The Relationship between Organizational Culture and Knowledge Sharing in a GCC Company

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Abstract
This research seeks to investigate the relationship between organizational culture and Knowledge Sharing in a Gulf Co-operative Council Company (GCC). A questionnaire was used to collect data from selected departments in the company. The cultural variables that have been investigated were trust, communication between staff, leadership, and reward system. Results of the study showed a positive relationship between each of organizational culture factors (trust, communication between staff, leadership, and reward system) and knowledge sharing.

Keywords: organizational culture, knowledge sharing, GCC

1. Introduction
Knowledge of individuals and of organizations has become increasingly valued and is considered to be vital element of the competitive environment. Many organizations have recognized that creation, sharing, and management of knowledge are crucial for their success in the business environment.

Despite the fact that organizations have developed and adopted several methods to improve KS in technological wise, those methods are not utilized effectively (Park et al., 2004). Successful knowledge management (KM) implementation may require more than using latest technological tools. Therefore, in KM initiatives, it is essential to create a culture of KS as the main goal of managing knowledge is to make KS the norm in an organization (Plessis, 2006).

The term ‘culture’, in its wider context, displays a notion of shared attributes (such as language, religion, beliefs, traditions, heritage), and values that distinguish one group or society from another (Schein, 1990). Hofstede (2003) describes culture as the collective programming of the mind (the way people think and interpret information) which distinguishes one group of people from another.

The aim of the study is to investigate the relationship between organizational culture variables, viz. trust, communication between staff, leadership, and reward system, and knowledge sharing (KS) in a Gulf Co-operative Council Company (GCC) and to provide recommendations to decision makers.

2. Literature Review
A number of organizational culture elements are likely to influence KS. For example, employees are willing to share knowledge in situations where they can trust the recipient of this knowledge (Connelly and Kelloway, 2002). Some other cultural elements, such as, leadership and interaction among staff are essential for successful KS (Kerr and Clegg, 2007). Previous studies indicated reward system has also positive impact on KS (Oliver and Kandadi, 2006).

2.1 Trust
A high degree of interpersonal trust is essential to encourage employees to share knowledge. Trust is defined as “a set of beliefs about the other party (trustee), which leads one to believe that the trustee’s actions will have positive consequences (Bakker et al., 2006). A culture that emphasizes trust has been found to help reduce the negative impact of perceived costs on KS (Kankanhalli, et al., 2005).

Trust between co-workers is an extremely fundamental attribute in organizational culture, which is believed to have strong influence on KS (Andrews and Delahay, 2000). A number of authors believe that when people trust each other, they are more willing to provide valuable knowledge (Bakker et al., 2006).

When trust exists, people are more willing to listen and absorb each other’s knowledge (Andrews and Delahay, 2000). This belief is shared by Connelly and Kelloway (2002) who found that employee would only be interested to share knowledge in situations where they trusted the receiver of this knowledge.

Other authors such as Davenport and Prusak (2000), found that if distrust is present within an organization, KS cannot, and will not, succeed because when fear is present, people will not share critical information and will suspect their organization’s real intentions. Bakker et al. (2006) argued that trust among people is important for successful KS. Issa and Haddad (2008) revealed in a recent study that mutual trust among employees is needed for knowledge to flow freely within a company.
Some management practices can affect the level of trust in an organization. When decisions are made openly, information is widely available and accessible by employees. On the contrary, one-sided decision-making, and a lack of information will impede trust. When team relationships have a high level of mutual trust, members are more willing to engage in KS. It has been revealed that a low level of mutual trust is considered a key barrier to KS in teams (Szulanski, 1996).

Andrew and Delahaye (2000) found that in the absence of trust, formal KS practices were inadequate to encourage people to share knowledge with others in the same work environment.

In light of these studies, researchers suggested that companies should not overlook that the most important asset that impacts the sharing of knowledge is a trustful relationship that is directly affected by an appropriate organizational culture.

2.2 Communication (interaction among staff)
Communication refers to human interactions through oral conversations and the use of body language. Interaction among employees is facilitated by the existence of social networking and knowledge sharing. Some previous studies showed that communication contributed to KS as it was related to trust in various inter-organizational relationships and that interaction between co-workers is fundamental in encouraging KS (Smith and Rupp, 2002).

Nonaka and Takeuchi (1995) argued that organizations cannot create knowledge without individuals. Organizations that explicitly favor KS and knowledge integrating into the organization encourage debate and dialogue in facilitating contributions from individuals at multiple levels of the organization (Davenport and Prusak, 1997). Such contribution among employees is enhanced by practices that involve individuals gathering data from diverse sources, exercising their judgment to transform data into information and then engaging in intense interaction to produce new knowledge that can be the basis for action (Lopez et al., 2004).

2.3 Leadership
The term leadership refers to the process of influencing others towards achieving some desired goals (Jong and Hartog, 2007). The leaders act as role models for the manner in which KS occurs, as well as, making the incentives for doing so (Kerr and Clegg, 2007). The leaders facilitate networks of knowledgeable employees across boundaries of the organization and provide best practice of coordination and collaborative activities (Kerr and Clegg, 2007). Therefore, leaders play an important role in KS because they facilitate other members to create the necessary knowledge locally (Kreiner, 2002).

As Nonaka (1995) argued, managers need to orient chaos toward purposeful knowledge creation by proving conceptual framework that helps employees make sense of their experiences (Nonaka, 1995). Therefore, a leader is expected to provide guidance and translate business strategies (business knowledge) to his team. Kerr and Clegg (2007) argued that leadership is necessary in providing appropriate knowledge and network with and across boundaries, which impacts the opportunities to share knowledge.

The importance of leadership in affecting knowledge culture in organizations was also supported by Oliver and Kandadi (2006) who highlight the essential role of middle and front level managers in developing a culture that will facilitate KS through the demonstration of various leadership characteristics.

2.4 Reward System
An effective reward system is essential in order to motivate employees to share knowledge among themselves and between different departments because in the absence of proper motivation, some employees may be uninterested to share knowledge due to fear of loss as a result of this action. Oliver and Kandadi (2006) confirmed that organizational rewards motivate employees towards KS and foster a knowledge culture.

Organizational rewards such as promotion, bonus, and higher salary were found to be positively related to the frequency of KS especially when employees identify with the organization (Kankanhalli et al., 2005). Also, in promoting KS culture, long-term rewards such as profit sharing and employee share options (ESOPs) were found as effective technique when compared to the short-term rewards.

Similarly, Cornelia and Kugel (2004) found that monetary rewards have an immediate effect on motivation to share knowledge. But in the long-term, people should be incentivized non-monetarily for sharing their knowledge.

Other researchers also highlight the importance of reward system in enhancing KS (Davenport and Prusak, 2000). On the other hand, Ling et al. (2009) revealed that the most effective method to promote KS in the organization is to link it with rewards and performance appraisal.

Al-Alawi et al. (2007) also showed that managers (or leaders) must consider the importance of collaboration and sharing best practices when designing reward systems. The idea is to introduce and implement processes in which sharing knowledge and horizontal flow of information are encouraged and indeed rewarded.

Some authors such as Yang and Wan (2004) believe that people hoard knowledge because they fear that their
subordinates would be promoted faster, which is actually the fear of losing promotion opportunity (i.e. a non-monetary reward). Contrary to the expected positive effect of rewards, Bock and Kim (2002) found that anticipated rewards had a negative effect on attitudes toward KS. Ling et al. (2009) also found that monetary reward is more effective than non-monetary reward in promoting KS in organizations.

3. Research Methodology
The study was conducted on a large petrochemical company in the Arabian Gulf region. The sample was chosen from the population of A structured survey Questionnaire was administered to employees, top level managers, mid-level managers, and lower level managers of Research and Development Department workforce involved in KS. The questionnaire used to collect data was adopted from Islam et al. (2011). Operational definitions of main variables are documented in Table 1. The Questionnaires were distributed in total one hundred and fifty and fifty were returned and used for data analysis. The operational definitions of the study's variables are adopted from previous literature and are documented in Table 1.

Table 1. Operational Definitions of Study's Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Operational Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>Trust is seen as an important determinant of the level of KS between organizational members. It reflects the reliability of employees' relationships and the nature of social interaction among employees. Trust represents the atmosphere in which employees trust each other. It involves employee faith in corporate goal attainment and organizational leaders, and their belief that organizational action will prove beneficial for employees (Ribiere, 2001).</td>
</tr>
<tr>
<td>Communication between staff</td>
<td>Communication here refers to human interaction through oral conversations and the use of body language while communicating. Human interaction is greatly enhanced by the existence of social networking in the workplace. This form of communication is fundamental in encouraging knowledge transfer (Smith and Rupp, 2002).</td>
</tr>
<tr>
<td>Leadership</td>
<td>The term leadership refers to the process of influencing others towards achieving some desired goals (Jong and Hartog, 2007). The leaders act as role models for the manner in which KS occurs, as well as, making the incentives for doing so (Kerr and Clegg, 2007). The leaders facilitate networks of knowledgeable employees of the organization and provide best practice of coordination and collaborative activities (Kerr and Clegg, 2007). Therefore, leaders play an important role in KS because they facilitate other members to create the necessary knowledge locally (Kreiner, 2002).</td>
</tr>
<tr>
<td>Reward System</td>
<td>The term refers to organizational rewards which motivate employees towards KS and foster a knowledge culture. Employees need a strong motivator in order to share knowledge (Syed-Ikhsan and Rowland, 2004).</td>
</tr>
<tr>
<td>Knowledge Sharing</td>
<td>Al-Hawamdeh (2003) defines KS as the communication of all types of knowledge including explicit knowledge (information, know-how and know-who) and tacit knowledge (skills and competency). KS can be also defined as the dissemination of information and knowledge throughout the organization (Ling, Sandhu and Jain, 2009).</td>
</tr>
</tbody>
</table>

4. Empirical Findings
Cronbach alpha test was used to examine the consistency of the results produced by the scale as shown in Table 2. Cronbach alpha measures the consistency based on the extent to which a participant who answered a question in certain way will respond to other questions in the same way.

According to this test, the internal reliabilities of all scales were between 0.520 and 0.851, exceeding the recommended value of 0.50, which is considered as an acceptable level of reliability (Sekaran, 2004).

Table 2. Reliability Test of the Scale's Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>No of Items</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>5</td>
<td>0.520</td>
</tr>
<tr>
<td>Communications</td>
<td>3</td>
<td>0.617</td>
</tr>
<tr>
<td>Leadership</td>
<td>6</td>
<td>0.851</td>
</tr>
<tr>
<td>Reward System</td>
<td>3</td>
<td>0.600</td>
</tr>
<tr>
<td>Knowledge Sharing</td>
<td>4</td>
<td>0.609</td>
</tr>
</tbody>
</table>

Table 3 shows that employees believe that the communication between staff culture is high with mean value (4.20) followed by the reward with mean value (3.89), leadership (3.86), and finally trust with mean value...
Pearson correlation coefficients were calculated to detect the existence of the relationship between the organizational culture factors and KS and results are reported in Table 4.

### Table 3. Descriptive Statistics of Organizational Culture Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S.D</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>3.71</td>
<td>0.6531</td>
<td>High</td>
</tr>
<tr>
<td>Communication staff</td>
<td>4.20</td>
<td>0.4831</td>
<td>High</td>
</tr>
<tr>
<td>Leadership</td>
<td>3.86</td>
<td>0.6326</td>
<td>High</td>
</tr>
<tr>
<td>Reward</td>
<td>3.89</td>
<td>0.6035</td>
<td>High</td>
</tr>
</tbody>
</table>

### Table 4. Pearson Correlation Coefficients with KS

<table>
<thead>
<tr>
<th>Variables</th>
<th>Correlation with KS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>0.425*</td>
</tr>
<tr>
<td>Communication between staff</td>
<td>0.605*</td>
</tr>
<tr>
<td>Leadership</td>
<td>0.643*</td>
</tr>
<tr>
<td>Reward</td>
<td>0.750*</td>
</tr>
</tbody>
</table>

* Significant at 0.05 Level

Table 4 shows that all correlation relationships between organizational culture factors and KS are significant and positive and ranged between 0.425 and 0.750. The strongest relationship was found between KS and the cultural dimension of reward.

Regression analysis model (Table 5) has been used to test the relationship between organizational culture variables (trust, communication, leadership, and reward) and KS. Nevertheless, to meet the assumptions of regression analysis; some statistical tests were conducted including tolerance, Variance Inflation Factor (VIF), and skewness tests. The values of these tests were found to meet the assumptions of regression analysis. The regression analysis results showed statistically significant relationship between organizational culture factors and KS ($F = 60.53, \text{ex} < 0.000$). $R^2 (0.629)$ and suggests that organizational culture factors interpret 62 percent of the variation in KS.

### Table 5. Regression Analysis Results between Organizational Culture Factors and KS

<table>
<thead>
<tr>
<th>Variables</th>
<th>R2</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Sharing</td>
<td>0.629</td>
<td>152.648</td>
<td>9</td>
<td>18.172</td>
<td>60.53</td>
<td>0.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>108.381</td>
<td>358</td>
<td>0.326</td>
<td>412</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>161.029</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 0.05 Level

Since the main objective of this study was to explore the relationship between organizational culture factors on KS within the context of the GCCC, multiple regression analysis was used and results are shown in Table 6. It is evident from the follow-up transactions (f3) and the t-test that organizational culture variables (trust, communication between staff, leadership, and reward) have significant statistical relationships with KS.

Stepwise regression analysis (Table 7) has also been used to determine the importance of each of organizational culture variables and its contribution to KS. The results shown in Table 7 revealed that trust was ranked first and explained 54 percent of KS, followed by the variable (communication between staff) which explained with (trust) 54 percent of the variation in KS, and reward explained 63 percent of the variation in KS.

### Table 6. Multiple Regression Analysis between Organizational Culture Variables and KS

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Std.err</th>
<th>$f^2$</th>
<th>t-value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>0.378</td>
<td>0.056</td>
<td>0.370</td>
<td>6.900</td>
<td>0.000*</td>
</tr>
<tr>
<td>Communication</td>
<td>0.136</td>
<td>0.063</td>
<td>0.127</td>
<td>1.944</td>
<td>0.053*</td>
</tr>
<tr>
<td>Leadership</td>
<td>0.141</td>
<td>0.059</td>
<td>0.147</td>
<td>2.518</td>
<td>0.015*</td>
</tr>
<tr>
<td>Reward</td>
<td>0.181</td>
<td>0.044</td>
<td>0.217</td>
<td>6.920</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

* Significant at 0.05 Level

### Table 7. Stepwise Multiple Regression Analysis Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>R2</th>
<th>Calculated value of T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>0.536</td>
<td>21.318</td>
<td>0.000</td>
</tr>
<tr>
<td>Communication</td>
<td>0.530</td>
<td>7.268</td>
<td>0.000</td>
</tr>
<tr>
<td>Leadership</td>
<td>0.423</td>
<td>3.720</td>
<td>0.005</td>
</tr>
<tr>
<td>Reward</td>
<td>0.639</td>
<td>2.527</td>
<td>0.003</td>
</tr>
</tbody>
</table>

* Significant at 0.05 Level
Findings of the study revealed that organizational culture factors (trust, communication, leadership and rewards system) have high levels from the perspectives of the GCCC’s employees. Research participants believe that communication between staff is very important with mean value (4.20) followed by reward with mean value of (3.89). Further, leadership has scored a high mean value of (3.86) followed by trust of (3.71). The results of the study revealed a statistically significant correlation between organizational culture and KS as whole (0.72).

The findings of this study revealed that trust as a dimension of organizational culture had a statistically significant impact on KS within the context of the GCCC (t=6.00; sig=0.000). The results of the study demonstrated that communication (interaction between staff) has a positive and significant relationship with KS (t=1.944; sig=0.053). The current study’s findings showed that there was statistical significant impact for communication with staff as a dimension of organizational culture on KS within the context of the GCCC.

The study revealed that leadership as a dimension of organizational culture had statistically significant relationship with KS within the context of the GCCC (t=2.518; sig=0.015). The findings of this study revealed that reward orientation as a dimension of organizational culture had a significant statistical relationship with KS within the context of the GCCC (t=6.920; sig=0.000). This emphasizes the importance of organizational reward for KS and team cooperation more than individual achievements.

5. Conclusion
This study shed light on the importance of some cultural attribute for effective KS as a major process relating to KM practices. The results of this study emphasized that cultural attributes are considered as important factors that can determine the extent of KS with the organizational context. The value of R2 (62.9%) indicates that the four cultural factors investigated in this study including trust, communication, leadership, and reward system can explain 62.9% of the variance in KS. This value of variance explained is considered of high importance considering the social aspects of this study. This, in fact, is re-emphasizing the concept of an organization as a social entity where the level of trust, communication, leadership and reward system very important social characteristics.

The study concludes that cultural elements, namely trust, communication between staff, leadership and rewards system all received strong literature support and found to be significant for KS in the GCCC. The results of this study clearly indicate that there is a need to consider the cultural attributes which impact KS practices. This involves not only the attempt to understand the organizational culture but also to enhance certain cultural attributes that can support successful implementation of KS in the GCCC.

Results of this study can be extremely helpful to the management of the GCCC while they try to enhance the KM system. It highlighted some vital considerations and facts not only to foster KS as a valuable organizational attribute, but also to comprehend the organizational culture of the GCCC and its fitness for successful KM initiative in general and effective KS in particular.

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