

Surveying of Organizational Culture and Management Behavior Affect in Organizational Innovation (Case Study: Agriculture Organization of Eastern Azerbaijan in Iran)

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Abstract: The purpose of this study was to explore how management behavior and organizational culture can affect organizational innovation in Agriculture Organization of Eastern Azerbaijan (AOEA) of Iran. The study has used both correlation and descriptive-analytic methodologies. Samples of 186 employees (at least B.Sc. holders) (or experts) were randomly selected in AOEA of Iran. The data was collected by using the questionnaire and processed within SPSS and Minitab. The questionnaire as a research tool was initially developed based on an extensive review literature and finalized after pre-testing and faces validity by a team of experts. Results showed that despite importance of the two organizational factors; organizational culture and managerial behavior they were not supportive enough for facilitating suitable environment for organizational innovation in AOEA. Moreover, a rather low level of organizational innovation was observed as well as positive relationships were found between organizational factors and organizational innovation. In order to change the organizational structure of AOEA based on organizational innovation, it is recommended that informal organizational relationships should be encouraged; a decentralized planning system and participatory decision making need to be applied and formal, hierarchical and complicated control should be eliminated.

Key words: Management behavior • Organizational Culture • Organizational Innovation • AOEA

INTRODUCTION

This is a time of unprecedented change in our society. The changes one experiences are happening at faster and faster rates. Every organization goes through periods of transformation that can cause stress and uncertainty. To be successful, organizations must embrace many types of change [1]. Almost all today's organizations face a dynamic environment, characterized by rapid technological change, shortening product life cycles and globalization. Thereby, organizations need to be more creative and innovative than before to survive, to compete, to grow to lead and to success [2]. Additionally, the organizations are continually under competitive pressures and forced to re-evaluate come up with new innovations. Innovations have always been essential for the organizations' long-term survival and growth and currently play even more crucial role in the company's future to follow the rapid pace of markets' evolution [3].

Business and technological changes also are threatening organizational sustainability and modern management faces many challenges [4]. Therefore,

becoming an innovative organization is a means to compete in this dynamic and changing business environment [5].

One of the most serious challenges facing a company, particularly a high-technology firm, is how to manage innovation as the organization evolves [6]. It is apparent that in order to satisfy the customer's unlimited expectations, companies need to orientate themselves to their customers' wants, as well as latent needs and as a result provide products and services which are perceived to be valuable.

In fact, achieving successful innovation is not simple for most organizations as it innately cannot easily be interpreted [7]. A combination of innovative ideas and good organizational innovation management (OIM) is the key to sustaining competitive organizational innovation in the long-term [8].

An innovation can be a new product or service, a new production technology, a new operation procedure or a new management strategy to an enterprise [9],[10] As revealed by several researchers in this field, innovation is one of the paths to maintaining growing and promising

organizational performance [11]. It is also pinpointed as an essential element for sustaining competitiveness and ensuring an organization's future potential [12].

Organizational innovativeness is a complicated phenomenon. Conventional researches on organizational innovativeness have explored the determinants of an organization's propensity to innovate. Although researchers have analyzed the influence of individual, organizational and environmental variables [13], [14], most of the research has focused on organizational structure [15].

As Keegan and Turner (2002) managers play an important role in creating and facilitating innovative environment. Managing innovative ideas is an important step towards effective organizational innovation [16]. It is a strong predictor for the realization of innovative ideas and management of organizational innovation [17] as innovation begins with top management who believe organizational innovation is the way to survival. Top management with an effective leadership style also creates an environment for innovation within the company. It should be able to inspire and motivate the entire work force and encourage involvement, development and learning for the employees [18].

Christensen (1999) describes the management of innovation as an overriding responsibility of today's managers. Product innovation, for instance, entails developing new goods and services. Managing such innovation may help firms meet or even drive changing market demands. Likewise, process innovation involves creating or improving methods of production, service or administrative operations. Effective process innovation may enhance organizational efficiency and responsiveness [19], [20].

In regard to the factors affecting organizational innovation, as the literature showed, organizational culture plays an important role to create an innovative environment within organizations [20]. According to Jassawalla and Sashittal (2002) "an innovation-supportive culture is defined as a firm's social and cognitive environment, the shared view of reality and the collective belief and value systems reflected in a consistent pattern of behaviors among participants" (p 43). In addition, culture may provide an overarching frame of reference, helping align employee behavior with organizational objectives of innovation and meet paradoxical demands for control and flexibility organizational culture is defined broadly as a collection of values, beliefs and norms shared by its members and reflected in organizational practices and goals [20].

McGourty and his colleagues (1996) found that an organizational culture may be modified by specific management practices through strategic direction, employee selection, rewards and recognition, employee deployment, support of idea generation and multifunctional teaming to encourage innovative behavior.

Idea generation and innovation are two interrelated factors at the organizational environments. Innovation starts with ideas and therefore is regarded as an important variable of the innovation capacity of the organizations. The way individuals and organizations collect, disseminate, exchange and use knowledge influences idea generation. Additionally, management of the flow of technological information leads to generating ideas effectively as an important part of an organization's innovation capacity [21], [22].

According to Peters (1982) and Pinchott (1985) middle managers play an important role in informally encouraging employees to innovate and take risks. These middle managers provide political and organizational support for "skunk work" activities that result in innovative ventures [23]. Kanter (1985) and Quinn (1985) also noted the importance of middle managers in promoting autonomous or informal corporate entrepreneurial activities. Middle managers can do this by providing rewards (mostly intrinsic) that allow employees to experiment with and explore the feasibility of, innovative ideas [23].

Obviously, many organizational and environmental factors may affect on organizational innovation, but this research has mainly focused on the two important factors including management behavior and organizational culture. Reviewed in the literature, management and culture affect on the other organizational aspects, therefore it is vital to know how these two factors affect organizational innovation as well as how managers and policy makers should prepare necessary conditions, facilities and innovative environments for changing management behaviors and organizational culture in organizations.

Purposes and Objectives: The main purpose of this article was to explore how management behavior and organizational culture can affect organizational innovation in Agriculture Organization of Eastern Azerbaijan (AOEA). To do this, the research has mainly focused on the two important factors and the roles of other organizational factors such as external environment of the organization were not dealt with. The other objectives in this study were:

- To describe demographic profile of the respondents,
- To identify the employees' perceptions of AOEA towards management behavior,
- To determine the employees' perceptions of AOEA towards the organizational culture,
- To assess the level of organizational innovation and
- To analyze the relationships among two independent variables and organizational innovation.

Methodology: The study has used correlation and descriptive-analytic methodologies. The statistical population included the employees (Experts) who were working at Agriculture Organization of Eastern Azerbaijan in Iran (N=4710). Based on a regional classification of provinces into six regions, six provinces were randomly selected. Then, the affordable number of samples (the expert employees) was randomly selected in terms of frequency of employees at the AOEA's. The estimated size samples were 186 (n=186), when the Cochran formula of calculating size samples were used.

A questionnaire as a research tool was initially developed according to an extensive review of literature and finalized after both the pre test and the face validity process. Questionnaire reliability was estimated by calculating Cronbach's Alpha via SPSS software that is shown in the table 1.

Face validity of the questionnaire were also assessed by a panel of both agricultural extension

experts in AOEA and some faculty members at Islamic Azad University Tabriz and Bonab and Kaleybar branch. Some changes were made to the questionnaire as a result of review by panel of experts.

The questionnaire consisted of two separate parts. The first part included some questions about the quality of management behavior and organizational culture as independent variables. The second part included the questions about the level of organizational innovation as dependent variable. A Likert-type scale ranged from 1 (very low) to 5 (very high) was used to quantify the responses in all parts.

The data were collected by an interviewing team when using the questionnaire. Descriptive statistics i.e. frequencies, valid percents, the means and standard deviations were used to describe data. Spearman correlation test was also employed to determine whether or not relationships between independent variables and the level of organizational innovation as dependent variable.

Hypotheses Test: Hypotheses have been tested and evaluated by inferential statistic and the results were shown.

Table1 shows the results of Regression analysis of the behavior of management and organizational culture on organizational innovation.

Table 1: Results of reliability variables from SPSS software

Variables	Cronbach's Alpha
Organizational Culture	0.676
Management Behavior	0.868
Organizational Innovation	0.751

Table 1: Analysis regression between independent variables and dependent variable

Variables Entered/Removed(b)			
Model	Variables Entered	Variables Removed	Method
1	Management Behavior, Organizational culture(a)	0	Enter

a All requested variables entered.

b Dependent Variable: Organizational Innovation

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 1 (Constant)	38.420	1.930	19.902	.000	
Organizational Culture	.544	.078	.436	6.958	.000
Management Behavior	.466	.081	.360	5.748	.000

a Dependent Variable: Organizational Innovation

First Hypothesis: organizational culture affects organizational innovation level.

Since (sig) significant level test in independent variable (organizational culture) is less than 0.05. We can say that, organizational culture affects organizational innovation level. The impact of organizational culture on organizational innovation level is direct; because of Beta value is positive. The first hypothesis is confirmed by research.??

Second Hypothesis: Management Behavior affects organizational innovation level.

Since (sig) significant level test in independent variable (Management Behavior) is less than 0.05. We can say that, Management Behavior affects organizational innovation level. The impact of Management Behavior on organizational innovation level is direct; because of Beta value is positive. The second hypothesis is confirmed by research.??

Regression equation of the test is as follows:

$$X^2 = 38.42 + 0.544X' + 0.466\hat{Y}$$

This model is significant at 95%.

Findings: Demographic profile of the respondents showed that the average age of respondents was 38.7 (SD=8). Respondents had an average of 14 years of experience in their organization. About level of education, a majority of the respondents (68.3%) were at Bachelor or higher Level on agricultural science. Most of the employees (83.9%) were married.

The following parts present findings about the quality of management behavior and organizational culture based on the employees' perceptions:

Management Behavior: Table 1, shows the employees' perceptions of management behavior in AOE. As indicated in this table, management's efforts about encouragement and development of new ideas and new ways was calculated between low and moderate (M=2.46) and also applicable new ideas was not widely supported by management (M=2.55). According to employees' perceptions, managers evaluate employees moderately based on job analysis (M=2.89). About whether or not management like to face challenges and to accept different ideas, the mean magnitude showed a rather weak attitude of the management (M=2.11). Managers were moderately risk-taker in decision making (M=2.49) and their trying to recruit creative persons was somehow low (M=2.28).

Totally, the management behavior in this organization was assessed low to moderate and it shows that the management behavior is not suitable enough to provide necessary conditions for developing organizational innovativeness.

Organizational Culture: As shown in table 2, there is a rather moderate communication between management and employees for solving problems (M=2.62). In the organization, personnel were not encouraged to expand their capacity to achievement (M=2.08) and the organizations attempt to foster the employees' potential was definitely low (M=1.90). Based on workers perceptions, considering the failure as an opportunity was low (M=2.05) and emphasis on teamwork was low (M=2.18) the total mean (M=2.25) shows the organizational culture is not suitable for facilitating and developing innovation in organization.

Measuring Organizational Innovation: In this study, the level of organizational innovation as dependent variable was measured with some indicators related to innovative

Table 1: Employees' perceptions of the management behavior

Management behavior	n	Mean*	S.D
In my organization, management encourages the development of new ideas and new ways of operating	185	2.46	1.25
New ideas are supported by management	181	2.55	1.18
My manager evaluates employees based on doing job description properly	180	2.89	1.32
The management likes challenges and different opinions	179	2.11	1.17
Management is risk-taker in decision making	183	2.49	1.24
Management Considers to different matters from the employees' point of view	185	2.03	1.29
Management tries to recruit creative persons	177	2.28	1.30
In my organization, there is a specific system To follow employees' suggestions.	183	2.28	1.42
In my organization, employees' innovation and creativity is important and valuable	185	2.60	1.27
In my organization, there is enough authority and freedom for employees To do work	181	2.43	1.36
Management tries to solve problems by using participative decision making	178	2.54	1.23
Management uses different management styles on different situations	180	2.48	1.23
Management prefers to delegate the authorities of duties	181	2.81	1.34
Total	185	2.40	0.86

*Scale: 1 = very low, 2 = low, 3 = moderate, 4 = high, 5 = very high

Table 2: Employees' perceptions of the organizational culture

Organizational culture	n	Mean*	S.D
In our organization, there is a common way to communicate manager and employees for solving problems.	185	2.62	1.22
Personnel are continuously encouraged to expand their capacities to achieve more	182	2.08	1.08
Organization tries to foster the employees potential	185	1.90	1.25
Failure is seen as an opportunity learning and getting experiences	181	2.05	1.24
There is a strong emphasis on teamwork in our organization	180	2.18	1.24
Our organization has a widely belief that innovation is an absolute necessary for the organization's future	178	2.60	1.18
Employees are encouraged to continually look at things in a new ways	176	1.94	1.22
Confidence, trust and accountability are words which describe how management treats the employees	181	2.60	1.20
Employees are evaluated based on the value of their thought and ideas	185	2.01	1.23
In our organization, employees are the key to success	185	2.27	1.31
In our organization, employees decide the way of doing their jobs	183	2.14	1.27
There is a strong commitment to organization and it's goals	183	2.72	1.38
Employees feel that they are their own boss	185	2.08	1.30
Total	185	2.25	0.981

*Scale: 1 = very low, 2 = low, 3 = moderate, 4 = high, 5 = very high

Table 3: Employees' perceptions of Innovation and renewal in plans and procedures in organization

Descriptors	n	Mean*	S.D
New and different plans or activities in last two years	181	2.80	1.18
New and different ways in doing plans or activities	181	2.67	1.12
Trying to find new clients and customers	183	2.79	1.16
Replacing old methods and procedures with new ones	182	2.61	1.11
Testing new methods in doing organizational activities	183	2.39	1.03
Improving and modifying structure and rules for facilitating organizational activities	181	2.41	1.06
Setting new organizational units or departments	180	1.91	1.08
Total	182	2.51	0.85

Note: 1 = very low, 2 = low, 3 = moderate, 4 = high, 5 = very high

Table 4: Relationship between independent variables and organizational innovation

	Management behavior	Organizational culture
Organizational innovation	r= 0.593** Sig=0.000	r= 0.628** Sig=0.000

** : significant relationship at 0.01 level

activities and renewal in plans and procedures. As indicated in table 3, respondents assessed the level of innovation and renewal in plans and procedures between low and medium (M=2.51).

The level of organizational innovation as dependent variable was measured with some indicators related to Innovative activities and renewal in plans and procedures.

Correlation Between Independent Variables and Organizational Innovation: Table 4 shows the results of using Spearman correlation test to determine relationship between independent variables (management behavior and organizational culture) and organizational innovation as dependent variable. As shown, positive significant relationship at 0.01 levels was shown between management behavior and organizational innovation. Also a positive significant relationship was found between the organizational culture and the level of organizational innovation in this organization. According

to this finding, it can be suggested that the better organizational factors such as management behavior and organizational culture are; the higher level of organizational innovation will be.

CONCLUSIONS AND IMPLICATIONS

Based on the findings of the study, the following conclusions were drawn and recommendations made:

Organizational culture and managerial behavior as two important organizational factors were not supportive for facilitating suitable environment for organizational innovation. Moreover, a rather low level of organizational innovation was observed as well as positive relationships were found between organizational factors and organizational innovation. Accordingly, this indicates that existing organizational environment is not suitable enough to improve organizational innovation at different levels of the organization. Therefore, it is recommended

that structures and rules of the organization should be modified based upon an organizational innovativeness by supportive culture and environment.

It is felt that the managers need to behave and apply human oriented styles of management so that the employees are able to better create new ideas. To do this, a supportive reward system needs to be planned. In order to provide suitable environment for developing organizational innovation, it should be emphasized on the role of organizational culture and management behavior strongly.

Therefore, it is necessary the managers and other policy makers realize how organizational culture and management behavior should be modified in order to facilitate organizational innovation.

Finally, in regard to modify the organizational structure towards organizational innovation, the following suggestions are given:

- improving organizational innovation by creating informal relationships,
- Shifting from current planning systems to decentralized and new planning systems,
- Applying participatory decision making approaches in which all stakeholders involve,
- Making informal control and monitoring without complicated organizational hierarchy,
- Changing the available reward system based on the employees' competencies and their innovative behavior and
- Making available training programs about organizational innovation process for both employees and managers employees' and managers' awareness as well as changing their attitudes towards organizational innovation through affordable educational programs.

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