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## A study on relationship between organizational culture and productivity

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#### CHRONICLE

#### ABSTRACT

Article history:
Received May 16, 2013
Received in revised format
16 August 2013
Accepted 28 September 2013
Available online
October 4 2013

Keywords: Productivity Organizational culture Gas distribution unit This study investigates the relationship between organizational culture and productivity in one of Iranian Gas distribution companies. The proposed study designs a questionnaire and distributes it among 78 out of 120 managers who worked for this organization. The study uses correlation ratio to examine the relationship between different components of the survey. The results of our survey indicate that there were positive and meaningful relationship between organizational culture and productivity where Spearman and Pearson correlations between these two components were 0.637 and 0.635 with P<0.01. In addition, the study has found some positive and meaningful relationship between different components of organizational culture and productivity; namely creativity, accepting risk, support, integration, control, identification and reward policy and communication.

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### 1. Introduction

During the past few years, there have been tremendous efforts to increase productivity of organizations. In fact, many business units have been able to become profitable through reducing their non-value added activities and increase their value added activities. There are also different studies to find out whether there is any relationship between productivity improvement and other organizational components such as organizational culture. Khalghani et al. (2013) investigated organizational structure, culture, and information technology as knowledge management (KM) infrastructural capabilities, and compared their significance and status quo in five medical research centers in Tehran, Iran. They reported that in terms of their status quo, the three studied KM enablers were at various conditions, with organizational culture having the best (mean rank=1.79) and IT the worst (mean rank=2.14) status. Moreover, it was disclosed by regression analysis that organizational

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structure had the most significant impact on the effectiveness of knowledge management initiatives, while information technology gained the least perceived impact.

Abbas et al. (2013) studied the factors promoting knowledge sharing and knowledge creation in banking sector of Pakistan. They detected most important factors in knowledge sharing and knowledge creation including organizational culture, trust, motivation, employee's attitude and socialization. They reported that all the factors had significant effect on knowledge creation and Knowledge sharing. They also explained that these factors were necessary for the promotion of knowledge creation and knowledge sharing culture in an organization. The knowledge sharing and knowledge creation were the keys for the success of an organization. A firm or an organization could sustain its competitive edge in market with the help of Knowledge sharing and knowledge creation. They concluded that socialization factor was at top, trust factor was at second and motivational factor was at third according to the respondents' point of view.

According to Zamahani et al. (2013), for years, the idea of virtue was unfavorable among researchers and virtues were traditionally considered as culture-specific, relativistic and they were supposed to be related to social conservatism, religious or moral dogmatism, and scientific irrelevance. They examined the relationships between leadership, organizational culture, human resource, structure and processes, care for community and virtuous organization. They stated that all the five variables had positive and significant influences on virtuous organization. Among the five variables, organizational culture had the most direct effect (0.80) and human resource maintained the most total impact (0.844) on virtuous organization.

Malmir et al. (2013) reviewed recent advances on leadership style and various aspects of organizational cultures completed during the past few years. According to Kia et al. (2013) knowledge plays an important role on creating value added business units in today's competitive environment. They performed a study to investigate the relationship between knowledge management and organization culture in an Iranian PVC industry. They investigated the relationship between knowledge management and four organizational cultures' components including mission, consistency, involvement and adaptability. Using Denison model and implementation of Pearson correlation ratio as well as stepwise regression techniques, they analyzed four hypotheses of the survey. The results of the study confirmed that there were strong relationships between knowledge management from one side and mission, consistency, involvement and adaptability.

According to Baqi and Ghaffari Tabar (2013), culture is the soul of an organization, which can cause advance or retrogress of the organization. Baqi and Ghaffari Tabar (2013) investigated the role of organizational culture on improvement and effectiveness of organizations. They identified and recognized the role of important components of organizational culture in effectiveness of professional ethics within organizations. Their results indicated that there had been a meaningful relationship between organizational interest and commitment, enhancement of stability and compatibility, teamwork moral, giving identity to the staff and the quality of professional ethics.

Vahabzadeh et al. (2013 presented an empirical investigation to detect important factors influencing internet marketing on Iranian food industry, named Shahrvand. They reported that among internal factors, knowledge management, organizational culture and resources influenced on acceptance of internet marketing, while these factors did not show any meaningful impact on ease of use. In addition, external factors including trend on market growth, competition and infrastructure influence on ease of use and acceptance of internet marketing but infrastructure and competition did not impact on ease of internet marketing. Asgari et al. (2013) presented an exploratory study to detect critical factors of innovation culture in organizations. They identified important factors influencing innovation culture in construction industry based on the implementation of factor analysis. They reported that six factors of building cultural infrastructures, education, organizational vision,

established culture, strategic culture and flexible culture were the most important items influencing innovation culture.

## 2. The proposed method

This study investigates the relationship between organizational culture and productivity in one of Iranian Gas distribution companies located in Province of Khozestan, Iran. The population of this survey includes all 120 managers who worked for this unit and the sample size is calculated as follows.

$$n = \frac{N \times z_{\alpha/2}^2 \times p \times q}{\varepsilon^2 \times (N-1) + z_{\alpha/2}^2 \times p \times q},\tag{1}$$

where N is the population size, p=1-q represents the yes/no categories,  $z_{\alpha/2}$  is CDF of normal distribution and finally  $\varepsilon$  is the error term. Since we have  $p=0.5, z_{\alpha/2}=1.96$  and N=120, the number of sample size is calculated as n=78. The proposed study designs two questionnaires, one with 41 questions regarding organizational culture and the other with 22 questions on productivity, and distributes them among 78 out of 120 managers who worked for this organization. The study uses correlation ratio to examine the relationship between different components of the survey. The study uses Pearson as well as Spearman correlation ratios to examine different hypotheses of this survey.

#### 3. The results

We first present details of our survey on testing the relationship between organizational culture with productivity using both Pearson and Spearman correlation. Table 1 summarizes the results of our findings,

**Table 1**The summary of some basic statistics as well as Pearson and Spearman correlation ratios

	Mean	Standard deviation	Min	Max	Spearman	Pearson
Organizational culture	104.78	12.03	79	133	R=0.637  Sig. = 0.01	R=0.635  Sig. = 0.01
Productivity	58.25	10.03	36	76	-	

The results of Table 1 indicate that there were some positive and meaningful relationship between organizational culture and productivity. We have also investigated the relationship between different components of organizational culture and productivity and Table 2 shows details of our findings.

**Table 2**The summary of correlation ratios between components of organizational culture and productivity

	Mean	Standard deviation	Min	Max	Correlation	Sig.
Creativity	11.57	2.06	7	12	0.398	0.01
Accepting risk	9.47	1.88	5	14	0.220	0.05
Leadership	10.70	2.19	5	15	0.470	0.01
Support	11.40	2.04	7	16	0.511	0.01
Integration	10.29	2.16	5	15	0.421	0.01
Control	10.38	1.44	7	13	0.240	0.05
Identification	11.34	2.35	6	16	0.550	0.01
Reward system	10.17	2.17	5	14	0.460	0.01
Conflict adoption	10.18	2.34	5	14	0.456	0.01
Communication patterns	10.29	2.15	5	14	0.462	0.01
Productivity	58.25	10.03	36	76	-	-
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As we can observe from the results of Table 2, there are some positive and meaningful relationships between various components of organizational culture and productivity. In our survey, identification plays the most important role followed by management support, leadership and communication patterns. In our survey, accepting the risk plays the least important factor followed by control.

#### 4. Conclusion

In this survey, we have performed an empirical investigation to find the relationship between organizational cultural and productivity. The survey has been accomplished in one of gas distribution firms and the study has gathered the necessary information from the managers who worked in various levels in this organization. The survey has concluded that there were some positive and meaningful relationship between organizational culture and productivity and the results were consistent with other studies accomplished earlier by others (See for instance, Asgari et al., 2013; Baqi & Ghaffari Tabar, 2013; Malmir et al., 2013). Fig. 1 shows the summary of our findings.

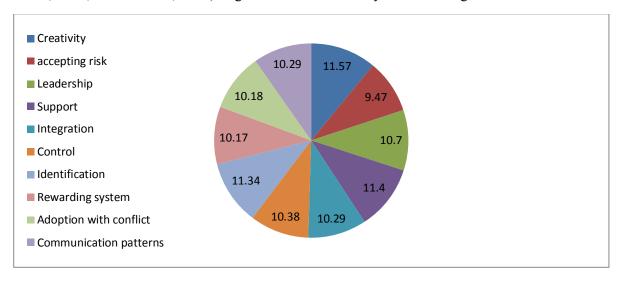


Fig. 1. The summary of mean for different components of organizational culture

### Acknowledgment

The authors would like to thank the officials of gas distribution for cordially cooperating in accomplishment of this survey.

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