



Investigating the Impact of Strategic Flexibility on Organizational Innovation

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ABSTRACT

This research is practical in terms of purpose and descriptive - scrolling in terms of data gathering. To investigating the impact of strategic flexibility on innovation, this method was done among managers and staff of the cultural center of education (Ghalemchi). The total number of members in the statistical society is 212 managers of Ghalemchi institute. The sample size is 136 people using Morgan table and simple sampling method was used for sampling. Data were collected by questionnaires. The reliability of the questionnaire was measured using Cronbach's alpha. Its value is 0/96 which indicates the high reliability of the questionnaire. In order to analyze the data, linear regression was used. Results showed that strategic flexibility has a positive and significant impact on knowledge management and organizational innovation. Strategic flexibility has a mediation role in organizational learning and innovation. Organizations need to increase their adaptive capacity by promoting knowledge management in order to build their resilience to addressing intra-organizational and environmental shocks. Also, knowledge management directly and indirectly affects organizational flexibility. Knowledge management system is influential on organizational change resulting from innovation in the organization. Although, innovation is considered as a competitive advantage, but nonetheless, in some cases, companies are failing to earn economic returns in this way. The result of the research shows that resource flexibility has a positive relationship with product innovation but is completely dependent on the company's performance and it depends on the company's strategic flexibility. So that, strategic flexibility has the greatest impact on manufacturing innovation and has the least impact on process innovation.

Keywords: Strategic Flexibility, Innovation, Product Innovation, Process Innovation, Administrative Innovation

JEL Classifications: O3, Q55

1. INTRODUCTION

In the highly competitive and turbulent climate of the new era, organizations should have the capability to adapt to environmental dynamism while trying to affect their business environment in the course of achieving their strategies. These requirements have brought the strategic flexibility into the spot light in recent years and given rise to development of useful models and frameworks to better understand and analyze this notion (Alan et al., 2016). Flexibility is contingent upon the firm's capacity to change or exploit opportunities created in the context of environmental dynamism and can be viewed as the corporate specific skill or a resource (Doroudi and Babaei, 2016). Strategic flexibility is the capability of a firm to identify the dynamics of environment and tap into the sources fast to begin new operation to react to these dynamics (Dehghan-Dehnavi and Nadafi, 2010) so that leads to

enhanced innovation performance (Kamasak et al., 2016). Today organizations increasingly face the challenge of improving their products and services to introduce their offering to the mark sooner than their rivals (Kowang et al., 2014). Organization of the new era desperately needs to position itself into the current dynamic and complicated market environment and gain competitive advantage. The capacity to produce new and unique products and services is embedded in the changing markets of today, and it would not be possessed but through innovation. It is quite obvious that a business strategy guiding the organization in the path of innovation plays a crucial role in helping it to have a more favorable position in the market than its rivals do. Therefore, as mentioned before, innovation has an effective role in enhancing organizational status, its long-term survival, and bringing competitive advantage to the organization. Accordingly, it is of high importance to know how to achieve and embed innovation and bring it into harmony

with organizational goals so as to develop effective competitive strategies and execute them in the organization in particular (Pashazadeh and Gohari, 2012).

The Ghalamchi, Cultural and Educational Center, is the largest Iranian non-governmental educational institute, which is active in the fields of education, publication of textbooks, holding periodic tests, and educational planning. It is one of the most active publishers of textbooks in Iran wherein the innovation is of high importance. Since, by growing the completion in cultural - educational field, the need for innovation in offering modern services is felt to maintain previous customers while attracting new ones. Therefore, recognition of factors effective in innovation can be considered as a practical tool to improve innovation performance in Ghalamchi. Strategic flexibility is one of these factors, which can improve institute's ability to confront dynamics of the current competitive environment and bring competitive advantage.

“Does strategic flexibility affect innovation in Ghalamchi, the cultural and educational center?”

2. RESEARCH REVIEW

2.1. Strategic Flexibility

As assumed by Lau (1996), the strategic flexibility is the increase in a firm's capacity to respond to competitive, highly changing market environment though regulating its goals by supporting knowledge and key capabilities. Indeed, when the flexibility of sustainable resources is high, firms can be confident in profitability of their new product lines by using the market leadership through reducing the time needed for searching resources in demand. Moreover, firms can integrate building, coordination between internal and external resources through coordination flexibility to save their costs, time, and resources (Sanchez, 1997). Kamasak et al. (2016) considered 4 dimensions for strategic flexibility, namely resource orientation, robustness, agility, and integrity.

2.2. Innovation

Innovation is defined as implementation of a new production or delivery method or significant improvement in offered value perceived by end user. Innovation process involves significant changes in technique, equipment, or software (OECD, 2005). Innovation is a process that is designed and managed to create value and comes out in the form of services, products, processes, technologies, and business systems (Edwards et al., 2002).

Organizational innovation is developing new, useful, and valuable products and services within the organizational context. Innovation, in practice, is shows the organization disposition to develop new products and services or to improve them and succeed to offer those products and services in the market (Gumusluoglu and Ilsev, 2009).

As believed by Hung et al. (2010), organizational innovation consists of three elements:

- Product innovation: That is enhancement of combination of the products and services offered to the market.

- Process innovation: That is improvement of combination and performance of internal operations in the organization.
- Administrative (organizational innovation) that includes improvement of competitive advantage, firm's profitability, cost reduction, people's efficiency, and turnover in organization (Hung et al., 2010).

2.3. Strategic Flexibility and Innovation Relationship

Flexible organizations emphasize on delicate but profound changes as well as socialization. The focus on the latter helps to improve organizational abilities through reviewing and modifying structures, policies, and behavioral patterns. Practically, flexibility provides a safe environment for the organization to experiment, learn for mistakes, and improve innovation (Luthar et al., 2000).

Flexibility can enhance innovation through various ways (Garriga et al., 2013), for example, from the resource perspective, firms with strategic flexibility access to human resource with intellectual diversity and various professional skills who are able to propose new thoughts and state of the art solution or to employ new technologies in work processes and, in such a way, they can improve innovation performance (Wei et al., 2014). Firms with higher strategic flexibility can react to the dynamics of market better and faster, identify the customers' need more rapidly and precisely (than less agile companies), offer products and serviced required by customers with higher quality and in shorter time, bring customers satisfaction more successfully and, as the result, they will enjoy higher interest rates.

Additionally, the agility helps managers to come up with creative ways to manage, lead, and control different task, allowing them to adjust internal environment of organization to the external, in step with changes occurred in the outside world, and show strong reaction to shifting demands of both internal and external environment. Integrity, as a dimension of strategic flexibility, can develop wide cooperation and coordination between different departments in organization, leading to innovation while increasing efficiency (FEghhi-Farahmand and Debaghi-Sadr, 2015).

2.4. Research Background

Previously related studies published are presented in Table 1.

3. RESEARCH MODEL AND HYPOTHESES

Research conceptual model is presented in Figure 1.

3.1. Primary Hypothesis

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

3.2. Secondary Hypotheses

1. Strategic flexibility affects product innovation in Ghalamchi, the cultural and educational center.
2. Strategic flexibility affects process innovation in Ghalamchi, the cultural and educational center.
3. Strategic flexibility affects administrative innovation in Ghalamchi, the cultural and educational center.

Table 1: Results of reach background in and out of Iran

| No | Year | Researcher | Title | Results |
|----|------|----------------------------|--|---|
| 1 | 2016 | Doroudi and Babaei | A study on the relationship between strategic planning processes, planning flexibility, and firm Performance: Considering the mediating role of innovation | Strategic planning process has a positive, significant effect on planning flexibility. It is confirmed that the firm performance and innovation are positively and significantly affected by strategic planning process and planning flexibility. Moreover, the results show that strategic planning process and planning flexibility are significantly and positively related to the firm performance through innovation |
| 2 | 2015 | Shokouhi and Ghafari | The effect of organizational learning and strategic flexibility on innovation | The Organizational learning directly affect strategic flexibility which, in turn, has a direct effect on the innovation in organization. Consequently, strategic flexibility has a mediating role in relationship between organizational learning and organizational innovation |
| 3 | 2015 | Ibrahimpour-Azbari | Examining the effect of strategic flexibility on the firms market performance: The mediating role of mark innovation | Strategic flexibility positively and significantly affect the market innovation which, in turn, has a positive and significant effect on the market performance |
| 4 | 2015 | Dehghan-Dehnavi and Nadafi | Can strategic flexibility bring profitability to firms through product innovation? | Resource flexibility has a positive relationship with product innovation - but not with firm performance - only if the coordination flexibility is positive. Furthermore, this effect is limited to the firms facing high level completion |
| 5 | 2011 | Kamasak et al. | Importance of strategic flexibility on knowledge and innovation relationship: An emerging market study | Interaction between knowledge management and innovation performance and strategic flexibility is stronger than single and direct relationship between knowledge management and innovation performance |
| 6 | 2016 | Hock and Claub | Knowledge management, strategic flexibility, and business model innovation | Knowledge Resource Management has a significant effect on organizational innovation. The higher the strategic flexibility in a firm, the higher effect of knowledge management is on the business model innovation |
| 7 | 2014 | Dibrell et al. | Linking the formal strategic planning process, planning flexibility, and innovativeness to firm performance | There is a positive and significant relationship between formal strategic planning process and planning flexibility and both are positively related to innovativeness. In addition, innovation acts as a mediator in the relationship between firm performance, formal strategic planning process, and planning flexibility |
| 8 | 2103 | Cingöza and Akdoğan | Strategic flexibility, environmental dynamism, and innovation performance: An empirical study | There is positive and significant relationship between strategic flexibility, innovation performance, and environmental dynamism |
| 9 | 2012 | Rajala et al | Strategic flexibility in open innovation: Designing business model for open source software | Business model is representative of open innovation and can increase challenges between open and closed innovation |

4. 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 includes all managers and employees at Ghalamchi, the Cultural and Educational Centre, which are about 212. The sample size is calculated to be 136 using Cochran's formula. The sampling is also done through simple random sampling method. A 41-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). Innovation is measured according to 3 dimensions of product innovation, process innovation, and administrative innovation (17 questions in total) (Kamasak et al., 2016). The measurement scale of questionnaire is based on 5-item Likert scale (on a continuum from strongly agree to strongly disagree) (Feghhi and Dabaghi, 2014). The questionnaire's reliability is confirmed by the respective

experts and scholars. Cronbach's alpha obtained for reliability of innovation and strategic flexibility questionnaires are 0.937 and 0.915 respectively. Finally, the linear regression is used to analyze the data in SPSS 22.

5. 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% have work experience between 5 and 10 years.

The Cronbach's alpha obtained for strategic flexibility, innovation, and all questionnaires is 0.915, 0.937, and 0.937 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 β coefficients show that the strategic flexibility has the most effect on the product innovation (0.826) and the least effect on process innovation (0.695) among the others. The results are presented in Tables 2 and 3.

6. CONCLUSION AND SUGGESTIONS

This paper studies the impact of strategic flexibility on innovation in Ghalamchi, the Cultural and Educational Center. To do so, a primary hypothesis is proposed alongside the 3 secondary hypotheses, in which the effect of strategic flexibility is measured on the dimensions of innovation. Analyzing the data through linear

regression confirms the hypotheses and suggests that the effect of strategic flexibility on innovation is 0.958, i.e., 1 unit increase in strategic flexibility will increase innovation by 0.958 unit (only if other factors remain constant). That is innovation will be improved by an increase in the strategic flexibility. It confirms the results obtained from previous studies (Kamasak et al., 2016; Cingöza and Akdoğan, 2014; Rajala et al, 2012).

Similarly, the effect of strategic flexibility on product innovation, process innovation, and administrative innovation is 1.012, 0.914, and 0.925 respectively. It means all dimension of innovation will be improved by 1 unit increase in the strategic flexibility.

Taking into account what obtained from the 1st secondary hypothesis (effect of strategic flexibility on product innovation), the managers are recommended to employ and precisely evaluate people's ideas in production and recognize the importance of and encourage behaviors that helps dissemination and sharing of knowledge in organization and indicates an air of innovation among people. Building on the results of 2nd secondary hypothesis (effect of strategic flexibility on process innovation), it is revealed that social skills and positive and effective interpersonal communication are the core elements of successful teams. Accordingly, managers are suggested to notice emotional connection between team members so that everyone understands the role their emotions and affections have in the team's success and effectiveness. Furthermore, to create and develop innovation in the organization, they are recommended to direct all energies into achievement of pervasive (interactive) objectives, which embrace succeeding in reaching goals, while developing a positive emotional condition. Given the results of the 3rd secondary hypothesis (effect of strategic flexibility on administrative innovation), managers should build an academic work environment wherein administrative innovation is promoted as the core principle and experts and other people are provided with opportunities to review the past plans and discuss the reasons behind their failure or success. Moreover, it is necessary for the advisors and experts to provide the bedrock on which creativity

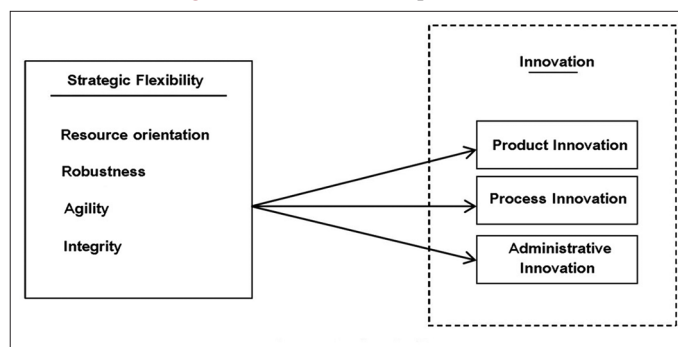
Table 2: Results obtained from demographic statistics

| Demographic variables | Frequency (%) |
|-------------------------|---------------|
| Gender | |
| Male | 25 |
| Female | 75 |
| Degree | |
| Below bachelor level | 26.5 |
| Bachelor level | 51.5 |
| Master level | 19.1 |
| Doctoral level | 2.9 |
| Age | |
| 20–30 | 96.6 |
| 31–40 | 4.4 |
| Work experience (years) | |
| <5 | 94.1 |
| 5–10 | 5.9 |

Table 3: Hypotheses testing

| Hypotheses | Variables | β | Standardized β | Sig | Result |
|-------------|---|---------|----------------------|-------|-----------|
| Primary | Strategic flexibility/Innovation | 0.958 | 0.822 | 0.000 | Supported |
| Secondary 1 | Strategic flexibility/Product Innovation | 1.012 | 0.826 | 0.000 | Supported |
| Secondary 2 | Strategic flexibility/Process Innovation | 0.914 | 0.695 | 0.000 | Supported |
| Secondary 3 | Strategic flexibility/Administrative Innovation | 0.925 | 0.738 | 0.000 | Supported |

Figure 1: Research conceptual model



and innovation can be promoted in organization and develop new and working ideas through empowering the leadership.

The present research can be viewed as the turning point for future researches. Accordingly, we suggest the future researches to use other strategic indicators to evaluate the relationship between strategic flexibility and innovation and while Ghalamachi, the cultural and educational center, is selected as the sample of this study, we encourage more studies on other organizations to assess and test this relationship. Finally, it is recommended that identification of characteristics of an appropriate culture for promoting innovation and knowledge management in organization is put on the agenda of future researches.

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