



#### Available online at www.sciencedirect.com

### **ScienceDirect**

Procedia
Social and Behavioral Sciences

Procedia - Social and Behavioral Sciences 210 (2015) 164 - 169

4<sup>th</sup> International Conference on Leadership, Technology, Innovation and Business Management

# The Mediating Role of Organizational Learning Capability On The Relationship Between Innovation and Firm's Performance:

## A Conceptual Framework Gülhan Kalmuk<sup>a</sup>, A.Zafer Acar<sup>b</sup>, a\*

<sup>a</sup> Yeni Yüzyıl Üniversity, İstanbul, 34000, Turkey <sup>b</sup>Okan University, Istanbul, 34722, Turkey

#### Abstract

Today, in the rapidly emerging globalization process, increasing the competitiveness of enterprises depends on increasing of their business performance. Although there are many methods and techniques affecting business performance, innovation has become one of the most widely used method. Although it is known that innovation increases company's performance; in recent years, it has been started to perform different studies in order to further increase the efficiency. The opinion which claims that organizational learning is one of the most important of them has been developing.

This study emphasizes the importance of mediating role of organizational learning capability on the relationship between innovation and company's performance with a strategic approach. It's tried to prove the contribution of more than one type of innovations to company's performance through organizational learning capability.

The aim of our study is to express whether organizational learning capability is effective as intermediate variable to the effects of innovation at company's performance

Keywords: Innovation, Organizational learning capability, Firm performance.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Peer-review under responsibility of the International Conference on Leadership, Technology, Innovation and Business Management

#### 1. Introduction

In the global world where the change become the main determinant, the survival of organizations and their ability to show high performance depends on their ability to comprehend the environmental changes and to create appropriate innovations for these environmental changes. When we take into consideration that change and development are continuous processes, we see that; organizational learning capability plays a vital role for enterprises in the

fax. +90- 212 481 40 58

E-mail address: gulhan.kalmuk@yeniyuzyil.edu.tr

<sup>\*</sup> Corresponding author. Tel. + 90-212-44450 01

internalization process of changes and developments while innovation plays a vital role for enterprises in the adaptation process to changes and developments. When we look at this point of view, we can say that organizational learning capability and innovation are the concepts which should be dealt together at the point of continuing company's existence and improving the performance (Özdevecioğlu and Biçkes, 2012). In literature, the innovation has been conceptualized in many ways both as output and as process.

The XXI Century has been witnessing the rise of innovation and innovative concepts as the main carriers of industrial competitiveness. Innovation is as important as the contribution of wealth and growth for maintaining the competitive advantage of an organization. In other words, innovation is a strong competitive strategy for developing world-class standards of production and service performance as well as sustaining and persistence in global markets.

In the context of knowledge management, it is claimed that, a company's capability to learn is the main carrier for developing innovations (Gunsel et al.).

Innovation is vital not only because of affecting to viability of institutions; but also because of affecting the social and economic changes, sustaining competitive advantages, surviving to organizations and improving their performances. Literature studies show that; learning from internal and external sources provides support for companies which want to innovate. On the other hand, giving too much importance to past experiences decreases to learning performance. In recent years, although the studies on innovation and learning have increased; the role of learning capability, which is

recent years, although the studies on innovation and learning have increased; the role of learning capability, which is focused on the absorptive and transformative role of learning capability, remained limited with the competitive strategies of innovation (Weeraward valve, J., 2003).

According to Porter (1990), companies should develop their learning capabilities in order to add superior value to them, to continue their activities in organizational environment and in order to gain competitive advantages. Because (a) the processes of innovation and competitive advantages are linked with each other, and (b) organizational innovation is an important strategic option for gaining competitive advantages. Companies can learn the ways of improving their performances only by means of good learning.

#### 2. Literature Review And Hypotheses

#### 2.1. Innovation and Firm Performance

Innovation in particular are frequently regarded as important means of achieving superior performance in such competitive environments (Lyon D, Ferrier W., 2002). Innovation has a considerable impact on corporate performance by producing an improved market position that conveys competitive advantage and superior performance. Cronbach for the underlying factors range from 0.93 through 0.71 again indicating reliability of factors. On their empirical study, carried out on 184 manufacturing company in Turkey, the studied effects of types of innovations on firm performance. Results showed positive effect of innovation on firm performance (Günday et al, 20011). Innovation is as strategic asset, helps to improve competition advantage and firm performance. The innovation is conceptualized in literature in many ways as both output and process. Most of the definitions of innovation are expressed by new idea or behavior. In the literature, there are different types of innovation. Adaptation of types of innovation may facilitate the organizations' adaptation process in time and effect the organizational performance (Damanpour and Gopalakrishn, 1998, Damanpour et al., 1989, Rogers, 1995). However, according to Damanpour (1991), the most widely accepted types of innovation are technological innovation and administrative innovation. But, technological innovation refers to new processes, new products or services while administrative innovation refers to new procedures, policies and administrative structures (DewarandDutton, 1986; Hage, 1980; Normann, 1971). Innovation helps company to cope with company's complex external environment as one of the basic elements of long-term success for developing in dynamic markets and for developing the business (Baker and Sinkula, 2002, DarrochandMcNaugton, 2002; Lyon and Ferrier, 2002; Scherer, 1992). In the organizations which have Schumpeterian opinions, in order to survive, it is needed to cope with rapid changes and increasing complexity. Thus, innovative companies can develop new products faster than non-innovative companies and they can be pioneers for taking advantage of market opportunities and accordingly resulting with increased organizational performance (Brown and Eisenhard1995).

As a result of the development of competitive environment, innovation is the major determinant of company performance (Bueno and Ordoñez, 2004). Innovation can provide higher production efficiency with increased market share, higher productivity growth and rising income. (Shefer & Frenkel, 2005). According to Zahra, Ireland and Hitt (2000), innovation can increase financial performance as a result of creating a large variety of differentiated products. In the majority of empirical studies, it has proven the positive relationship between innovation and performance

(Brown and Eisenhard, 1995; Damanpour, 1991; Damanpour et al, 1989; Hansen et al, 1999.; Roberts 1999; Thornhill, 2006; Weerawardena et al. 2006).

However, as Simpson et al. (2006) pointed out, although innovation has positive impact on company performance, it is expensive and risky and it may create some conflicting results such as increasing costs, employee dissatisfaction or the emergence of unintended consequences.

#### 2.2. Organizational Learning Capability and Firm Performance

Organizational learning capability is defined as organizational and administrative characteristics of the elements which provide an organization for learning or for encouraging to learning processes; and it is an important variable for developing organizational performance in order to gain sustainable competitive advantages (Jiménez, Sanz-Valle 2011). Organizational learning is a process where the employees of organization have potential to effect company's development capabilities and behaviors by using their common experiences as well as using the understanding of new information development. (Fiol and lyles 1985, Senge, 1990; SlaterandNarver, 1995).

This process consists of four sub-processes. The first of them is obtaining information. The company obtains information in this process. The second process is the distribution of information; in this process, the employees share information within the company. The third process is interpretation of information, where the information is interpreted by individuals and it is converted into a new common knowledge. The information which is collected to generate organizational memory and documents is stored for being used in future (Baker and Sinkula, 1999; Slaterand Narver, 1995).

Organizational learning is an important variable for gaining a sustainable competitive advantage and developing to organizational performance. A common belief in literature of strategic management is; increasing lifespan and performance of organizations is based on ability of learning and adaptation (Fiol and lyles, 1985; Dibella et al., 1996; Stata, 1989) Learning organizations generally react faster and more flexible than their competitors in order to solve their problems for sustaining their long-term competitive advantages (Day, 1994; SlaterandNarver, 1995). Companies can be more advantageous for perceiving market developments and trends by using their organizational capabilities, (Sinkula, 1994; TippinsandSohi,2003).

Some studies have proven that there is a positive relationship between organizational learning and company performance. For Example; According to Baker and Sinkula (1999), learning orientation has a direct effect on company performance. Theriou ve ark. (2011), tarafindan yapılan ampirik çalışmada öğrenme yeteneğinin firma performansının alt boyutu olan finansal performansını özkaynak karlılığı ve non finansal boyutu olan iş memnuniyetini pozitif olarak etkilediğini kanıtlamıştır. Learning capability is positively related to job satisfaction (rp=0.734), a non-financial measure of the firm's performance, and this relationship is statistically significant (p=0.003<0.01) at the 0.01 level (2-tailed), learning capability is positively related to ROE (r=0.3466), the second financial measure, and this relationship is statistically significant (p=0.016<0.05) at the 0.05 level (2-tailed).

According to Akgün at al., (2013) OLC incorporates a systems perspective, recognising the importance of bridging organisational members to collectively promote a common language, shared knowledge, joint action, and perceptions and beliefs. This results in the realisation of and increased effort in achieving organisational objectives to improve financial performance. They added the mediating variables (OLC) to the relationship between financial performance. Based on the SEM analyses, they found that OLC are positively related to financial performance ( $\beta = .34$ , p < .01).

Tippins and Sohi (2003) studies organizational learning process in five stages (obtaining information, sharing information, interpreting shared information, creating memory and procedural memory); they have positive effects on company's performance. Generally, all the processes of organizational learning are for generating the best performance. Finally, according to Zheng et al. (2010) knowledge management plays a variable role in the relationship between organizational culture, structure, strategy and organizational effectiveness.

In summary, all the empirical findings and evidences show that; there is a positive relationship between organizational learning and company performance (Jiménez, Sanz-Valle, 2011).

#### 2.3. Innovation and Organizational Learning Capability

According to studies made, organizational learning ability is one of the basic elements of innovation, since it constitutes a foundation for generation of new ideas and supports creativity when innovation is supported by organizational learning ability (Liao et all.,2008). According to Argyris and Schon (1978); organizational learning improves the innovation capacity of the organization. According to Stat (1989); in knowledge intensive industries,

innovation is a result of individual and organizational learning, and sole source of permanent competitive advantage. According to Foster (1986); production with unchanging technology decreases total income, since it does not have desired productivity, however, contrary to this, assuring continuous technological innovation prevents decrease in income, and provides increased income and profit.

On literature, lots of authors proposes different models to explain innovation. Innovation requires acquiring knowledge and sharing it within the organization. Acquiring knowledge is related to obtaining outer information and document as well as the organization's own background information. (Chang and Cho, 2008). Absorbing new ideas, is related to capacity of understanding and assimilating outer information and obtaining commercial income. (Cohen and Levinthal, 1990). Innovation includes the process of acquiring, sharing and implementing of new information. To ensure sustainability of this process, it is advocated that, there must be a strong relationship between ability of organizational learning and innovation. Innovation requires gathering and transforming the information at the same time. Sharing of information and developing new and common understanding within the organization by employees, results in improved organizational innovation. Briefly, developing organizational innovation is depending on transformation and development of ability of organizational learning and providing formation of new sources of information (Koçoğlu et all., 2010).

Some qualitative studies, suggests that, organizational learning should be used as an intervening variable to increase organizational performance of innovation. For instance; Forrester (2000) found positive relation between innovation and organizational learning, in innovations made by two auto manufacturing firms to decrease costs.

In some quantitative studies, relation between organizational innovation and learning was analyzed, and a cultural approach was adopted (Hult et al., 2004; Hurley and Hult, 1998; Keskin, 2006). For example, in previous studies, tendency of innovation was focused, and developing firm's culture was fostered and the degree of support for innovation was measured.

Finally, some studies are focusing on a phase of organizational learning process or one type of innovation. For example; on a study, it was found that there is a positive relationship between knowledge acquisition and product innovation, Weerawardena et al. (2006) state that, there are three types of learning effecting innovation intensity, finally, Chang and Cho (2008), you can find use the official procedures for keeping information, use of outer information and sharing of background information for improving innovation.

#### 3. Proposed conceptional framework

In Table 1, it is shown the positive effect mediating role of organizational learning capability in the innovation model that we propose as well as showing its positive effect on company performance.

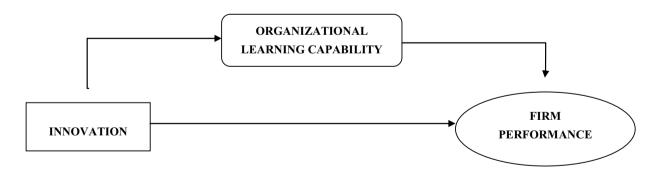


Table 1 The Model Proposed For 'The Mediating Role of Organizational Learning Capability on The Relationship Between Innovation and Firm's Performance'

#### 4. Conclusions

The studies show that; organizational learning capability positively affects to innovation and company performance. In addition, according to many empirical studies and the literature; innovation has a positive impact on company performance (Hult et al., Damanpour, et al, 1989). Therefore, it has been concluded that; innovation's positive impact on company's performance can be increased more as a result of mediating role of the organization's learning capability to implement supportive and facilitating structures and procedures of learning with appropriate administrative activities. Organizational learning capability is closely related with new product development process as it facilitates to obtain, to share and to store information (Jiménez, Sanz-Valle, 2011). Model has not been proved yet by collecting data. In order to prove the model, it is needed to perform some empirical studies.

#### References

Akgün, A.Eç, Ince, H., Imamoglu, S.Z., Keskin, H., Kocoglu, I., (2013), The mediator role of learning capability and business, innovativness between total quality management and financial performance. International Journal of Production Research, Gebze Institute of Technology, School of Business Administration, Gebze-Kocaeli, Turkey.

Argyris, C., Schon, D., (1978), Organizational Learning: A Theory of Action Perspective. Addison-Wesley, Reading, MA

Baker WE, Sinkula JM., (1999), The synergistic effect of market orientation and learning orientation on organizational performance. J Acad Mark Sci;27(4):411–27.

Brown SL, Eisenhard KM., (1995), Product development: past research, present findings, and future directions. Acad Manage Rev; 20(2):343–78. Bueno, E., & Ordoñez, P. (2004). Innovation and learning in the knowledge-based economy: challenges for the firm. International Journal of Technology Management. 27 (6/7), 531-533.

Chang, D. R., Cho, H., (2008), Organizational memory influences new product success. JBus Res 2008;61:13–23.

Damanpour F, Szabat KA, Evan WM. (1989), The relationship between types of innovation and organizational performance. J Manage Stud;26(6): 587–601

Damanpour F., (1991), Organizational innovation: a meta-analysis of effects of determinants and moderators. Acad Manage J;34(3):550-90.

Damanpour F, Gopalakrishnan S.(1998), Theories of organizational structure and innovation adoption: the role of environmental change. J Eng Tech Manage; 15(1):1-24.

Day GS., (1994), The capabilities of the market-driven organizations. J Mark 1994;58(4):37-52.

Dewar Robert D., Dutton Jane E., (1986), The adoption of radical and incremental innovations: an empirical analysis. Manage Sci;32(11):1422-33

Dibella, A.J., Nevis, E.C., Gould, J.M., (1996), Understanding Organizational Learning Capability, Journal of Management Studies 33:3, 0022-2380, pp. 361-379

Fiol CM, Lyles MA., (1985), Organizational learning. Acad Manage Rev 1985;10(4):803-13.

Foster, R.N., (1986)., Technology in the Modern Corporation: A Strategic Perspective, Timing Technological Transition.

Günday, G., Ulusoy, G., Kılıç, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. International Journal of Production Economics, 133(2), 662-676.

Gunsel, A., Siachoub, E., Acar, A.Z., (2011), Knowledge Management And Learning Capability To Enhance Organizational Innovativeness, Knowledge 5th International Conference, Procedia Social and Behavioral Sciences 24 (2011) 880–888

Hage J., (1980), Theories of organizations. New York: Wiley.

Hult G, Tomas M, Hurley RF, Knight GA., (2004), Innovativeness: its antecedents and impact on business performance. Ind Mark Manage;33:429–38.

Hurley RE, Hult GTM., (1998), Innovation, market orientation and organizational learning:an integration and empirical examination. J Mark:62:42–54 [July].

Jiménez-Jiménez, D., Sanz-Valle, R., Innovation, Organizational Learning, and Performance, Universidad de Murcia, Murcia, Spain Journal of Business Research 64 (2011) 408 417

Keskin H., (2006), Market orientation, learning orientation, and innovation capabilities in SMEs.Eur J Innov Manage 2006;9(4):396-417.

Liao, S., Fei, W., Liu, C., (2008). "Relationships between knowledge inertia, organizational learning and organization innovation", Technovation 28, 183–195.

Lyon D, Ferrier W., (2002), Enhancing performance with product–market innovation: the influence of the Top Management Team. J Manage Issues: 14(14):452–69.

Özdevecioğlu, M, Biçkes, D.M., (2012), The Relationship of Organizational Learning and Innovation: A Study on Large-Scale Enterprises, Erciyes University Faculty of Economics and Administrative Sciences Journal: 39, ss. 19-45

Porter, Michael E. (1990). Competitive Advantage: Creating and Sustaining Superior Performance, New York: Free Press.

Rogers EM., (1995), Diffusion of innovations. New York: The Free Press; 1995

Scherer EM., (1992), Schumpeter and plausible capitalism. J Econ Lit 1992;30:1416–33.

Senge PM., (1990), The fifth discipline: the art & practice of the learning organization.London: Ramdom House.

Simpson, P., M, Siguaw J., Enz C.A., (2006), Innovation orientation outcomes: the good and the bad. J Bus Res;59:1133-41.

Slater SF, Narver JC., (1995), Market orientation and the learning organization. J Mark; 59 (3):63-74.

Stata, R., (1989). Organizational learning—the key to management innovation. Sloan Management Review Spring, 63-74.

Thornhill Stewart., (2006), Knowledge, innovation and firm performance in high- and low technology regimes. J Bus Venturing;21(5):687–703.

- Tippins MJ, Sohi RS., (2003), IT competency and firm performance: is organizational learning a missing link. Strateg Manage J;24(8):745–61. Jay, W., (2003)., The University of QueenslandExploring The Role Of Learning Capabilities In Innovation-Based Competitive Strategy, Organizational Learning and Knowledge, 5th International Conference
- Jay, W., Aron, O., Craig, J., (2006) Does industry matter? Examining the role of industry structure and organizational learning in innovation and brand performance. J Bus Res 2006;59:37–45.
- Zahra, S., Ireland, R., & Hitt, M. (2000). International expansion by new venture firms international diversity, mode of market entry, technology learning, and performance? Academic of Management Journal, 43(5), 925-950. http://dx.doi.org/10.2307/1556420
- Zheng Wei, Yang Baiyin, McLean Gary N. (2010), Linking organizational culture, structure, strategy, and organizational effectiveness: mediating role of knowledge management. J Bus Res 2010;63(7):763–71.