

Studying the Effects of Organizational Learning Based on Organizational Learning Dimensions on its Levels and Organizational Culture

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ABSTRACT

This study aims at investigating the effects of organizational learning on organizational culture in ArjanNovin Oil Factory of Behbahan. This study is an applied survey. Statistical population is the total of 382 individuals but based on Morgan table, sample volume has been calculated as 191 workers using simple random sampling method. To collect data, standardized questionnaires have been utilized which consist of 66 and 60 questions on organizational learning and culture, respectively. Questionnaire validity has been confirmed by the experts and scholars. For measuring the reliability, Cronbach's Alpha coefficients of organizational culture and learning were computed as 87.0 and 79.0, respectively. Questions were tested by the use of spss software and linear regression method. Data analysis results indicate that learning has 7 dimensions including team learning, continuous learning, inquiry and dialogue, empowerment, embedded system, system connection and strategic leadership. Learning levels have been discussed and shown that learning strategies affect the organizational culture as correlation coefficients of it were calculated as 0.181, 0.205 and 0.612 at three levels of individual, group and organization, respectively.

KEYWORDS: Marsick and Watkins pattern, organizational learning, organizational culture, embedded system.

INTRODUCTION

Businesses including virtual or network organizations encounter a challenging and competitive environment due to expanding the economy scope, developing the knowledge and technologies and appearing new paradigms. Evidently, competitive advantages are likely to be changed in such environments. Learning is considered as the best competitive advantage for these new business paradigms. Consequently, an organization can be regarded as a small community which has a set of values regarded as organizational culture of that organization or business affecting the possibility of organization and management techniques and concepts' successful implementation (Alireza Amirkabiri, 2011, p. 35). Today's environment is a complicated and unpredictable one (Frankema, Rosendaal & Taminiiau, 2006, p.291) and organizations constantly face with social developments such as technological progress, increase in world competition and globalization (Govaerts, Kyndt, Dochy & Baert, 2011, p. 35).

In such environment, some will be successful but some encounter a failure. Now, we should answer this question "what distinguishes successful organizations from unsuccessful ones?" In this regard, De Geus (1997) argues that when an organization's learning ability is faster than the competitors, it can be considered as a competitive advantage. Organizational learning improves the organization abilities in order to encourage and apply knowledge in accordance with outside changes (Loon Hoe, McShane, 2010, p. 364).

RESEARCH BACKGROUND

The term "organizational learning" was first used by Siret and March in studying behavioral aspects of organizational decision making in 1963, however regardless the starting date of organizational learning discussion, this subject did not attract scholars' attention until late 1970s. Then, some theorists including Argyris focused their investigations on organizational learning. In 1990s, organizational learning was discussed just in various management fields such as strategic and production management. Afterwards, the discussion was influenced by new management discussions including learning organizations. Organizational learning is influenced by new management subjects such as learning organizations. According to Argyris, organizational learning is the product of researches and investigations in the organization.

When a process's expected consequences are contrary to the actual results, one person seeks to understand this contradiction and if necessary, he/she takes measures to solve the problems. Through this organizational inquiry, the

individual interacts with the other members and finally, learning event is happened in the organization; in other words, learning directly is the basic product of interactions. The term “culture” is applied by the anthropological scholars and researchers and has a wide range of concepts so that it is of high applications in a variety of social sciences. Specifically, culture was used by Talor in the late 1990s and then, appeared in the anthropological studies (1832-1917). Organizational culture is regarded as one of the most recent words in the management literature in which many management theorists and experts have been interested during recent years (Peters & Waterman, 1969). Peters and Waterman have emphasized the organization’s culture as a key requirement to be successful in the market.

Organizational learning: at organizational levels, it refers to the systems, procedures and acceptable instructions for all the organization members and at group levels, indicates the common values, attitudes and expected behavioral patterns transformed into the databases which are easily to be accessible by each member in the organization (Alireza Amirkabiri, 2011, pp369-370). Simon (1991) has defined the organizational learning as the knowledge growth, structure renovation and successful reviews of problems. Organizational learning whose results are reflected in the structural factors and organizational achievements by the individuals is regarded as a social process which provides opportunities to make the organizations repeat their past successes. In fact, organizational learning is a way to achieve a competitive advantage (Hong, 1999, p173).

Organizational learning model of Marsick and Watkins has focused on three following components which lead to

- 1- The organizational learning at the level of systems,
- 2- The creation and management of knowledge consequences and finally,
- 3- The improvement of organization performance.

Its market value is measured through assessing the financial and non-financial assets (Jyothibabu et al., 2010, p305).

Seven components of learning organization are as follows:

1. Continuous learning: it presents the organization attempts to provide the opportunities of continuous learning to the members.
2. Embedded system: it points to the attempts done in order to create the systems for attracting and sharing the learning event.
3. System connection: it reflects general thought and practices so as to connect internal and external environments of organization.
4. Inquiry and dialogue: it refers to organization measures to create culture of questioning, answering and testing (ibid, p305).
5. Team learning: it is the idea of effective cooperating and enjoying team work (Weldy& Gillis, 2010, p461) and a process to expand and coordinate the capacities of group members so that the resultant consequences are those that all the members want (Bui & Baruch, 2010, p214).
6. Empowerment: it indicates the organization process in order to create and share collective attitudes and receiving feedback from members on the existing gap between current situation and new views.
7. Strategic leadership: it shows the extent to which leaders strategically think on how to use learning to change and move organization in new directions or new markets (Jyothibabu et al., 2010, p305). Strategic leadership acts as the catalyst which accelerates the learning process (Bontis, Fitz-enz, 2002, p. 226).

Strategic learning leadership: it indicates the degree to which the leaders think and make decisions in a strategic manner on how to apply the learning event in order to bring some changes and push the organization in new directions or markets (Jyothibabu et al., 2010, p305).

Peter Senge has defined four fundamental elements of learning as follows:

Practice: performing the tasks based on the experience framework

Reflection: observing the practices and thoughts of self and inspecting the performed actions

Connection: creating new ideas to take actions and organize them in new forms

Decisions: selecting the most appropriate approaches out of presented possibilities at connection stage and arranging the trends to do actions

These four elements are applied as learning rings of individual, group and organization.

Individual learning: Peter Senge (1990) emphasizes that individuals are the fundamental components of teams and organizations contributing to the learning of individuals. Although individual learning does not guarantee the organizational learning, it cannot be created without individual learning. Individual commitment to the learning and his/her learning ability are vital for the organization.

Team learning: In today’s complex companies, teams are of high importance. Team learning means that teams are able to think, innovate and learn as a united identity. Senge and Pavlovski have pointed out that team learning serves as a bridge to achieve the organizational learning, practice the experiences into new strategies and spread the acquired knowledge quickly throughout the organization.

Organizational learning: Sharing the knowledge, experiences and mental models of members leads to an organizational learning (Senge, 1990).

Organizational Culture: From the viewpoint of Eliot Jacks, organizational culture refers to prevalent or conventional procedures to think and take measures which should be learnt or at least accepted by the organization members or new comers to a large extent (Jack W. Duncan, 1989, p299). Organizational culture is seen as a framework for the workers and managers in order to determine their decision making behavior and manners and they should rely on these guidelines to achieve the organizational goals. In fact, organizational purposes are identified and originated from culture (Stoner & Gillbert, 2010, p306). Organizational culture is regarded as a combination of values, attitudes, concepts, hypotheses and norms which are shared by the members and accurately taught to new comers (Daft, 2005). It has been argued that organizational culture may be an important key by which managers can guide their businesses and companies (Smircich, 1983).

RESEARCH METHODOLOGY

This study is of applied survey type. To complete the theoretical and research literature and collect necessary data on statistical population, library method and field research have been applied. Closed questionnaire has been administered to collect field information. Questionnaire validity has been confirmed by some management scholars and professors. To evaluate the questionnaire reliability, Cronbach’s Alpha coefficients of 87.0 and 79.0 were given for organizational culture and learning questionnaires at an acceptable level while presenting a sample of 30 workers of ArjanNovin Oil Factory in Behbahan. Among total of 722 workers, 191 workers have been selected out of 382 individuals with diploma degree based on Morgan table. A simple random sampling method was utilized to distribute the questionnaires. Then, data and questions were analyzed and examined using linear regression method and with SPSS software. The research results indicate that organizational learning dimensions and its levels have impacts on the organizational culture.

DATA ANALYSIS

H₀₁: Organizational learning dimensions affect the organizational culture.

Table1: Predicting the organizational culture using organizational learning dimensions of Watkins and Marsick

Organization learning dimensions	Continuous learning	Inquiry and dialogue	Team learning	empowerment	Embedded system	System connection	Strategic leadership
Correlation coefficient	0.478	0.467	0.584	0.740	0.457	0.943	0.491
Coefficient of Determination	0.229	0.219	0.341	0.584	0.208	0.890	0.241
Calculated F	47.447	44.749	82.616	193.753	42.146	1.552	50.904
	1.916	2.323	1.885	1.489	2.136	0.351	1.965
	0.497	0.412	0.530	0.638	0.504	0.939	0.413
Significance level	0.000	0.000	0.000	0.000	0.000	0.000	0.000
H	No	No	No	No	No	No	No

H₀₂: Organizational learning levels affect the organizational culture.

Table2: Predicting the organizational culture using organizational learning levels of Senge

Organizational learning levels	Individual level	Group level	Organization level
Correlation coefficient	0.181	0.205	0.612
Coefficient of Determination	0.033	0.042	0.374
Calculated F	6.417	8.263	112.990
	3.513	3.944	1.699
	0.202	0.159	0.453
Significance level	0.012	0.005	0.000
H	No	No	No

As the results of linear regression test have shown already, seven organizational learning dimensions of Watkins and Marsick influence the organizational culture (see tables1& 2).

H_M: Organizational learning affects the organizational culture.

H₀: Organizational learning has no effects on the organizational culture.

H₁: Organizational learning has impacts on the organizational culture.

Table3: Predicting the organizational culture using organizational learning variable

Regression coefficient		Significance level	Calculated F	Coefficient of Determination	Correlation coefficient
B	β	0.001	10.412	0.052	0.229
3.636	0.229				
0.203					

Linear regression expression: $Y = \frac{3}{636} + \frac{0}{203}$

According to table3, significant level of 0.001 is lower than error level of 0.05. H₀ is rejected and H₁ is accepted. Therefore, at certainty level of 95%, it can be confirmed that changes of organizational culture are likely to be predicted by those of organizational learning.

CONCLUSIONS

In this paper, it is tried to study the effects of organizational learning on the organizational culture of Arjan Novin Oil Company using Marsick and Watkins model. Based on the analyses and results revealed in current research, it can be found that seven dimensions of continuous learning, team learning, empowerment, embedded system, system connections, inquiry and dialogue and strategic leadership affect the organizational culture. It has been observed that correlation coefficients of 0.181, 0.205 and 0.612 were computed for three learning levels of individual, team and organization which have impacts on the organizational culture.

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