Organizational Agility and Knowledge Sharing Process in the Staffs of the Iran's Central Plateau Contractor Company

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Received: August 11, 2017; Accepted: December 16, 2017

Abstract

This study aimed to investigate the association between organizational agility and knowledge sharing process in the Iran's Central Plateau Contractor Company (ICPCC). For this purpose, one main hypothesis and three subsidiary hypotheses were formulated to assess the relation between organizational agility parameters, leadership and shared identity, strong strategy, and adaptable organizational design, as dependent variables, and knowledge sharing parameters, cooperation, commitment, and culture, as independent variables. To test the hypotheses and gathering the data, two questionnaires were used: Verli and Lover Questionnaire of Organizational Agility and a researcher-developed questionnaire of knowledge sharing. These questionnaires were administered to 170 staffs of the ICPCC selected according to stratified, random sampling. The main hypothesis and three subsidiary hypotheses were confirmed. This means that organizational agility and sharing knowledge were significantly associated (0.43). Moreover, strong strategy, adaptable organizational design, leadership and shared identity were significantly correlated with knowledge sharing (0.45, 0.54, and 0.36, respectively).

Keywords

Knowledge Sharing, Organizational Agility, Leadership and Shared Identity, Strong Strategy

1. Introduction

Nowadays, the environment of business has been more competitive. Organizations apply the agility for their survival. Organizational agility plays a significant capability for a quick accordance to environmental changes [1]. Organizations have to replace new approaches with previous ones to survive in competition [1]. Knowledge sharing is a mechanism which transmits knowledge from one to another [2]. Members in the organization reach to the new knowledge through sharing their knowledge [3]. Knowledge sharing refers to the behaviors of transmitting knowledge, acquired in organization, to colleagues in the communication processes inside or outside the organization. Agility can be considered as a capable and competent system in order to help the organizations survive in uncertain environments [4]. To be agile, organizations need to be fast, adaptable, responsible, so that they would be able to adapt to the unexpected and unpredicted variations, market opportunities, and the customers' needs. The most important challenge in teams which form for using various expertise is sharing knowledge. A specific set of knowledge management processes affects not only organizational function but also organizational agility [5].
The Iran’s Central Plateau Contractor Company (ICPCC) needs a very high level of knowledge sharing to realize its objectives and plans, such that the ICPCC will be able to act adequately flexible and adapt to the environment in confronting with the unpredicted environmental variations. The aim of this study is to investigate the association between the organizational agility and the knowledge sharing process.

In this study, three variables, which have already been offered by Verli and Lover, were considered as dependent variables. These variables that appear to be common to all the patterns of agility are as follows:

2. Literature Survey

Recently, many studies have been conducted on organizational agility and knowledge management, and subsequently knowledge sharing. However, little research has been done on the association between organizational agility and knowledge sharing despite the high importance of these two issues.

Mehrabi et al. perused the relationship between the process of knowledge sharing and organizational agility among personnel of Agriculture- Jahad Organization in Share-Kord [6]. Research population included 150 experts at Jihad - Keshavarzi in Shahre- Kord in 2012, that 150 of them were selected as research sample. Results confirmed that there is a positive relationship between organizational agility and process of knowledge sharing. Also this study indicated a positive relationship between adaptable organization design and process of knowledge sharing, and leadership and identity and process of knowledge sharing, that their amount respectively equal to 50% and 56% [6]. Organizational culture affects knowledge sharing and job satisfaction greatly, and knowledge sharing plays an important mediatory role between organizational culture and job satisfaction [7]. According to Taghizade [8], the relation between knowledge management and organizational agility has been confirmed and he proved that knowledge management affects organizational agility. Juan-Gabriel Cegarra-Navarro et al attempted to survey the role of organizational agility on structured knowledge processes and firm performance. The authors investigated this relation in 112 large Spanish companies [9]. The study is entitled Effects of Organizational Agility and Knowledge Sharing on Competitive Advantage: An Empirical Study in Jordan. This paper was done with contribution of 112 senior managers in Jordan. The main findings of this paper are that: agile capabilities have a remarkable effect on organisational competitive advantage; knowledge sharing practices have a positive effect on organisational competitive advantage; agile capabilities and knowledge sharing lead to competitive advantage [10]. The results of this modelling exercise confirmed the effectiveness of knowledge management processes and proved the direct effect of knowledge application, and also the mediating effect of organizational agility in this relation. In 2017, a study on factors influencing organisational performance was done: the role of knowledge sharing and organisational agility. According to the results, organisational performance can increase by paying attention to the development of an effective organisational culture, and facilitating the process of knowledge sharing and organisational agility [11].
3. Conceptual Framework

Strong strategy: Strong strategy is the first feature of an agile design and is characterized by the ability to obtain the desired results under variable conditions. The organizations with strong strategy seek to implement the powerful strategies that achieve their cultural and economic benefits through responding to the environment [12].

Adaptable organizational design: To be agile, organizations should have a designing that enables them to respond rapidly to internal and external pressures and adapt to the changes in or replacement of strategic intent [12].

Leadership and shared identity: Disseminating knowledge and power throughout the organizations to process and respond rapidly to information without a high level of top to bottom guidance with the structure of surface territory with maximum appropriateness [12]. In addition, cooperation, commitment, and culture, considered the key parameters of knowledge sharing, were investigated as the independent variables. A cultural component of knowledge sharing is creating the environments in organizations and companies of any sizes in which the staff are willing to disseminate their information.

3.1 Research Hypotheses

3.1.1 Main Hypothesis
There is a correlation between organizational agility and knowledge sharing process in the ICPCC.

3.2 Subsidiary Hypotheses
1. There is a correlation between the strong strategy and knowledge sharing process in the ICPCC.
2. There is a correlation between the adaptable organizational design and knowledge sharing process in the ICPCC.
3. There is a correlation between the leadership and shared identity, and the knowledge sharing process in the ICPCC.

4. Materials and Methods

This is a descriptive-correlational study with research-applied purposes. The study population consisted of all the staffs of the ICPCC (n: 700). From this population, 170 people were selected by stratified, random sampling proportionate to sample size and for data analysis. To gather the data, three questionnaires were used. In addition, correlation coefficient test was used to investigate the association between the dimensions of organizational agility and those of knowledge sharing, and find a positive, significant correlation between these two categories of dimensions. The used questionnaires were as follows:

4.1 Demographic Questionnaire
This questionnaire consisted of the demographic or general questions about age, marital status, gender, education, occupational status, organizational position, and work history.
4.2 Knowledge Sharing Questionnaire
In this study, a researcher-developed questionnaire was used to measure the knowledge sharing. The validity of this questionnaire was ensured by the experts on organizational behavior. Besides that, factor analysis was used to assess the validity of the questionnaire. The significant factor burdens confirmed the acceptable validity of this questionnaire. Regarding the reliability of the questionnaire, Cronbach's alpha derived 0.89, 0.85, 0.92 and 0.77 for knowledge sharing, cooperation, culture, and commitment, respectively.

4.3 Organizational Agility Questionnaire
A standard questionnaire, Verli and Lover Questionnaire, was used to measure the organizational agility. Face validity and factor analysis were used to assess the validity of this questionnaire. Regarding the significant factor burdens, the model's validity was confirmed. According to the Cronbach's alpha, the reliability coefficients of organizational agility, strong strategy, adaptable organizational design, and leadership and shared identity were obtained 0.91, 0.95, 0.87, and 0.91, respectively.

5. Analysis and Findings
In this study, a main hypothesis and three subsidiary hypotheses were offered and assessed. To test the hypotheses, structural equation modeling was used. Regarding the main research hypothesis, virtually all the indices were in acceptable ranges, which confirmed the overall fitness of the model.

Table 1. The indices of the model's overall fitness to the first subsidiary hypothesis

<table>
<thead>
<tr>
<th></th>
<th>CMIN/DF</th>
<th>NFI</th>
<th>RMR</th>
<th>CFI</th>
<th>GFI</th>
<th>PRATIO</th>
<th>AGFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN/DF</td>
<td>1.914</td>
<td>0.754</td>
<td>0.082</td>
<td>0.864</td>
<td>0.725</td>
<td>0.936</td>
<td>0.712</td>
<td>0.070</td>
</tr>
</tbody>
</table>

The indices of overall fitness (critical ratio and level of significance) were in acceptable ranges and all the factor burdens had a significant difference equal to zero. In addition, P values were estimated lower than 0.05 for all the correlations. Therefore, the indices of overall fitness confirmed the data's fitness to the model.

Table 2. The regression-based burdens of the model of the first hypothesis

<table>
<thead>
<tr>
<th>Regressional associations</th>
<th>Estimated standard value</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge sharing &lt;-&gt; Organizational agility</td>
<td>0.43</td>
<td>0.230</td>
<td>6.218</td>
<td>***</td>
</tr>
</tbody>
</table>

Since the main hypothesis highlighted the knowledge sharing and organizational agility as independent and dependent variables, the knowledge sharing was positively and significantly correlated with organizational agility with the factor
burden 0.90 on the dependent variable. Therefore, the main hypothesis was confirmed and the effect of knowledge sharing was obtained 0.43 (estimated value) on the organizational agility.

Regarding the first subsidiary hypothesis, all the indices were in acceptable ranges, which confirmed the overall fitness of the model. Knowledge sharing process affected the strong strategy in the organization (standard value: 0.54). According to the independent t-test, the level of knowledge sharing was estimated more than average level. Furthermore the level of significance (*** P<0.001) and the critical ratio 5.128 was confirmed. Therefore, knowledge sharing was directly, positively, and strongly correlated with the strong strategy (Table 4).

Table3. The indices of the model's overall fitness to the first subsidiary hypothesis

<table>
<thead>
<tr>
<th></th>
<th>CMIN/DF</th>
<th>NFI</th>
<th>AGFI</th>
<th>GFI</th>
<th>PRATIO</th>
<th>RMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFI</td>
<td>1.914</td>
<td>0.84</td>
<td>0.86</td>
<td>0.83</td>
<td>0.94</td>
<td>0.065</td>
<td>0.070</td>
</tr>
</tbody>
</table>

Table4. Regression-based burdens of the first subsidiary hypothesis

<table>
<thead>
<tr>
<th>Regressional associations</th>
<th>Estimated standard value</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge sharing &lt;-&gt; Strong strategy</td>
<td>0.540</td>
<td>0.125</td>
<td>5.128</td>
<td>***</td>
</tr>
</tbody>
</table>

The second subsidiary hypothesis was related to the correlation between adaptable organizational design and knowledge sharing process in the ICPCC. As Table 5 indicates, all the indices are in acceptable ranges, which confirms the overall fitness of the model. The results indicated that the knowledge sharing process was positively and significantly correlated with adaptable organizational design with the estimated standard 0.45. According to the independent t-test, the level of adaptable organizational design was estimated (more than average level) (Table 6).

Table5. The indices of the model's overall fitness to the second subsidiary hypothesis

<table>
<thead>
<tr>
<th></th>
<th>CMIN/DF</th>
<th>NFI</th>
<th>AGFI</th>
<th>GFI</th>
<th>PRATIO</th>
<th>RMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFI</td>
<td>1.49</td>
<td>0.80</td>
<td>0.94</td>
<td>0.94</td>
<td>0.96</td>
<td>0.028</td>
<td>0.059</td>
</tr>
</tbody>
</table>

Table6. The regression-based burdens of the second subsidiary hypothesis

<table>
<thead>
<tr>
<th>Regressional associations</th>
<th>Estimated standard value</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge sharing &lt;-&gt; Adaptable organizational design</td>
<td>0.455</td>
<td>0.080</td>
<td>5.703</td>
<td>***</td>
</tr>
</tbody>
</table>

The third subsidiary hypotheses states that leadership and shared identity are associated with knowledge sharing in the ICPCC. Table 7 shows that all the indices are in acceptable ranges, which confirms the overall fitness of the model. Regarding the output of the structural equation model, we can conclude that knowledge sharing affects the leadership and shared identity with the estimated standard value 0.362 .

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Table 7. The indices of the model's overall fitness to the third subsidiary hypothesis

<table>
<thead>
<tr>
<th></th>
<th>CMIN/DF</th>
<th>NFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFI</td>
<td>2.413</td>
<td>0.89</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.91</td>
<td>0.741</td>
</tr>
<tr>
<td>PRATIO</td>
<td>0.020</td>
<td>0.067</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.020</td>
<td>0.067</td>
</tr>
</tbody>
</table>

Table 8. Regression-based burdens of the third subsidiary hypothesis

<table>
<thead>
<tr>
<th>Regressional associations</th>
<th>estimated standard value</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge sharing &lt;-&gt; Leadership and shared identity</td>
<td>0.362</td>
<td>0.078</td>
<td>2.985</td>
<td>***</td>
</tr>
</tbody>
</table>

5. Conclusion

In some organizations, knowledge sharing plays a key role, but in some others, they try to keep their knowledge. This attitude acts as an obstacle to be shared knowledge among the staffs and it causes that staffs feel unreliable to share their knowledge. In this regard, organizations are assumed to create safe conditions to encourage the staffs to share knowledge. Many of the enlightened organizations have launched the strategies and tools to change this attitude and seek to use promotional tools to motivate the staff in order to share their knowledge.

Considering the key parameters of knowledge sharing, cooperation, commitment, and culture, organizations can be encouraged to share knowledge as far as they are able to. Regarding the results of Friedman's test in this study, cooperation obtained the highest score of these variables. Therefore, organizations should create an environment which is conducive to further the cooperation among the staffs to enhance knowledge sharing, because as litters in which humans are developing their occupational knowledge and experiences, organizations are more affected by confidence-based cooperation and relationships.

Furthermore, given the positive correlation between the adaptable organizational design and the knowledge sharing, organizations should pay adequate attention to design the organizational strategies and give the highest priority to flexibility. We can argue that knowledge sharing can create organizational agility, because organizations need to use the knowledge and experiences of all the staff to become agile so that they can respond rapidly to the environmental variations and customers' needs and overtake the rivals. Moreover, to develop the leadership and shared identity, organizations should seek to create a participatory culture among the staff and engage them in organizational decision making, such that they cause the knowledge sharing to enhance and develop management and leadership skills in the staffs.

6. References


