Organizational Learning Culture as a Vital Source of Innovative Culture and Innovation (Case Study: Saderat Bank of Iran)

Elaheh Alhouei Nazari *

* Payam Noor University, West Tehran Branch. Address: 44 Baharan Complex, Shahr-e-Ziba, Kashani St, Tehran, Iran Postcode 14878-73353

Abstract

This article explores the impact of organizational learning culture on innovative culture and innovativeness of North Supervision employees at Saderat Bank of Tehran, Iran and also formulates and tests a model of innovativeness improvement to analyze how organizational learning culture affects innovative culture and innovation. The research model along with the hypotheses is developed from the related literature and tested based on the data collected through a survey method at Saderat Bank of Iran. The results show a positive and statistically significant relationship between organizational learning culture and innovative culture and innovativeness by confirming 4 out of 5 hypotheses. Findings highlight a range of strategic benefits for managers, resulting from fostering the enhancement of all three dimensions of organizational learning culture to obtain innovation which is the main engine for organizations to be sustained within the uncertain market and generates a powerful mechanism for competitive advantage.

© 2014 Published by RRAMT France Ltd.

Keywords: Innovation, innovative culture, organizational learning culture, Saderat Bank of Iran;

1. Introduction

In today’s dynamic worldwide business surroundings, organizational learning culture plays a crucial role in creation of a competitive advantage in the organizations. Technological advancements, dynamic customer demands, augmenting globalization, the blurring of organizational boundaries and increasing competition are all uniting to produce organizational surroundings “more turbulent and volatile than ever before” (Parry & Proctor-Thompson, 2003, p. 377). Organizations that are able to learn stand a better chance of sensing events and tendencies in the marketplace (Tippins & Sohi, 2003). As a result, learning organizations are usually more flexible and faster to reply to new challenges than competitors (Slater & Narver, 1995), which enables firms to sustain long-term competitive advantage (Dickson, 1996). Lawson and Samson (2001, p.380) declared that compare to 1980s and 1990s, “today’s organizations confront with an additional challenge-the requirement to innovate, not just occasionally but often, quickly and with a solid success rate”. This requirement puts pressure on organizations to seek for new ways for being creative and innovative. Empirical research shows that organizational learning culture (Škerlavaj et al., 2007) and innovative cultures (Škerlavaj et al., 2010) improve organizational performance of modern enterprises. In order to confront with a variety of challenges, organizations need to construct their core competencies and sustain their competitive advantage. Particularly, knowledge generation and dissemination are more crucial than they have been in the past (Powell & Snellman, 2004; Wilson & Gattell, 2005).
Progress in the areas of trade and taking advantage of the benefits of technological advancements depends on the banking progress and also in today's changing world, banking progress is not possible by gradual change and it requires mutations that merely will emerge by creativity and innovation. In this regard, to keep pace with the changing environments and exploiting the opportunities, recognizing the internal strength points such as employee’s individual creativity, innovation and also organization is essential. The main goal of this research is studying the impact of organizational learning culture on innovative culture and innovativeness at Saderat Bank of Tehran, Iran because of the lack of these factors in this organization.

2. Literature review

2.1. Organizational culture

Organizational culture is generally understood as the social glue that bonds organizational members together and makes them feel a strong part of the organizational experience which is useful to attract new staff and retain the best performers. Schein (1992) recognized organizational culture as a pattern of basic assumptions – invented, discovered or developed by a given group as it learns to deal with its problems of external adaptation and internal integration. Such a pattern has worked well enough to be taken into account valuable, to be taught to new members as the right way to perceive, think and feel in relation to those problems. Organizational culture is a source of sustained competitive advantage (Barney, 1991), it is also an important factor to enforce innovation (Fontana, 2009) and empirical research shows that it is a key factor to organizational effectiveness (Denison, 1990; Gordon and Di Tomaso, 1992). The complete knowledge and awareness of organizational culture should help to improve the ability to analyze the behavior of organization which aids to manage and lead (Brooks, 2006). An organization's cultural norms have strong impact on all who are involved in the organization. Those norms are almost invisible, but if we would like to improve performance and profitability, norms are one of the first places to examine (Stewart, 2010). Maximizing the value of employees as intellectual assets requires a culture that advances their intellectual participation and facilitates both individual and organizational learning, new knowledge creation and application, and the willingness to share knowledge with others (Dasanayake & Mahakalanda, 2008).

2.2. Organizational learning culture

This research has focused on an important organizational capability—organizational learning culture (OLC). The concept of organizational learning culture is derived from organizational learning and learning organization concept, and refers to when an organization identifies learning as definitely crucial for its business success (Wang, Yang, & McLean, 2007). There have been multiple efforts to clarify organizational learning and its various viewpoints. To present just few of them, Argyris and Schön (1996) declare that organizational learning appears when organizations acquire information (knowledge, understanding, knowhow, techniques and procedures) of any type by any means. Senge (1990) defines organizational learning as ‘a continuous testing of experience and its transformation into knowledge available to the whole organization and relevant to their mission’, while Huber (1991) sees it as a combination of four processes: information acquisition, information distribution, information interpretation and organizational memory. Spector and Davidsen (2006, p. 65) assert that ‘learning is basically about change’. If no behavioral or cognitive changes happen, organizational learning has not actually happened and the only thing that remains is unused potential for improvements (Fiol & Lyles, 1985; Garvin, 1993). Firms that have improved a strong learning culture are good at creating, acquiring and transferring knowledge, as well as at changing behavior to reflect new knowledge and insight (Huber, 1991; Garvin, 1993). Jones (2000) emphasizes the significance of organizational learning for organizational performance explaining it as ‘a process through which managers attempt to increase organizational members’ capabilities in order to better understand and manage the organization and its environment to accept decisions that augment organizational performance on a continuous basis’ (Jones, 2000, p. 472). There is a considerable consensus that the key competitive advantage of organizations lies in their ability to learn and to be responsive to challenges from both internal and external business environments (Škerlavaj et al.,
2007). According to Heo (2008), organizational learning culture depends on the acquisition of information, the interpretation of information and the creation of organizational knowledge, so the learning culture can bring about maximizing the capability of innovation in a high performance organization. Sanchez (2005) said that ‘knowledge has a value to organizations only when it is applied in action within an organization’s processes’ (p. 12) and that ‘organizational learning can be said to happen when there is a change in the content, conditionality, or degree of belief of the beliefs shared by individuals who jointly act on those beliefs within an organization’ (p. 16). Organizational learning culture is a culture that the process of information acquisition, information interpretation, and behavioral and cognitive changes can be extremely valuable. When information is acquired it needs to be interpreted and transformed into action in order to be able to say that organizational learning has occurred. Organizational learning process should therefore convert information into knowledge. According to Škerlavaj et al. (2010), the employees should be advised in flexible organizational learning culture that changes in economic, political and organization structures can importantly change the way of innovation in the workplace and it may be essential to alter the basic process, that through which, work is done and they will be ready for a new job.

2.3. Innovativeness and organization

Innovation enables organizations to alter as their environment alter, giving them two alternatives: to innovate or to die (Storey, 2000). The typologies of innovation are numerous (Han et al., 1998). The most often used are those that discern between product versus process innovation, incremental versus radical, and technical versus administrative innovations. The categorization of innovations either as technical or administrative responds to the “dual core” model developed by Daft (1978) who categorizes the organizational operations into two domains: (1) administrative innovations (2) technical innovations. According to authors (e.g. Damanpour et al., 1989; Han et al., 1998), it can be considered that a technical (product and service) innovations need to be combined with administrative (process) in order to get a complete picture of organizational innovations. Therefore, according to Škerlavaj et al. (2010), organizational innovativeness is comprehended as a combination of two constructs: (1) innovative culture and (2) innovations in products and services (technical innovations) and in processes (administrative innovations). If organizations want to develop an effective innovation, it is essential to improve the innovative culture, so all organization employees analyze ceaselessly the customer requirements and the market development in order to introduce innovations and become a modern and updated organization. Simpson, Siguaw & Enz (2006) indicate that firms require an ability to innovate ceaselessly, for this they must have a set of organization-wide shared beliefs and understanding. Therefore, firms should adjust their cultures in order to develop the innovative culture. Innovativeness “hints a firm being proactive by exploring new opportunities rather than merely exploiting current strengths” (Mengue & Auh, 2006) and so, it is considered as fundamental to an innovative attempt capable of surpassing the customer’s anticipations. Dombrowski et al. (2007) recognize eight main components of organizational innovative culture: (1) Innovative mission and vision statements (2) A culture of democratic, lateral communication without the chains of hierarchy to attract and maintain talented individuals who are so essential for pursuing experimentation and innovation (Hamel, 1999) (3) Forms of safe innovative environments that permit for the enigmatic innovation process (4) Flexibility (5) Collaboration across various organizational boundaries (6) Sharing and teaching amid and through business units and alliances can be an impressive way of advancing collaborative innovation (De Long & Fahey, 2000) (7) Encouraging plans on the basis of work teams can promote innovative culture (8) Leadership is indispensable to encourage innovation, for which is essential great ambitions, a flexible explanation of their businesses, and a habit of experimentation. According to Chang (2008), firm’s innovation was importantly accounted by organizational learning culture and positively affected by the interaction between the type of organizational learning and environmental uncertainty. Usually, innovations involve changes in working practices and social organization that intimidate established hierarchies. Therefore, there are occasions that innovations bring about resistance that may intimidate the project and even lead to it being abandoned (Smith, 2007). Studies suggest that innovation supportive culture is reflected by organizational structure and daily practices of the organization and comes from core values of the organization. The values are backbone of the culture and foster the innovation process (Leonard-Barton, 2007). Moreover, the higher
level of innovation is pertained to organizational culture which puts emphasis on learning, development and participative decision making (Hurley & Hult, 1998). The ability of a firm to identify the value of new idea or information and implement it commercially depends on organizational learning capability. Innovativeness is supposed to be especially important when the firm is confronted with substantial market turbulence and other kinds of environmental disturbances (Hult et al., 2004), because it encourages a wider and stronger innovation attempt to deal with the environmental change.

3. Methodology

3.1. Research goal

This survey aims to demonstrate conceptualization, measurement and examine the impact of organizational learning culture on innovative culture and innovativeness at Saderat Bank of Iran. Another objective is to help the organizations to develop appropriate strategies to enhance organizational learning culture that conducts to superior creativity and intends to provide useful recommendations for Bank managers.

3.2. Sample and data collection

The survey of this study is conducted on 384 employees of Saderat Bank in offices and branches in North Supervision of Tehran, Iran. A total of 417 surveys were distributed and 384 were returned, so empirical data were collected through this survey and questionnaires were addressed to executive managers and bank cashiers to estimate whether they have adequate knowledge of the organizational culture and performance within their organization or not. Among the respondents 12.5% were managers of the branches, 13.5% assistants of the branches, 51% cashiers and 22.9% of them had other positions at the bank. In this study, Škerlavaj et al. (2007) instrument was used with three constructs and 42 items on five point Likert scales in order to measure organizational learning culture. Items from Daft (1982), Tsai (1997) from Liao et al. (2008), Wang and Ahmed (2004) for innovations and from Hurley and Hult (1998) for innovative culture were used in order to measure innovativeness.

3.3. Analyses and results

In this research, main part of the data was obtained through valid and reliable structured questionnaires in order to test the hypotheses so, Cronbach alpha reliability analyses was performed in order to test reliability of the questionnaires. Therefore, questionnaires were designed and presented to the respondents, consisted of 60 questions with 5 key elements of the research to test the hypothesized relationships between the organizational learning culture dimensions, representing information acquisition, information interpretation and behavioral and cognitive changes, constructs comprising innovativeness; innovative culture and innovations, which are made of technical (product and service) and administrative (process) innovations. According to the model, the impact of independent variables on dependent variables was investigated by using T-statistic and standard coefficient. Exploratory factor analysis of items related to the information acquisition, information interpretation, behavioral and cognitive changes, innovations (technical and administrative innovations) and innovative culture indices was investigated by using T-statistic and standard coefficient. Exploratory factor analysis (EFA) using varimax rotation was conducted. Exploratory factor analysis (EFA) is appropriate in the early stages of research, prior to further confirmatory factor analysis (CFA), to identify key items and eliminate weak factors (Tabachnick & Fidell, 2001). The ultimate aim was to establish a model that makes both theoretical sense and has a logical correspondence to the data (Jöreskog, 1993; Prajogo & McDermott, 2005). The results of fitting the structural model to the data show that the model had a good fit. The
sample size was determined to be adequate for conducting an exploratory factor analysis based on the Kaiser–Meyer–Olkin sampling statistic (Tabachnick & Fidell, 2001). Structural equation modeling (SEM) was conducted with the LISREL program, assessing confirmatory measurement models (factor analysis) and confirmatory structural models (path analysis). This study assessed the hypothesized structural equation modeling using Jöreskog and Sörbom’s LISREL 8.50 program.

3.4. Hypotheses development

Organizational learning process is a sequence of three stages: information acquisition, information interpretation, and behavioral and cognitive changes. Information can be considered as a raw material for learning. Then, this information requires to be converted into meaning via the information interpretation stage. Organizations that esteem the interpretation of information use face-to-face and electronic channels both internally and externally. For learning to occur, information needs to be acquired, understood and above all convert into action (Garvin, 1993). Both behavioral and cognitive changes in the functioning of organizations are required for learning to be effective (Murray & Donegan, 2003). In order to prove that an organization has a strong learning culture, we should put high significance on three stages of the process of organizational learning. Based on the literature, five hypotheses generated as follows:

Hypothesis (1): Investigating the impact of information acquisition on the information interpretation.

H0: Information acquisition does not have a statistically significant (direct) impact on the information interpretation.
H1: Information acquisition has a statistically significant (direct) impact on the information interpretation.

If the absolute magnitude of T-statistic is less than the standard value of the table which is 1.96, we conclude H0 and if the absolute magnitude of T-statistic exceeds 1.96, we conclude H1. The absolute magnitude of T-statistic equals to 8.41 and exceeds the standard value of the table which is 1.96, thus we conclude H1 that is, Information acquisition has a statistically significant (direct) impact on the information interpretation and the impact equals to 66% and it is positive (direct).

Hypothesis (2): Investigating the impact of information interpretation on the behavioral and cognitive changes.

H0: Information interpretation does not have a statistically significant (direct) impact on the behavioral and cognitive changes.
H1: Information interpretation has a statistically significant (direct) impact on the behavioral and cognitive changes.

The absolute magnitude of T-statistic equals to 8.41 and exceeds the standard value, which is 1.96, so we conclude H1, that is, information interpretation has a statistically significant (direct) impact on the behavioral and cognitive changes and the magnitude of impact equals to 0.65 which is positive (direct).

Another set of hypotheses should relate organizational learning culture to innovativeness. Positive changes in the way people act (behavioral changes) and perceive their internal and external environments (cognitive changes) are anticipated to have a positive effect on both innovative culture (Kandemir & Hult, 2005) and also technical and administrative innovations. Particularly, changing actions and cognitive maps of an organization’s members should lead to the understanding of this fact that innovation proposals are welcome in organizations and people are encouraged to experiment in order to be creative, and in higher level of managerial support and seeking for innovative ideas and creative processes. Therefore, strong organizational learning culture supports values and beliefs pertained to innovative culture. In line, culture that values creativity, experimentation and innovation should bring about more technical and also administrative innovations.

Hypothesis (3): Investigating the impact of behavioral and cognitive changes on innovative culture.

H0: Behavioral and cognitive changes do not have statistically significant (direct) impact on innovative culture.
H1: Behavioral and cognitive changes have statistically significant (direct) impact on innovative culture.
The absolute magnitude of $T$-statistic equals to 7.38 and exceeds the standard value of the table which is 1.96, so we conclude $H_1$, that is behavioral and cognitive changes have statistically significant (direct) impact on innovative culture and this impact equals to 42% and it is positive (direct).

**Hypothesis (4): Investigating the impact of innovative culture on technical and administrative innovations.**

$H_0$: Innovative culture does not have a statistically significant (direct) impact on technical and administrative innovations.

$H_1$: Innovative culture has a statistically significant (direct) impact on technical and administrative innovations.

The absolute magnitude of $T$-statistic equals to 4.78 and exceeds the standard value of the table which is 1.96, so we conclude $H_1$, that is innovative culture has a statistically significant (direct) impact on technical and administrative innovations and the amount of this impact equals to 83% and it is positive (direct).

Organizations that have a strong learning culture are good at creating, acquiring and transferring knowledge and also at modifying behavior to reflect new knowledge and insight (Garvin, 1993). Simultaneously, a strong organizational learning culture means that an organization learns and acts faster and hence better in dealing with its innovation processes. Organizational learning culture should also have a direct link to augmented technical and administrative innovations. If members of an organization have the essential information, completely understand its meaning and occasions and are able to convert into action, this should mean that can be more innovative.

**Hypothesis (5): Investigating the impact of behavioral and cognitive changes on technical and administrative innovations.**

$H_0$: Behavioral and cognitive changes do not have statistically significant (direct) impact on technical and administrative innovations.

$H_1$: Behavioral and cognitive changes have statistically significant (direct) impact on technical and administrative innovations.

The absolute magnitude of $T$-statistic equals to -1.03 and it is less than the standard value of the table which is 1.96, thus we conclude $H_0$, that is behavioral and cognitive changes do not have statistically significant (direct) impact on technical and administrative innovations of North Supervision employees at Saderat Bank of Tehran, Iran.

In Fig.1, the conceptualized research model has been illustrated in which all the main constructs are shown together with the hypothesized relationships among them.

![Figure 1. The conceptualized research model (made by author)](image)
Studying the impact of independent (exogenous) variables on dependent (endogenous) variables in the model

Confirmatory factor analysis (Figure 2):

The above diagram indicated the measurement model in the case of estimation. The results of estimation (beneath of the model) indicated that the model was not fit (poor fitting). With regard to the output of LISREL, the magnitude of $\chi^2$ per degree of freedom equals to 5.53 and exceeds 3 which is not fit. Highness of the magnitude of this Index indicated the remarkable difference between the conceptualized research model and the observed data of the research. Thus, the output, indicated RMSEA = 0.109 in the model which exceeded 0.08, besides $\chi^2$, the lesser the magnitude of RMSEA index, the fitter the model. The model was modified and after some stages of modification, the following model was obtained.

Studying the impact of independent variables on dependent variables after modifying the model

Confirmatory factor analysis after modifying the model (Figure 3):

Chi-square=176.01, df=67, P-value=0.00000, RMSEA=0.065
Studying the impact of independent variables on dependent variables and testing the hypotheses of the research (Figure 4)

The above diagram shows the modified measurement model in the case of standard estimation. The results of estimation (beneath of the model) indicated that the model had good fitting. Regarding to the output of LISREL, the magnitude of $\chi^2$ per degree of freedom equals to 2.63 and it is less than 3 which is fit. Lowness of the magnitude of this index indicated the negligible difference between the conceptualized research model and the observed data of the research. Thus, the output shows the magnitude of RMSEA = 0.065 in the model which is less than 0.08, besides $\chi^2$, the lesser the magnitude of RMSEA index, the fitter the model. The model had good fitting on the basis of the above criteria. The magnitude of chi-square per degree of freedom was less than 3. Thus, the magnitude of RMSEA was equal to 0.065 and it was less than 0.08 and (GFI – AGFI – NFI – NNFI – IFI – CFI) indices all exceeded 0.90 or were close to 0.90, so the model had good fitting and was confirmed, therefore the impact of independent variables on dependent variables was studied by using T-statistic and coefficient of standard according to the model.

4. Discussion

In this research, innovativeness was evaluated by using two constructs of innovativeness that are innovative culture and innovations. This study proposed the construct of innovation capability by developing organizational learning culture to describe the ability of Saderat Bank employees to achieve effective performance. A mix of exploratory and confirmatory approaches was used to generate the model. From the fundamental point of view, five relationships were assumed among the constructs of interest. In the final version of the model, four of them were found to be statistically significant. Putting a high degree of importance on various channels of information interpretation causes greater action regarding behavioral and cognitive changes which means that much learning has actually occurred. Hypotheses 1 and 2 indicate that organizational learning is a process in which information is observed as a raw material which can be transformed into action. Organizations that put much value on the acquisition of different information types will have a better understanding and interpretation of the acquired information. Acquisition of information positively impacts on the interpretation of information. Firms that ascribe a high level of significance to the elements of this process integrate them into their set of norms and values and may be considered to have an organizational learning culture (Škerlavaj et al., 2007). The results of the research show that the behavioral and cognitive changes did not have any statistically significant impact on technological and
administrative innovations of North Supervision employees at Saderat Bank of Tehran, Iran. It is evident that positive impacts of achieving an organizational learning culture regarding augmented administrative and technical innovations reveal both directly and indirectly by means of innovative culture. Acquisition of information and interpretation of information which are main components of organizational learning culture have statistically significant strong impact on innovations. Organizational learning culture also had a direct positive impact on innovations by means of innovative culture (Hypotheses 3 and 4). Behavioral and cognitive changes mean transforming the words into actions and holding firmly the opportunities that ends the organizational learning cycle, but these changes did not have any impacts on innovations of North Supervision employees at Saderat Bank of Tehran, Iran. The research has shown that organizational learning culture has a statistically significant impact on organizational innovations. Each of these findings will help the organizations to elucidate the effectiveness and efficiency of the organizational learning culture’s implementation to workplace innovation in which they are encountered with unpredictable global and economic challenges. Innovativeness is a form of organizational culture that encourages innovation. When the environment of the workplace is good, the employees can successively learn and share their knowledge. The organizational learning culture should change according to the workplace demands because dynamic environmental settings product and service preferences are constantly changing, so learning organizations should be aware of this information and react consequently engaging in broad innovative activities to meet customers’ demands specially at Banks and also employees should adapt themselves to these changes. This would allow a superior corporate response to the market needs through organizational innovation. Effective innovation has to be based on a clear focus of organization’s customer. The results show that organizational learning culture has a deep impact on the performance of employees that can result in improving the productivity and enhance the innovative culture and innovativeness, so on the basis of this study we can conclude that organizational learning culture has a positive impact on the employee’s innovation.

5. Conclusion and key recommendations

Today’s organizations operate in a very complex environment in consequence of the financial crises, technology changes, competition, and globalizations and managers should pay more attention to improve organizational innovativeness by developing the organizational learning culture in the organizations in order to respond to external and internal challenges due to the substantial consensus that their learning is the key to competitive advantage. Obviously, it can be concluded that more attention has to be paid to develop an organizational learning culture in order to enhance organizational innovativeness. This can be attained by cultivating an environment in which the employees can and should successively learn and share their knowledge. Thus, organizational learning culture must be pliable in order to accept more changes in the demands of the workplace, that learning support is updated in an appropriate manner and helps employees of the organization adjust themselves with the important changes of external environment. According to the findings, among the indicators mentioned, the behavioral and cognitive changes are the most significant indicators that play a crucial role in innovativeness and innovation, but as mentioned in the analysis of the findings, in this study, the behavioral and cognitive changes as one of the dimensions of organizational learning culture had no statistically significant impact on technological and administrative innovations of North Supervision employees at Saderat Bank of Tehran and it was lower than the average. Thus, the following suggestions will provide techniques to strengthen this aspect at Saderat Bank of Iran:

• Make effort to reduce the environmental pressures of the employees’ workplace and improve their job satisfaction.
• Attention to the average productivity of employees in the organization.
• Struggle to improve the overall atmosphere of the organization.
• Improve the personal communication between top managers and employees.
• Raise the employee’s level of understanding of the strategic orientation and major problems of the organization.
• Attention to the efficiency of information systems within the organization and also team meetings’ efficiency.
• Raise the quality of the presented services of Saderat Bank to customers and try to increase the number of services.
• Introduce the new marketing approaches in the organization.

References