



## The Study of Strategic Flexibility Effect on Knowledge

Raheleh Ghorban-Bakhsh<sup>1</sup>, Yousef Gholipour-Kanani<sup>2\*</sup>

<sup>1</sup>Department of Management, Qaemshahr Branch, Islamic Azad University, Qaemshahr, Iran, <sup>2</sup>Department of Industrial Engineering, Qaemshahr Branch, Islamic Azad University, Qaemshahr, Iran. \*Email: [gholipourkanani@yahoo.com](mailto:gholipourkanani@yahoo.com)

### ABSTRACT

This paper is to study effects of strategic flexibility on knowledge management. Statistical population includes 212 managers and employees in Ghalamchi, the Educational and Cultural Center. Sample size is determined to be 136 using the Morgan table, and the sampling is done through simple random sampling method. Given its objectives, the present study is an applied research classified as descriptive survey in terms of the method employed for gathering data. The questionnaire's reliability measured through Cronbach's alpha is 0.96. Results of data analysis using linear regression show that strategic flexibility has significant effect on the knowledge management. Moreover, it is revealed that strategic flexibility affects aspects of knowledge management significantly so that the strategic flexibility produces the most and least effect on knowledge acquisition (0.515) and knowledge organization respectively.

**Keywords:** Strategic Flexibility, Knowledge Management, Knowledge Creation, Knowledge Acquisition, Knowledge Dissemination  
**JEL Classification:** D8

### 1. INTRODUCTION

The fast-changing markets has brought about goods and features like high-level competition, uncertainty, and unstable environment (Moon et al., 2014). Competitive, extremely variable atmosphere of the business world has firms' survival dependent on their flexibility (Chan et al., 2016). It is relying on the firm's ability to change or exploit opportunities created in the context of environmental dynamism and can be viewed as corporate specific skill set or a resource (Doroudi and Babaea, 2016). Strategic flexibility is the corporate capacity to identify environmental dynamism and use resources promptly to carry out new operation to respond to these changes (Dehghan-Dehnavi and Nadafi, 2010). Corporate knowledge resources are viewed as the largest and most crucial resources in this regard. In the opinion of Judith (2007), the knowledge management refers to measures taken systematically to discover and organize intellectual resources of organization and make them accessible, foster culture of continuous learning, and disseminate knowledge in the organization. The knowledge management requires a sense of commitment to create new knowledge, promote it throughout the organization, and translate it to products and services, systems, daily tasks, cultures, and strategies. The knowledge management is not a program but a new way to work, which have to be embedded

in the organizational culture through overall strategy and operation plan of the organization. Leverage and improvement of knowledge management-related skills is subject to capacity to manage other corporate resources (Sirmon et al., 2005; Wu and Chen, 2014). Flexibility and rapid response to dynamics of environment will result in better utilization of human resources and their knowledge that, in turn, improve knowledge management.

Ghalamchi, the Cultural and Educational Center, is the largest educational non-state-owned institute in Iran, working in the field of education, publication of textbooks, administration of periodic tests, and educational planning. Ghalamchi is among the most active Iranian textbooks publishers wherein the knowledge management is of high significance as the knowledge acquisition, storage, utilization, and sharing can bring efficiency and competitive advantage for this institute. Accordingly, identifying factors effective on the knowledge management can be viewed as a practical tool to improve this system in the Cultural and Educational Center. The strategic flexibility is considered as a factor capable of boosting the Center capacity to deal with changes of the competitive environment.

"Does the strategic flexibility affect the knowledge management in the Ghalamchi, the Cultural and Educational Center?"

## 2. LITERATURE REVIEW

### 2.1. Knowledge Management

The knowledge management is defined by various researchers as a system that takes the corporate knowledge sources, namely knowledge acquisition, creation, sharing, storage, and utilization, to enhance organizational competitiveness (Nonaka, 2007; Darroch, 2005).

It is hard to either define or measure the knowledge management as it is too much complicated, multidimensional, and pervasive (Gorelick et al., 2005), however, the knowledge management's dimensions have always focused on concepts like knowledge identification, acquisition, storage, dissemination, and utilization (Büchel and Probst, 2000).

Daghfous (2004) recognizes the knowledge management as combination of management, control, creation, encoding, dissemination, and utilization processes of knowledge in the organization and believes that its main objective is to ensure that a person in need is able to obtain the required knowledge as the need arises so that it enables him/her to make right decision at right time. The present study uses dimensions introduced by Lawson (2003) to measure the knowledge management, they are as follow:

**Knowledge creation:** It refers to the process of new knowledge creation through interaction between tacit and explicit knowledge (Lawson, 2003).

**Knowledge acquisition:** New knowledge is identified and acquired to meet present and future needs of organization and then it will be presented in a logical way that can be easily available for and shared among the people (Lawson, 2003).

**Knowledge organization:** The new knowledge is refined and organized. It will be done to identify and list useful dimensions of knowledge for various services and products. The organizing process can be subject to review to ensure the relevancy and continuity of knowledge (Lawson, 2003).

**Knowledge storage:** The useful knowledge is stored in an appropriate framework to be accessible for members of organization (Lawson, 2003).

**Knowledge dissemination:** It refers to spread knowledge from a person, group, or organizational unit to other person, group, or organizational unit (Lawson, 2003).

**Knowledge utilization:** It means that the existing knowledge in organization should be used in order to make it profitable (Lawson, 2003).

### 2.2. Strategic Flexibility

As assumed by Lau (1996), the strategic flexibility is the increase in corporate capacity to respond to competitive, highly erratic market environment, which is achieved through setting goals by supporting the knowledge and key capabilities. In practice, when the flexibility of sustainable resources is high, firms can be assured of the profitability of their new product lines by using market leadership through decreasing the time for searching required resources.

Additionally, firms can integrate building and coordination between indigenous and exogenous resources through coordination flexibility to save their costs, times, and resources (Sanchez, 1997).

As belived by Kamasak et al. (2016), dimensions of strategic flexibility includes resource orientation, robustness, agility, and integrity.

### 2.3. Relationship between Strategic Flexibility and Knowledge Management

Naturally, organizations attempting to be flexible should enhance their knowledge resources, organizational adaptation, value, and competitiveness (Ongaro, 2004). Researchers report evidence confirming a significant relationship between flexibility and knowledge management in high-tech industries in China. As shown in the study of Carrasco-Hernández and Jiménez-Jiménez (2016), the higher the flexibility in the firms and organization, the higher is their capacity to adjust the human skills to the organizational needs in human resources and, therefore, the more improved will be the knowledge management. Furthermore, firms with knowledge management system are more capable of dealing with and adapting to environmental conditions when compared to ordinary organizations (Matthyssens et al., 2005). Consequently, the strategic flexibility is closely related to the knowledge management. Since emphasizing on the role of flexibility in organizational learning suggests that the strategic flexibility would lead to improved knowledge acquisition (Bridoux et al, 2013).

### 2.4. Research Background

Research background is presented in Table 1.

### 2.5. Research Model

Research model is presented in Figure 1.

### 2.6. Research Hypotheses

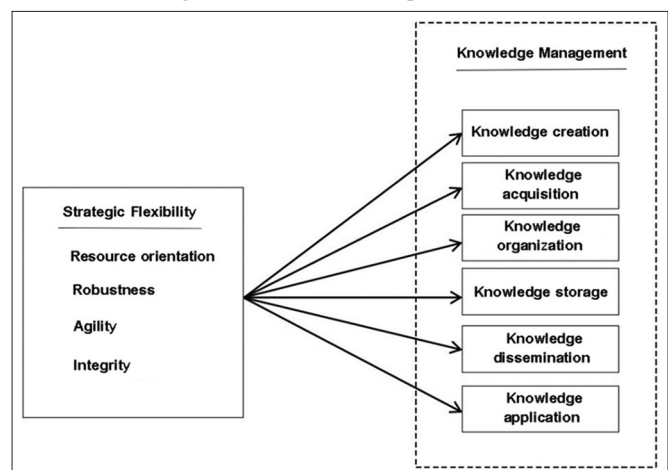
#### 2.6.1. Primary hypothesis

Strategic flexibility affects knowledge management in Ghalamchi, the Cultural and Educational Center.

#### 2.6.2. Secondary hypotheses

1. Strategic flexibility affects knowledge creation in Ghalamchi, the Cultural and Educational Center.

**Figure 1:** Research conceptual model



**Table 1: Research background in and out of Iran**

No.	Year	Researchers	Title	Findings
1	2017	Khadem and Amir-Nejad	The Effects of Strategic Flexibility and Knowledge Management on Organizational Agility: Case of Karoon, Oil and Gas Production Co (KOGPC)	Strategic flexibility affects the organizational agility in offices and management centers of KOGPC. It also has a positive, direct effect on the knowledge management
2	2016	Mokhtari-Dinani and Nazarian Madovani	Predicting knowledge management through organizational culture: A study on selected sports organizations	The organizational culture has the ability to foresee the knowledge management. Among the subscales of organizational culture, three subscales of organizational partnership, adaptability, and flexibility are more likely to be able to significantly predict the knowledge management respectively
3	2015	Haraghi and bahreini-Zadeh	Developing a structural model for knowledge management and organizational flexibility	Organizational culture and promotion of organizational innovation have a profound effect on building organizational flexibility based on the knowledge management
4	2016	Kamasak et al.	Importance of strategic flexibility on the knowledge and innovation relationship: An emerging market study	Interaction between knowledge management and innovation performance and strategic flexibility is stronger than direct and single relationship between knowledge management and innovation performance. Therefore, it is revealed that the effective knowledge management, which leads to innovation performance, is contingent on strategic flexibility
5	2016	Hock and Clauß	Knowledge management, strategic flexibility and business model innovation	The knowledge resources management has a significant effect on organizational innovation. The effect of knowledge management on business model innovation is greater in firms with high strategic flexibility
6	2016	Carrasco-Hernández and Jiménez-Jiménez	Knowledge management, flexibility and firm performance: The effects of family involvement	Knowledge management has a positive effect on the firm's performance, whereas the flexibility has not. However, flexibility and knowledge management relationship is positive and significant. Additionally, there is no linear relationship between family in ownership and management, flexibility, and knowledge management in the firm
7	2014	Rezaeikalantari et al.	An study on organizational culture and knowledge management	There is a significant relationship between organizational culture and knowledge management as well as between dimensions of organizational culture- including organizational accompaniment, flexibility, perspective, and adaptability - and knowledge management

2. Strategic flexibility affects knowledge acquisition in Ghalamchi, the Cultural and Educational Center.
3. Strategic flexibility affects knowledge storage in Ghalamchi, the Cultural and Educational Center.
4. Strategic flexibility affects knowledge organization in Ghalamchi, the Cultural and Educational Center.
5. Strategic flexibility affects knowledge dissemination in Ghalamchi, the Cultural and Educational Center.
6. Strategic flexibility affects knowledge utilization in Ghalamchi, the Cultural and Educational Center.

### 3. METHODOLOGY

The present study is an applied research, in terms of its objectives, and classified as descriptive survey regarding the method used for

gathering data. The research population contains all managers and employees working in the Ghalamchi, the Cultural and Educational Centre, which are about 212. The sample size for this research is calculated to be 136 by using Cochran's formula with 95% confidence level and 5% margin of error. The sampling is also done through simple random sampling method. A 39-item questionnaire is used for gathering the data. The strategic flexibility is measured according to the four aspects of resource orientation (6 questions), robustness (4 questions), agility (3 questions), and integrity (2 questions). Kamasak et al. (2016) measure knowledge management according to 6 dimensions of knowledge creation, knowledge acquisition, knowledge organization, knowledge storage, knowledge dissemination, and knowledge utilization (4 questions per se). Lawson (2003) employs 5-item Likert scale (on a continuum from strongly agree to strongly disagree) as the

measurement scale of research questionnaire. The questionnaire's reliability is confirmed by experts and scholars in the field of study. The reliability of knowledge management questionnaire and that of the strategic flexibility measured through Cronbach's alpha are 0.937 and 0.915 respectively. Finally, the linear regression method is adopted to analyze the data using SPSS 22.

#### 4. RESULTS

The sample size includes 142 among which 25% is female and 75% is men. The participants aged between 20 and 30 year-old consists 95.6% of the sample while those who aged 31-40 year-old are 4.4%. Regarding the educational level of the participants, 26.5% hold a degree below Bachelor, 51.5% have bachelor's degree, 19.1% have Master's degree, and 2.9% have Doctoral degree. The work experience for 94.1% of participants is <5 years while 5.6% work between 5 and 10 years.

The Cronbach's alpha is 0.915, 0.937, and 0.937 for strategic flexibility, performance of knowledge management, and the questionnaire respectively which shows high reliability of the measurement instrument.

The regression analysis confirms the significant effect of dependent variable on independent variables. Accordingly, both primary and secondary hypotheses are supported. Results of the comparison of standardized  $\beta$  coefficients show that the strategic flexibility produces the most effect on knowledge acquisition (0.515) and the least effect on knowledge organization (0.421) among the other dimensions of knowledge management. The results are presented in Tables 1 and 2.

#### 5. CONCLUSION AND DISCUSSION

This paper studies the impact of strategic flexibility on knowledge management in Ghalamchi, the Cultural and Educational Center. To do so, a primary hypothesis is proposed alongside the 6 secondary hypotheses, in which the effect of strategic flexibility is measured

on the dimensions of knowledge management. Analyzing the data through linear regression confirms the hypotheses and suggests that the effect of strategic flexibility on knowledge management is 0.537, i.e., with one unit increase in strategic flexibility, the knowledge management increases by 0.537 unit (only if other factors remain constant). That is the knowledge management will improve by an increase in the strategic flexibility. It is in line with what found in other studies (Kamasak et al., 2016).

Similarly, the effect of strategic flexibility on knowledge creation, knowledge acquisition, knowledge storage, knowledge organization, knowledge dissemination, and knowledge utilization is 0.48, 0.515, 0.48, 0.421, 0.488, and 0.45 respectively. That is one unit increase in the strategic flexibility will improve all dimensions of knowledge management Table 3.

##### 5.1. Suggestions

Given the confirmation of research hypotheses, it is suggested that managers in Chalmachi to place improvement of strategic flexibility high on their agenda. Apparently, the dimensions of strategic flexibility should receive attention in this course. Therefore, they have to focus on resource orientation, robustness, agility, and integrity to enhance the strategic flexibility. To do so, improvement of resource orientation requires identification of and searching for various, new resources. In case of Ghalamchi, the most crucial resources include content and human resources both of which should receive equal attention. Employing the experienced experts to extract the content materials in publication of books and identification of new blood generations of skilled people have to be managers' high priority in Ghalamchi. To improve the robustness, managers are suggested to develop a comprehensive program focusing on flexibility and remain committed to organizational goals. They should always consider various approaches to achieve specific organizational goals. To improve the agility, managers are recommended to respond to problems with care and pace. Employing the previous experiences from seasoned staff as well as considering alternatives and taking advantage of them in emergencies could improve the agility. And finally to foster integrity, managers should make the people aware

**Table 2: Results obtained from demographic statistics**

Demographic variables		Fr. (%)	Demographic variables		Fr. (%)
Gender	Male	25	Age	20-30	95
	Female	75		31-40	4.4
Degree	Below bachelor level	26.5	Work experience	Less than 5 years	94.01
	Bachelor level	51.5		5 to 10 years	5.9
	Master level	19.1			
	Doctoral level	2.9			

**Table 3: Hypotheses testing**

Hypotheses	Variables	$\beta$	Standardized $\beta$	Significant	Result
Primary	Strategic flexibility/Knowledge management	0.646	0.537	0.000	Supported
Secondary 1	Strategic flexibility/- Knowledge creation	0.757	0.515	0.000	Supported
Secondary 2	Strategic flexibility/- knowledge acquisition	0.757	0.515	0.000	Supported
Secondary 3	Strategic flexibility/Knowledge storage	0.599	0.48	0.000	Supported
Secondary 4	Strategic flexibility/Knowledge organization	0.578	0.421	0.000	Supported
Secondary 5	Strategic flexibility/knowledge dissemination	0.658	0.488	0.000	Supported
Secondary 6	Strategic flexibility/Knowledge utilization	0.63	0.45	0.000	Supported

of perspectives and goals of the organization, set their tasks and responsibilities clearly, coordinate them, and clarify how they can work together according to the organizational chart. They can also use shared work-based and non-work-based programs to enhance their sense of cooperation and harmony.

## 5.2. Suggestions for Future Research

The effect of strategic flexibility on knowledge management is examined in this study. Undoubtedly, the relation between these variable can be affected by several other variables (e.g. respective industry, organizational culture, level of competitiveness in industry, innovation and so on), which can be subject to more studies. Furthermore, similar studies can be conducted in other statistical communities active both in public and private sectors and offering either products or services and make comparison between their result and what obtained in the present study.

## REFERENCES

- Bridoux, F., Smith, G., Grimm, M. (2013), The management of resources temporal effects of different types of actions on performance. *Journal of Management*, 39(4), 928-957.
- BUECHEL, Bettina, PROBST, Gilbert. From Organizational Learning to Knowledge Management. 2000 <https://archive-ouverte.unige.ch/unige:585>
- Carrasco-Hernández, A.J., Jiménez-Jiménez, D. (2016), Knowledge management, flexibility and firm performance: The effects of family involvement. *European Journal of Family Business*, 6(2), 108-117.
- Chan, A.T.L., Ngai, E.W.T., Moon, K.K.L. (2016), The effects of strategic and manufacturing flexibilities and supply chain agility on firm performance in the fashion industry. *European Journal of Operational Research*, 6, 1-14.
- Daghfous, A. (2004), Organizational learning, knowledge and technology transfer: A case study. *The Learning Organization*, 11(1), 67-83.
- Darroch, J. (2005), Knowledge management, innovation, and firm performance. *Journal of Knowledge Management*, 9(3), 101-15.
- Dehghan-Dehvani, H., Nadafi, Q. (2010), Can strategic flexibility effective in firms through product innovation? *Modern Economy and Business*, 4, 1-4.
- Doroudi, H., Babaea, L. (2016), Investigating the Relationship between Processes Strategic Planning, Planning, and firm's Performance: Considering the Moderating Role of Innovation. *International Conference of Economy, Management, and Psychology*, Qom.
- Gorelick, C., Tantawy-Monsou, B. (2005), For performance through learning, knowledge management is critical practice. *Learning Organization*, 12(2), 125-139.
- Haraghi, M., Bahreini-Nejad, M. (2015), Developing a structural model for knowledge management and organizational flexibility. *Quarterly of Organizational Behavior Studies*, 4(1), 147-177.
- Hock, M., Clauß, T. (2016), Knowledge Management, Strategic Flexibility and Business Model Innovation. *The Proceedings of The XXVII ISPIM Conference 2016 Porto, Portugal*. p19-22.
- Judith, J.F. (2007), Knowledge management at WLIC Durban: Libraries for the future: Progress, development and partnerships, IFLA knowledge management. *Newsletter Issue*. 4, 114-130.
- Kamasak, R., Yavuz, M., Karagulle, A.O., Agca, T. (2016), Importance of strategic flexibility on the knowledge and innovation relationship: An emerging market study. *Journal of Procedia-Social and Behavioral Sciences*, 229, 126-132.
- Khadem, M., Amir-Nejad, G.H. (2017), The Effects of Strategic Flexibility and Knowledge Management on Organizational Agility: Case of Karoon, Oil and Gas Production Co. 4<sup>th</sup> Conference of Practical Management and Economics with National Approach.
- Lau, R.S.M. (1996), Strategic flexibility: A new reality for world-class manufacturing. *SAM Advanced Management Journal*, 61(2), 11-15.
- Lawson, S. (2003), Examining The Relationship between Organizational Culture and Knowledge Management Doctor of International Business Administration, Nava Southeastern University, ProQuest Information and Learning Company. p87-93.
- Matthyssens, P., Pauwels, P., Vandenbempt, K. (2005), Strategic flexibility, rigidity and barriers to the development of absorptive capacity in business markets: Themes and research perspectives. *Industrial Marketing Management*, 34(6), 547-554.
- Mokhtari-Dinani, M., Nazarian-Madovani, A. (2016), Predicting knowledge management through organizational culture: A study on selected sports organizations. *Research in Sports Management, Kinetic Behavior*, 6(12), ???.
- Moon, K.K.L., Mo, P.L.L., Chan, R.L.Y. (2014), Enterprise risk management: Insights from a textile-apparel supply chain. *International Journal of Risk and Contingency Management*, 3(2), 18-30.
- Nonaka, I. (2007), Knowledge management: Theoretical and methodological foundations. In: Smith, K.G., Hit, M.A., editors. *Great Minds in Management: The Process of Theory Development*. New York: Oxford University Press. p373-93.
- Ongaro, E. (2004), Process management in the public sector. *International Journal of Public Sector Management*, 17(1), 81-107.
- Rezaeikalantari, M., Salehi, M., Taheri, S.M. (2014), A survey of the relationship between organizational culture and knowledge management at IAU (SARI BRANCH). *Quarterly Journal OF New Approach in Educational Administration*, 5(17), 189-200.
- Sanchez, R. (1997), Preparing for an uncertain future: Managing organizations for strategic flexibility. *International Studies of Management and Organization*, 27(2), 71-94.
- Sirmon, D.G., Hitt, M.A., Ireland, R.D., Gilbert, B.A. (2011), Resource orchestration to create competitive advantage: Breadth, depth, and life cycle effects. *Journal of Management*, 37(5), 1390-1412.
- Wu, I.L., Chen, J.L. (2014), Knowledge management driven firm performance: The roles of business process capabilities and organizational learning. *Journal of Knowledge Management*, 18(6), 1141-1164.

AQ6

Author Queries???

AQ6:Kindly provide page number