1995) stated that organizational culture is the result of the interactions on values, meanings, common rules and how to speak among the organization's members. Based on two aspects namely respecting the internal/external environment and the flexibility/stability aspects (Quinn, 1991), he provided four types of organizational culture: contributive, developmental, rational, and hierarchical cultures. To elaborate more in depth, he explained a critical reality: usually, organizations are of the values and traits of all four types of organizational culture. In this paper, according to the previous studies on knowledge management, the focus was made on internal/external environment and stability/flexibility aspects concerning all four types of organizational culture (Denison, 2004; Cameron, 1991; Boggs, 2004).

- **Contributive culture:** It emphasizes on internal orientation and flexibility as well as on cooperation, sharing information, empowerment, building trust in teams, and establishing a friendly environment like family.
 - **Innovative culture:** It emphasizes on external orientation and flexibility as well as creativity, entrepreneurship, adaptability and dynamism. Such organizations support a creative and dynamic environment by putting emphasis on innovation.
 - **Integration and stability culture:** It emphasizes on internal orientation and control as well as laws, regulations, efficiency, stability, discipline and formalism.
 - **Rational culture:** It emphasizes on external orientation and control, competition, objectives, effectiveness, profit-oriented initiatives, and success in production (Chang, 2007).
- All four types of organizational culture are depicted in the below figure.

Internal Maintenance	Flexibility		External Position
	Participatory	Innovative	
	Stability	Rational	
	Control		

Figure 1 - Four types of organizational culture (Chang and Lee, 2007)

Research conceptual model

The research conceptual model is depicted in figure 2, while the relevant hypotheses are shown in figures 3 and 4

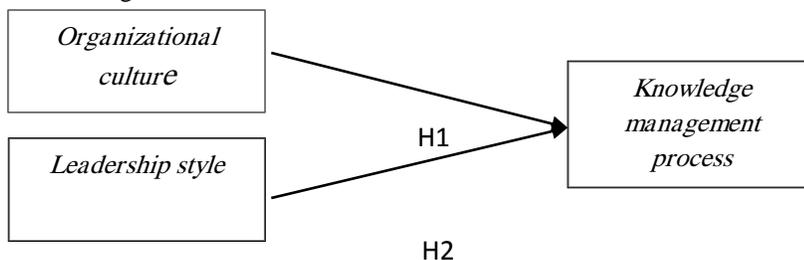


Figure 2 – The research conceptual model

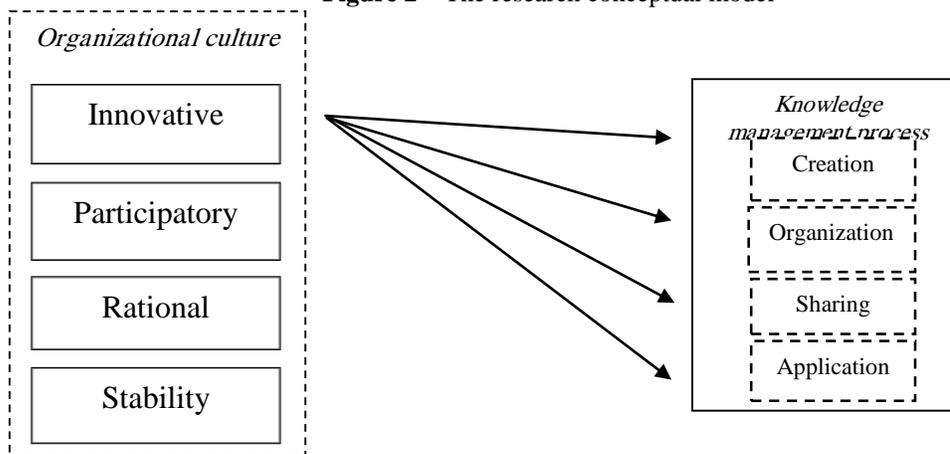


Figure 3 – The components of hypothesis H1

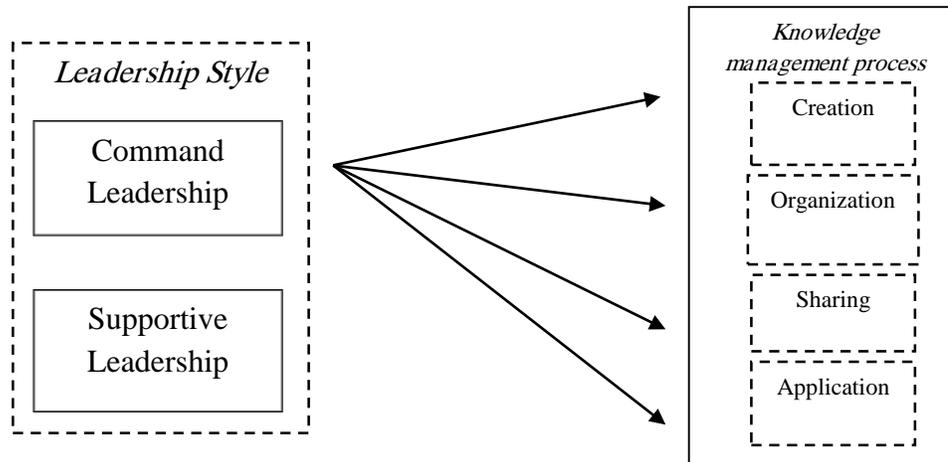


Figure 4 – The components of hypothesis H2

Methodology

Today, knowledge is considered as the most important competitive advantage amongst organizations. Hence, knowledge management has obtained a particular position in R&D centers and it has been seen as the main concern of many managers at knowledge-based organizations. At these four research firms in this study, different projects are conducted in the fields of electronics, software, mechanics, chemistry and IT. Due to the broadness of projects, massive volume of knowledge has been generating in these four organizations. A part of the generated knowledge is recorded in the format of documents and reports. A large part of the generated knowledge is intangible and hidden in the format of experiences, relations, and skills in people's minds with low chance of reuse. By considering the above points and the importance of knowledge management activities in the research organizations, such studies are conducted upon their managers' requests.

This research is a descriptive survey and a four-part questionnaire based on Likert's scale is designed to collect the needed information. The questionnaires were distributed among the statistical sample of all four research organizations and some of the respondents were contacted face-to-face in the time of filling their questionnaires in order to remove the ambiguities and answer as many questions as possible. The research population consisted of 224 subjects whose distinguishing attribute was their knowledge. The respondents were the deputies, supervisors, managers including HR managers, as well as the active experts of the organizations in the field of knowledge management and R&D. Of 250 distributed questionnaires, 224 forms were filled and returned. Thus, the response rate of distributed questionnaires was 89%. The utilized questionnaire in the present study contained four parts, including the questions on demographic data, organizational culture, knowledge management, and leadership styles. Concerning the knowledge management questionnaire, it should be noted that since there existed no questionnaire for this particular purpose, a new questionnaire containing 12 five-item questions was devised based on Likert's scale by using well known sources on knowledge management quadruple aspects (Moreno, 2011; Michael Brandt, 2009; Hsin-

Jung, 2007). A standard questionnaire was used to collect information on organizational culture aspects, which have been applied frequently in many papers. It consists of 26 questions, which measures four types of organizational culture, and was designed based on Likert's scale (Chen and Lin, 2007).

The questionnaire devised by Wendt et al. (2009) was employed to gather data for leadership style aspects. It consisted of 14 questions that measures two leadership styles, each by seven questions.

Concerning the questionnaire of knowledge management process, it should be noted that since there did not exist any questionnaire in this field, a 24-item questionnaire based on Likert's five-point scale was created on four knowledge management aspects by using credible sources. This questionnaire measures all four aspects by using six questions. To determine the validity of the questionnaire, the elites' opinions were used. Cronbach's alpha coefficient (0.85) was used to measure the reliability of the questionnaire.

Concerning the leadership style questionnaire, in the present study, two types of leadership style were used to investigate the leadership situation in the studied organizations in order to determine the impact of leadership on knowledge management. In this line, the Wendt's questionnaire was used and its validity and reliability were confirmed (Wendt et al., 2009). The organizational culture questionnaire was extracted from the article by Lin and Chang (2007). It was used to determine four types of organizational culture. Its questions were devised by Likert's scale, its validity was confirmed by elites and its total reliability was supported by Cronbach's alpha value (0.76).

The research population consisted of experts, researchers, and managers of four selected research organizations. According to Cochran's formula, at the confidence level of 95%, the sample size was computed as 220. The subjects were selected by the simple systematic random technique so that they could have equal opportunities to be chosen. The acquired data from the questionnaire were analyzed by SPSS software package. In the present study, deductive statistical methods, correlation tests, and

Multivariate regression analysis were used. The research main questions are as follow:

- Is there any relationship between organizational culture aspects and knowledge management aspects?
- Is there any relationship between leadership styles and knowledge management aspects?

Analysis

Analyzing demographic information

Tables 1 to 4 show the respondents’ demographic traits in the surveyed organizations

Table 1 - Demographic characteristics of the responded firms (n= 224)

Row	Index	Status
1	Gender	51% male, 49% female
2	Age	(36%) below 30 years old, (34%) between 30-35 years old, (20%) between 35-40 years old, and (10%) more than 40 years old
3	Education	(5%) Associates degree, (48%) Bachelor, (40%) Master, and (7%) PhD
4	Occupation	(45%) experts, (28%) supervisors, (17%) deputies, and (10%) managers
5	Work experience	(41%) less than five years, (24%) between 5-10 years, (20%) between 10-15 years, and (15%) more than 15 years

Studying the relationship between organizational culture and the aspects of knowledge management

Hypothesis 1: Four aspects of organizational culture impact on knowledge generation.

Hypothesis 2: Four aspects of organizational culture impact on knowledge organization.

Hypothesis 3: Four aspects of organizational culture impact on knowledge sharing.

Hypothesis 4: Four aspects of organizational culture impact on knowledge utilization.

According to the reviewed literature, organizational culture effects significantly on knowledge management activities. Hence, it was tried to investigate this relationship by using the

Correlation test. What obtained from the correlation test indicated that the contributive culture and innovation influence over all aspects of knowledge management (knowledge generation and acquisition, knowledge stockpiling and organizing, knowledge sharing and disseminating, and knowledge utilization). This claim was verified by the achieved significance level. Therefore, it can be declared that the more contributive culture and innovation among the personnel would lead to a better status of knowledge management aspects. In the organizational culture on stability and integration, the findings indicated that this type of organizational culture impacts positively and significantly on knowledge generation and organization even though no relationship was observed between this type of organizational culture and two aspects of knowledge management. In the rational culture, the results mentioned that it has a direct and significant impact on two aspects of knowledge generation and organization. The relevant findings are depicted in table 2.

Table 2 – The correlation between organizational culture and knowledge management process

		Creation	Organization	Sharing	Utilization
Participatory	Pearson Correlation	0.505**	0.208**	0.527**	0.385**
	Sig. (2-tailed)	0.000	0.009	0.000	0.001
	N	72	72	72	72
Innovative	Pearson Correlation	0.588**	0.232**	0.566**	0.745**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	72	72	72	72
Stability	Pearson Correlation	0.391**	0.613**	- 0.021	0.193
	Sig. (2-tailed)	0.001	0.000	0.858	0.104
	N	72	72	72	72
Rational	Pearson Correlation	0.462**	0.536**	0.239	0.282
	Sig. (2-tailed)	0.000	0.000	0.053	0.086
	N	72	72	72	72

In the following, multivariate regression test is used to study the impact of the types of organizational culture on four aspects of knowledge management along with the results obtained from table 2. The results of the conducted tests indicated the impact of organizational culture on knowledge management by using multivariate regression analysis: $Y = 0.604 x_1 + 0.459 x_2 + 0.184$

$x_3 + 0.04 x_4 + \varepsilon$, where x_1 = contributive culture, x_2 = innovative culture, x_3 = stability culture, and x_4 = rational culture. Concerning the findings, all three factors demonstrated their positive impacts. However, these impacts were higher in Contributive culture and lower in rational one. The relevant findings are shown in table 3. As organizing the culture is

influenced by the organizational culture, it can be said as the impacts of three types of organizational culture on knowledge organization were proved through the correlation test, the results from multivariate regression analysis indicated that the positive beta values reflect the positive and direct association. This model

on knowledge organization is as follows: $Y = 0.360 x_1 + 0.548 x_2 + 0.486 x_3 + \epsilon$, where x_1 = contributive culture, x_2 = innovative culture, x_3 = stability culture. The findings are presented in table 3 and 4.

Table 3 - Multiple regression

Model	Un-standardized Coefficients		Standardized Coefficients	T
	B	Std. Error	Beta	
(Constant)	- 0.745	0.484		-1.540
Participatory	0.604	0.181	0.331	3.343
Innovative	0.459	0.110	0.394	4.151
Stability	0.184	0.069	0.259	2.679
Rational	0.040	0.106	0.042	0.381

The dependent variable: Knowledge creation

Table 4 - Multiple regression

Model	Un-standardized Coefficients		Standardized Coefficients	t
	B	Std. Error	Beta	
(Constant)	- 1.316	0.608		- 2.163
Participatory	0.360	0.208	0.150	1.728
Innovative	0.548	0.136	0.357	4.017
Rational	0.486	0.078	0.519	6.220

The dependent variable: Knowledge organization

Concerning the impact of organizational culture on knowledge sharing, alongside the results mentioned in table 2, the results in table 5 can be highlighted in which the positive beta values show the positive and direct impact of three contributive, innovative, and rational organizational cultures. The obtained model is $Y = 0.556 x_1 + 0.501 x_2 + 0.517 x_3 + \epsilon$, where x_1 = contributive

culture, x_2 = innovative culture, x_3 = stability culture. The findings are exposed in table 6. Likewise, the obtained model from multivariate regression test on knowledge utilization indicated the positive and direct impact by two contributive and innovative cultures, where x_1 = contributive culture and x_2 = innovative culture. The findings are revealed in tables 3 and 4.

Table 5 - Multiple regression

Model	Un-standardized Coefficients		Standardized Coefficients	t
	B	Std. Error	Beta	
(Constant)	- 2.080	0.579		- 3.595
Participatory	0.556	0.223	0.230	2.496
Innovative	0.501	0.138	0.325	3.636
Rational	0.517	0.120	0.403	4.298

The dependent variable: Knowledge sharing

Table 6 - Multiple regression

Model	Un-standardized Coefficients		Standardized Coefficients	t
	B	Std. Error	Beta	
(Constant)	- 0.466	0.488		- 0.956
Participatory	0.291	0.175	0.140	1.666
Innovative	0.921	0.111	0.695	8.262

The dependent variable: Knowledge utilization

Studying the relationship between leadership style and the aspects of knowledge management

H1: Command leadership style impacts on knowledge management aspects.

H2: Supportive leadership style impacts on knowledge management aspects.

In accordance with what mentioned in theoretical discussions, leadership style impacts on knowledge management aspects significantly. The results of the correlation test showed that command leadership style can only influence on the knowledge organization aspect and as a result, the more usage of command

leadership style among organizational employees can ensure the better situation of the knowledge organization aspect. With regard to the obtained significance level, this claim is supported. The findings on supportive leadership style showed that it impacts positively and significantly on three aspects of knowledge management (i.e. knowledge generation, sharing, and utilization) even though no association was witnessed between supportive leadership style and knowledge organization. The findings are provided in table 7.

Table 7 - Regression test

		Creation	Organization	Sharing	Utilization
Command	Pearson Correlation	0.205	0.703**	- 0.126	0.241*
	Sig. (2-tailed)	0.083	0.000	0.292	0.041
	N	72	72	72	72
Supportive	Pearson Correlation	0.442**	0.205	0.528**	0.438**
	Sig. (2-tailed)	0.000	0.084	0.000	0.000

Discussions

Having analyzed the collected questionnaires, the findings indicated that contributive and innovative organizational cultures impact on four aspects of knowledge management positively. Since cooperation, information exchange, empowerment and trust building in a friendly environment are emphasized in contributive culture, the positive impact of this kind of organizational culture on knowledge management is rational even though the lowest impact of this culture is on knowledge organization because it mainly emphasizes on flexibility rather than reinforcing bureaucratic laws and control. On the other hand, in the innovative culture, it can be observed that there is a positive and direct association between this kind of organizational culture and four aspects of knowledge management since this kind of culture accentuates on the outside environment even though the lowest positive correlation ratio in this organizational culture is knowledge organization due to the flexibility, and lower control and emphasis on documenting data.

Likewise, having studied the findings, it was disclosed that stable and rational organizational cultures impact only on two knowledge management aspects. The reason can be their excessive emphasis on control since it yields to a bureaucratic structure with limited administrative regulation to apply and share knowledge and by considering the existing weaknesses in knowledge management. Among knowledge management aspects, knowledge organization is substantially affected by these organizational cultures. The reason is the insistence of the organizations with both cultures on stocking documents and information.

In this paper, linear regression was used to investigate the impact of four organizational culture aspects on four knowledge management aspects, which confirmed the above results. In the meantime, the impact of two supportive and command leadership styles on knowledge management was studied and it was

concluded that command leadership style has a positive and significant correlation with knowledge organization and utilization. This correlation is stronger in knowledge organization. The reason can be the existence of some attributes such as clear functions, and the extreme control and focus on aims and documenting files. On the other hand, supportive leadership style has a positive relationship with three aspects of knowledge management. Such significant relationship is rational due to the special attributes of this leadership style including special attention to followers and building a friendly and desired environment to empower subordinates. Since the results indicated that organizational culture and leadership style are of a special impact on knowledge management, it is necessary for managers to take necessary initiatives to establish proper organizational culture and adopt an effective leadership style in order to take an important step towards improving knowledge management in their own organization.

Overall, it can be expressed that improving organizational culture and leadership style is an important factor in knowledge management at research organizations. Enhancing these two factors can reinforce to attract, employ, and retain knowledge workers and researchers to proliferate the intellectual capacity and organizational knowledge that can help the organization to fortify its mission in today's competitive environment. The managers of such organizations can take an effective step towards improving the knowledge management process by recognizing the impact of the most important components of organizational culture and leadership style. Since supportive leadership style underscores employees' empowerment, the positive impact of this leadership style on knowledge management process is not unlikely. On the other hand, the positive relationship between command leadership style, which emphasizes on documenting data and controlling the organization, with knowledge organization is rational.

Conclusions

Concerning the scientific emphases on the relationship between organizational culture, leadership style and knowledge management, no comprehensive research has been yet conducted in this field. Hence, the present research tried to study the relationship between organizational culture, leadership style, and knowledge management by using statistical methods and relevant tests. The results pointed out the impact of organizational culture and leadership style on the relationship between organizational culture, leadership style, and knowledge management. In addition, the findings indicated that two types of stable and rational organizational cultures emphasize on control and concentration in the organization. They are strong in stocking and organizing the knowledge. Likewise, innovative and contributive organizational cultures have a positive and meaningful correlation with four aspects of knowledge management. Having investigated leadership style and knowledge management aspects, it was perceived that command leadership style is of a strong association with stocking and organizing the knowledge while supportive leadership style associates significantly to all knowledge management aspects except knowledge organization. Therefore, it can be expressed that among four types of organizational culture, the innovative and contributive cultures, and among two leadership styles, the supportive one are of the highest coordination with knowledge management.

With regard to the direct impact of organizational culture on activities, the managers at research organizations are recommended to organize continuous workshops, activate elite associations, incentivize knowledge management actors, run brainstorming meetings, provide software systems with knowledge gathering and organization, institutionalize knowledge sharing, and publish knowledge journals by their knowledge workers in order to improve the cultural space of knowledge management in their organizations. Future studies can be conducted to explore this issue by considering other organizational behavior attitudes including organizational justice, organizational commitment, and political behaviors, along with HR attitudes such as motivation, job satisfaction, and other variables like organizational entrepreneurship, social, human, structural and intellectual capital through different modeling and fuzzy techniques.

In a study by Politis (2002), he asserted that the managers' role has been changed from keeping knowledge to sharing and generating it. Lam (2002) concluded that transformational leadership can impact on organizational learning success. In fact, transformational leadership has a positive effect on individuals' morale in team working. Vera et al. (2004) comprehended that transformational leaders can guide future studies by creating official systems and training programs. It should be claimed that defining leadership is difficult since multiple concepts and descriptions are involved along with leadership. Organizational culture is considered as an important factor in knowledge generation and management. In fact, it indicates how members should learn, acquire and share knowledge. Organizational culture is considered as the main element in knowledge management success.

References

- Alavi, M., & Leidner, D. E. (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS*.
- Bali, R., Cockerham, G. and Bloor, C. (1999), "MISCO: a conceptual model for MIS implementation in SMEs", *Information Research*, Vol. 4 No. 4, available at: <http://informationr.net/ir/4-4/paper61.html>
- Banai, M., & Reisel, W. D. (2007). The influence of supportive leadership and job characteristics on work alienation: A six-country investigation. *Journal of World Business*, Vol. 42, pp. 463–476.
- Birasnav, M., Rangnekar, S., & Dalpati, A. (2011). Transformational leadership and human capital benefits: the role of knowledge management. *The Leadership & Organization Development Journal*, Vol. 32, No. 2, pp. 106-126.
- Boggs, W.B. (2004), "TQM and organizational culture: a case study", *The Quality Management Journal*, Vol. 11 No. 2, pp. 42-52.
- Burke, C. S., Stagl, K. C., Klein, C., Goodwin, G. F., Salas, E., & Halpin, S. M. (2006). What types of leadership behaviors are functional in teams? A meta-analysis. *The Leadership Quarterly*, Vol. 17, pp. 288–307.
- Cameron, K.S. (1991), "Culture congruence strength and type: relationship to effectiveness", *Research in Organizational Change and Development*, Vol. 5, pp. 23-58.
- Chattopadhyay, S.P. (2007), "Management education reform in a knowledge management Environment", *Journal of American Academy of Business*, Vol. 11, No. 1, pp. 168-172.
- Culverson DE. Exploring organizational commitment following radical change: A case study within the Parks Canada Agency [dissertation]. Canada: University of Waterloo; 2002.
- Davenport, T. H., & Klahr, P. (1998). Managing customer support knowledge. *California Management Review*, 40(3), 195-208. Retrieved December 3, 2005.
- Denison, D.R., Haaland, S. and Goelzer, P. (2004), "Corporate culture and organizational effectiveness: is Asia different from the rest of the world?", *Organizational Dynamics*, Vol. 33 No. 1, pp. 98-109.
- DeTiene, K.B. and Jackson, L.A. (2001), "Knowledge management: understanding theory and developing strategy", *Competitiveness Review*, Vol. 11, No. 1, pp. 1-11.
- Fahey, L. and Prusak, L. (1998), "The eleven deadliest sins of knowledge management", *California Management Review*, Vol. 40, No. 3, pp. 265-276.
- Ford, D.P. and Chan, Y.E. (2003), "Knowledge sharing in a multi-cultural setting: a case study", *Knowledge Management Research & Practice*, Vol. 1, No. 1, pp. 11-27.
- Germain, R., Droge, C. and Christensen, W. (2001), "the mediating role of operations knowledge in the relationship of

context with performance”, *Journal of Operations Management*, Vol. 19 No. 4, pp. 453-69.

Gold, A.H., Malhotra, A. and Segars, A.H. (2001), “Knowledge management: an organizational Capabilities perspective”, *Journal of Management Information Systems*, Vol. 18, No. 1, pp. 185-214.

Hersey, P., & Blanchard, K. H. (1984). *The management of organizational behavior* (4th ed.). Englewood Cliffs, NJ: Prentice Hall.

Hsin-Jung Hsieh (2007), “organizational characteristics, knowledge management strategy, enablers, and process capability: knowledge management performance in us software companies, Presented in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy, Lynn University.

Kebede, G. (2010). Knowledge management: An information science perspective. *International Journal of Information Management*, No. 30, pp. 416-424.

Koontz, Harold and O'Donnell, Cyril, (1959), "Principles of Management", 2nd .Ed. New York: McGraw Hill, p. 435.

Kwakman, k (2004) “the knowledge-productive corporate university “, university of twentieth publishing.

Lakshman, C. (2009). Organizational knowledge leadership. *The Leadership & Organization Development Journal*, Vol. 30, No. 4, pp. 338-364.

Michael Brandt Jones (2009), “organizational culture and knowledge management: an empirical investigation of U.S. manufacturing firms, in partial fulfillment of the requirements for the degree of Doctor of business administration, School of Business and Entrepreneurship Nova Southeastern University.

Moreno A. & Melendez A. (2011), “Analyzing the impact of knowledge management on CRM success: The mediating effects of organizational factors”, *International Journal of Information Management*, doi:10.1016/j.ijinfomgt.2011.01.002 (Article in press)

Ooi, K.B., Teh, P.L. and Chong, A.Y.L. (2009), “Developing an integrated model of TQM and HRM on KM activities”, *Management Research News*, Vol. 32, No. 5, pp. 477-490.

Pauleen, D. and Mason, D. (2002), “New Zealand knowledge management survey: barriers and drivers of KM uptake”, available at: www.nzkm.net/pdfs/survey.pdf.

Politis, J. D. (2001). The relationship of various leadership styles to knowledge management. *The Leadership & Organization Development Journal*, Vol. 22, No. 8, pp. 354-364.

Quinn, R.E. and Spreitzer, G.M. (1991), “The psychometrics of the competing values culture instrument and an analysis of the impact of organization culture on quality of life”, *Research in Organizational Change and Development*, Vol. 5, pp. 115-42.

Simonin, B. (1999), “Transfer of marketing know-how in international strategic alliances: an empirical investigation of the role and antecedents of knowledge ambiguity”, *Journal of International Business Studies*, Vol. 30, No. 3, pp. 463-490.

Skyrme, D., & Amidon, D. (1998). New measures of success. *Journal of Business Strategy*, Vol. 19, No. 1, pp. 20-24. Retrieved September 26, 2006, from ProQuest database.

Spender, J. C. (1996). Making knowledge the basis of a dynamic theory of the firm. *Strategic Management Journal*, 17(Winter), 45-62. Retrieved December 26, 2005, from Pro Quest database.

Probst, G. J. B. (1998). Practical knowledge management: A model that works. *Prism*, Second Quarter, 17-29. Retrieved November 27, 2005, from proQuest database.

Park, K. (2006). A review of the knowledge management model based on an empirical Survey of Korean experts. Unpublished doctoral dissertation, University of Kyushu, Korea.

Schyns, B., van Veldhoven, M., & Wood, S. (2009). Organizational climate, relative psychological climate and job satisfaction. *The Leadership & Organization Development Journal*, Vol. 30, No. 7, pp. 649-663.

Sims Jr., H. P., Faraj, S., & Yun, S. (2009). When should a leader be directive or empowering? How to develop your own situational theory of leadership. *Business Horizons*, Vol. 52, pp. 149-158.

Shuchih Ernest chang & Lin (2007), Exploring organizational culture for information security management, *Industrial Management & Data Systems*, Vol. 107 No. 3, pp. 438-458.

Susan J.Linz, “job satisfaction among Russian workers”, *international Journal of manpower*, vol.24, No.6, 2003, pp.626-652.

Tseng, S.M. (2010), “the correlation between organizational culture and knowledge conversion on corporate performance”, *journal of knowledge management*, Vol. 14, No. 2, pp. 269-284.

Tseng, S.M. And et al (2011), “the effects of hierarchical culture on knowledge management processes”, *management research review*, Vol. 34, No. 5, PP. 595-608.

Tseng, S.M. (2009), “A study on customer, supplier, and competitor knowledge using the Knowledge chain model”, *International Journal of Information Management*, Vol. 29, No. 6, pp. 488-496.

Viitala, R. (2004). Towards knowledge leadership. *The Leadership & Organization Development Journal*, Vol. 25, No. 6, pp. 528-544.

Wendt, H., Euwema, M. C., & Hetty van Emmerik, I. J. (2009). Leadership and team cohesiveness across cultures. *The Leadership Quarterly*, Vol. 20, pp. 358-370.

Wilson, TD 2002, The nonsense of Knowledge Management, *Information Research*, vol.8, No.1 <http://InformationR.net/ir/8-144.html>.