Influence of Organizational Factors on Knowledge Transfer Success in SMEs

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ABSTRACT

The study is designed to establish the relationship among organizational components and knowledge transfer success in SMEs in India. The study was carried out in demography of Delhi-NCR where 125 employees from 25 SMEs participated in the study. The responses were recorded through a questionnaire to test the hypothesis that organizational components have significant impact and predict knowledge transfer success. The outcome reflects training as the most significant factor in SMEs that impact knowledge transfer which implies that SMEs emphasizing on Knowledge Management have to assure effective training to its employees to drive successful knowledge transfer that enhances productivity. Organizations are advised to focus on result-oriented training programs.

Keywords: Knowledge Transfer, SMEs, Organizational Factors.

1. INTRODUCTION

It is commonly understood that knowledge is the most prime resource and is a major factor that differentiates successful organizations from the unsuccessful ones. Contemporary knowledge comes in the dimensions of explicit and tacit knowledge (Nonaka, 1994; Polanyi, 1966; and Spender, 1996). Explicit knowledge is the type of knowledge that can be verbally explained, codified or written down in specified documents, while tacit knowledge as an intangible knowledge is intuitive and difficult to express and practice. The latter comes from the individual’s mind and is based on life experiences, reading, learning, environment, beliefs, and other background characteristics.

According to Nonaka and Takeuchi (1995) and Polanyi (1966), tacit knowledge is knowledge that is non-verbal, intuitive and unarticulated. Spender (1996) opined that tacit knowledge could be best explained and understood as knowledge that is yet to be transformed into practice. As an individual variable, tacit knowledge is intimately tied to the knower’s experience (Kidd, 1998). Scholars have already noted that knowledge is not always polarized into the explicit-tacit dichotomy but exists along a continuum of tacitness and explicitness (Kogut and Zander, 1993).

When different types of knowledge are understood, it becomes important to examine how knowledge is managed. Knowledge management is defined by Stuhlmans (2012) as a conscious, hopefully consistent, strategy implementation to gather, store and retrieve knowledge and then help distribute the information to those who need it in a timely manner. It entails knowledge creation, internalization, use and transfer. It is the activity for obtaining, sustaining and growing intellectual capital in organizations (Marr and Schiuma, 2001). In the 21st century organization, knowledge management is considered essential for growth and productivity. Several studies have considered the transfer of knowledge within and between organizations and their employees but not much research has emphasized the success of such transfers (knowledge) and the possible role of key organizational factors, especially in SMEs in India.

In its generic term, knowledge (explicit and tacit) is not an end. It has no utility value for its own sake until deployed for organization’s effectiveness. Thus, knowledge acquisition and management become more
important than the degree of knowledge polarization. This results in the concern about knowledge internalization and its successful transfer to task performances. As it is with employees’ several engagement practices in the workplace, knowledge transfer requires prevailing climate in the organization to thrive. Specifically in the present study, some key organizational factors which have been identified by Choi and Lee (2000) as enablers in the transfer of knowledge within and between organizations and people are considered. These factors include organizational culture, organizational strategy, information technology, training, and organizational performance.

Organizational culture describes the attitude, experiences, beliefs and values as well as specific collection of norms that are shared by people and groups in an organization. However, the culture sets the criteria for human behavior in organizations (both indigenous and multinational enterprises). In addition to culture, organizational strategy is a key factor that is being considered. It concerns various programs that are put in place to enhance the organization’s strategic functioning. It represents a significant effort by organizations to improve their outcomes. Another factor under consideration is training. It is about the exposure to new experiences that are aimed at increasing employee competencies. As a component of organization’s practice, training is an important variable that deserves attention when aspects of knowledge management are being researched. It is the extent of career development opportunities that offer new learning experiences. It is important to include training as a deliberate learning experience when examining organizational factors in knowledge transfer success.

In addition to other organizational factors described above, information technology (IT) is considered necessary in the survey. This is owed to the central role IT occupies in change management processes, especially those that share best practices in their global operations. IT refers to the practice of using automated and electronic platforms to communicate and deliver on the organization’s operations. Finally, organization’s performance which results in its effectiveness and outcomes can be a point of emphasis in knowledge management. Hence, it is incorporated alongside other factors that have to be considered as key factors in the attempt to examine knowledge transfer success in SMEs in India.

Despite the huge budget that the organizations invest in knowledge management as a part of their struggle to improve product quality and ensure profitability, not much is known about the factors that improve effectiveness and affect success in the transfer of knowledge in question (explicit and tacit).

In studies where organizational factors have been implicated, not much focus is put on SMEs in developing economies. This necessitated the investigation of some organizational factors that have been described as enablers in the attempt to explain knowledge transfer success. Particularly, emphasis on continuous learning raises the question of how these factors can combine to influence knowledge transfer success in SMEs in India.

II. LITERATURE REVIEW

Knowledge-based theory of the firm by Grant (1996) explained certain premises regarding the nature of knowledge and its role within the firm. The theory explains the rationale for the firm, the delineation of its boundaries, the nature of organizational capabilities, the distribution of decision-making authority and the determinants of strategic alliances. According to Sveiby (2001), people can use their competence to create value by transforming and converting knowledge externally or internally to the organization they work for. The theory describes knowledge as a vital source of competitive advantage.

The level of knowledge available in a workforce is not enough to influence organization’s processes, but its integration is the key to competitive advantage. It shows that boundaries and governance structures are determined by the value to be derived from using employees’ knowledge. The competitive advantage therefore is dependent on the firm’s ability to continuously configure and integrate knowledge into value creating strategies. To put it short, possession of knowledge is not enough but its integration, transfer and re-use are essential to derive a competitive advantage for the organization. Knowledge is not created and held by organizations but by individuals. The knowledge is then applied by firms in the production of goods and services. Therefore, management is burdened with the responsibility through the organization’s practice to help tap into employees’ knowledge and successfully transfer it to the organization for optimal productivity and profitability. The organizational practice focuses on factors that are included in this process.
Organizational culture is one of the factors that specify the way employees interact with each other and with the organization’s stakeholders (Hills and Jones, 2001). It is also termed the most difficult organizational attributes to change (Schein, 2005). Organization culture is rated as weak or strong. In strong organizational culture, “groupthink” phenomenon exists, while in weak culture there is little alignment with organizational values. Culture can be classified in different ways, i.e. as power distance culture, uncertainty avoidance culture, individualism versus collectivism, and masculinity versus femininity, and long-term versus short-term orientation culture (Hofstede, 1980). Similarly, Handy (1985) classified it into power culture, role culture, task culture and person culture among others. Individualistic culture is a function of personality and personal belief in which knowledge is seen as a personal asset that should not be shared. Since Hofstede identified culture as a strong factor in organizational development, to what extent can organizational culture influence knowledge transfer success in multicultural SMEs in India needs an exploration.

Another factor to be researched is organizational strategy. As part of its strategy, some organizations encourage learning and acquisition of the necessary knowledge. Perrin and Rolland (2004) investigated the capacity of managing organizational networks and knowledge transfer in a global service company. They reported that despite putting mechanisms to create and transfer knowledge efficiently among professional networks, organizations still fell short of expectations because there was lack of support from top management. In the past, according to them, organizational strategy was based on codifying information instead of creating a collaborative climate outside organizational networks. Their emphasis was on fostering social capital embodied in networks while promoting coordination from the management. The study by Perrin and Rolland did not cover organizations (indigenous or multinational) in developing countries. It is not certain if the factor will play a significant role in knowledge transfer success in the SMEs covered in this study.

Apart from culture and strategy, training as an organizational factor is specifically aimed at improving employees’ competences. This is why people are considered the building block of organizational learning that can be acquired through training. Swieringa and Wierdsma (1992) reported that training in related field is the most efficient way to acquire knowledge. Stewart (1994) supported this view by stating that training is the best and most effective way of capturing human wisdom. In order for organizations to increase and improve their products and services, it needs to serve as a mentor in managing the knowledge gained through training. Mentoring is known to encourage continuous learning and problem solving skills (Hwang, 2003). The studies imply that training is the most important factor in knowledge acquisition. However, the authors have not shown that how the capacity of training influences knowledge transfer success. Therefore, it may be suggested in this study that it is more likely that training will predict knowledge transfer success compared to all the other organizational factors that are being considered.

Nonaka (1994) identified tacit knowledge as having a personal quality which makes it hard to formalize and communicate. It is deeply rooted in action, commitment and involvement in a specific context while explicit or codified knowledge refers to knowledge that is transmittable in formal, systematic language. The use of IT varies in the organizations, thus it is important to explore if the perceived effectiveness of IT by the employees may be a significant factor in knowledge transfer success.

Previously Alony, Jones, and Whymark (2007) explored tacit knowledge sharing using the Australian film industry (AFI) as a case study. It explored tacit knowledge sharing and demonstrated its significance to organization’s performance. Specifically, it examined the contribution of tacit knowledge sharing to the success of projects in the AFI. The study explored the differences between knowledge sharing, collaboration and communication, and their interrelations. Although this film industry entails more of tacit than explicit knowledge, the study investigated the issue of knowledge sharing and communication. Through interviews and content analysis, the factors influencing knowledge transfer (collaboration and skill sharing) and how it occurs in the AFI were examined. The success of workers and the performance of work units in the AFI were found to result from effective sharing of knowledge. Individual factors, network properties, properties of the knowledge shared, relationships and ties, organizational properties, and the issue of trust were considered and the relationship between them was investigated. It was concluded that knowledge shared in the AFI was basically tacit with an example of the knowledge of how a scene would look on screen etc. Conclusively, it showed that the knowledge sharing took place within a collaborative framework and...
occurred whenever information flow was observed. Factors that enable the sharing of explicit knowledge also serve as enablers to tacit knowledge transfer. Similarly, factors which motivated worker(s) to share knowledge were identified as networks, relationships, organizational elements and trust. In the present study, it is being predicted that the organizational elements (factors) under consideration may play a role in knowledge transfer success in Indian SMEs.

In another study, Odigie and Li-Hua (2008) investigated the channel of tacit knowledge transfer. Like previous findings, they reported that many factors had to be in place for the transfer of knowledge to be implemented. They considered knowledge transfer and technology transfer both collectively and individually, not leaving out their benefits and challenges. Though the study tried to unlock the channel of knowledge transfer, it specifically examined those factors that affected knowledge transfer by focusing on tacit knowledge and not on the explicit one. A major limitation in their study is that it failed to consider the issue of success in knowledge transfer.

Previous studies on knowledge transfer were carried out in different public organizations with less emphasis on profit making organizations like the film industry and NGOs to universally spin-offs. Gouza (2006) examined key factors of knowledge transfer within spin-offs. It was predicted that knowledge transfer within spin-offs would be positively associated with the disposition of the source, the capacity to learning of the recipient, strong ties between the recipient and the source, and the richness of transmission channels. According to Bray and Lee (2000), a spin-off is a new company that is formed by individuals who were former employees of a parent organization (Carayannis et al., 1998). It is obvious; however, that all the studies have focused on MNCs without much focusing on SMEs that could be added to the literature that already exists on the topic.

It is important to note that when knowledge is fully internalized by recipients, it become theirs and can lead to a higher discretion exercised by such individuals. It is more likely for them to invest their own ideas, unique knowledge and personal style in the knowledge (Pierce, Kostova and Dirks, 2001). Commitment as the second aspect of knowledge internalization results in individual’s identification and continuous involvement. It shapes the degree to which the recipient puts the knowledge into use (Mowday, Steers and Porter, 1979). Commitment is developed as a result of the value placed on the knowledge. It leads to the development of competencies in using the knowledge (Leonard-Barton, 1995) and willingness to put in extra effort in order to work with the knowledge (Mowday et al., 1979). The last aspect of knowledge internalization is satisfaction. The degree of satisfaction with knowledge to a great extent can help reduce the recipient’s stress and resistance levels in adapting and making use of the knowledge in question.

In this study, organizational factors refer to the collective name for organizational culture, organizational strategy, information technology, training and organizational performance as defined by Sekaran (2003). They are deliberately taken together to show their combination and individual contribution to the influence of knowledge transfer success. It is sufficient at this point to propose that the organizational factors of culture, strategy, information technology, training and organizational performance will significantly predict knowledge transfer success among employees in the selected SMEs in India.

III. METHODOLOGY

The survey research involves five independent variables signifying organizational factors. They include organizational culture, organizational strategy, training, information technology, and organizational performance. The dependent variable is knowledge transfer success. The data was collected from the employees of 25 SMEs in manufacturing of food and confectionaries.

Permission was taken from the heads of these SMEs. A sample size of 125 was drawn from these 25 SMEs. The organizations were selected as their structure is similar of FMCGs. Also, these firms are in manufacturing, hence the major knowledge transfer is required in the production department.

Respondents comprised of 113 males (90.4%) and 12 females (9.6%), with a mean age of 31.0 years (sd=1.10). The sample size was determined based on the guideline reported by Barlett et al. (2001) and Sekaran (2003). Barlett et al. stated that a sample size of 116 should be sufficient if the survey population is 200 and Sekaran (2003) reported that a sample size larger than 30 and less than 500 from work settings was usually sufficient and valid to be analysed using general statistical tools.

A part of the questionnaire used was adapted from previous studies. It has five sections (designated from
A to E). Section A was used to obtain information on demographic attributes of the respondents such as age, length of service, educational attainment, department and position occupied in the organization. The independent variables were measured in sections B, C and D by adapting Sekeran’s (2003) scale that measures organizational culture, organizational strategy, information technology, training and organizational performance.

As part of standardization for the present study, several words were changed from the initial scale because the questionnaire had been originally used on Society for Health Education (SHE) and was content-specific. There was a need to change some words such as SHE that were originally used in the scale to a more general one considered applicable to the present study. The word SHE was changed to “this organization” in various sections of the scale.

Section B had 10 items that measured organizational culture on a 5-point Likert scale from “strongly agree” to “strongly disagree”. Section C contained 16 items. Items 1-8 were meant to give response to questions on organizational strategies on a 5-point Likert scale from “strongly agree” to “strongly disagree”. Items 9-16 in section C involved questions on information technology with responses on a 5-point Likert scale from “strongly agree” to “strongly disagree”.

The next part of the questionnaire was section D, with a list of 14 items. The first seven items were centred on training and used a scale, ranging from “strongly agree” to “strongly disagree”. Organizational performance was assessed by the second part of section D (items 8-14). Item 14 in section D was reversely scored. Its response was also on a 5-point scale, ranging from “strongly agree” to “strongly disagree”.

As the dependent variable in this study, knowledge transfer success was measured in section E on the basis of knowledge internalization using a 22-item scale. These items were divided as follows: seven (7) items adapted from Szulanski (1996) to measure satisfaction related to cost, schedule and performance, nine (9) knowledge ownership related items from Mowday et al. (1979) to provide a robust measure of transfer success. Item and factor analysis were done on the scale that was finally used for the study after the changes from 3rd person singular to 1st person singular that was used in the knowledge transfer success scale adopted by Cummings and Teng (2003). Responses to the questions were scored on 5 – point Likert scale ranging from ‘to a very little extent’ to ‘to a very large extent’.

The items on each of the scales were subjected to item analysis and test for reliability from which coefficient alpha values were derived as follows: organizational culture scale (0.81), organizational strategy scale (0.78), training scale (0.81), information technology scale (0.67) and organizational performance (0.63) while knowledge transfer scale had a value of 0.87. The original versions of the scales that were adapted for the purpose of this research reported coefficient values of 0.61- 0.77.

IV. RESULTS

The proposed hypothesis was tested using multiple regression statistics. The results are presented in the summary table shown below.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>B</th>
<th>t</th>
<th>P</th>
<th>R²</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Transfer Success</td>
<td>Organizational Culture</td>
<td>0.11</td>
<td>0.86</td>
<td>&gt;0.05</td>
<td>0.22</td>
<td>7.76</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td></td>
<td>Organizational Strategy</td>
<td>-0.06</td>
<td>-0.41</td>
<td>&gt;0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Information Technology</td>
<td>-0.02</td>
<td>-0.06</td>
<td>&gt;0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Training</td>
<td>0.46**</td>
<td>3.91</td>
<td>&lt;0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizational Performance</td>
<td>0.05</td>
<td>0.54</td>
<td>&gt;0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Significant at p < 0.05
The results in table 1 revealed that the organizational factors combined prediction accounted for 21% variance of knowledge transfer success \(R^2 = 0.22, F = 7.76; p < 0.05\). However, among all the analysed factors, training showed the main significant prediction of knowledge transfer success \(\beta = 0.46, t = 3.91, p < 0.05\) with the highest percentage contribution of 46%. This means that training was the main factor found to contribute significantly to knowledge transfer success.

The following results were obtained from the analysis of influence of individual factors: organizational culture \(\beta = 0.11, t = 0.86, p > 0.05\), organizational strategy \(\beta = -0.06, t = -0.41, p > 0.05\), information technology \(\beta = -0.02, t = -0.06, p > 0.05\), training \(\beta = 0.46, t = 3.91, p < 0.05\), and organizational performance \(\beta = 0.05, t = 0.54, p > 0.05\).

Organizational culture, organizational strategy, information technology and organizational performance did not show independent significant prediction of knowledge transfer success \(p > 0.05\). However, training significantly predicted knowledge transfer success \(\beta = 0.46, t = 3.91, p < 0.05\), with a contribution of 46% to the explanation by organizational factors. Therefore, the hypothesis is confirmed.

V. DISCUSSION & CONCLUSION

In the present study, it was found that the key organizational factors can play a role in knowledge transfer success. The finding was supported by different empirical studies that showed the relationship as well as influence of the factors on knowledge transfer. Organizational culture as a factor had been found to influence knowledge management by the findings of Lang (2001) and Gouza (2001). However, it did not show strong influence on knowledge transfer success in the present study. It is believed that different cultures exist in organizations. While some are permissive thereby encouraging the transfer of knowledge in the form of sharing, others are not and exist in the form of an individualistic culture. If the existing culture is individualistic in which knowledge is hoarded, such organization will find it difficult to transfer knowledge when compared to a more liberal and collective organizational culture.

In Lang’s study, it was reported that the culture of an organization plays a vital role in the process of sharing and transferring knowledge among employees in an organization. However, it did not individually show any significant influence in the present study. It is not surprising that previous studies contradicted present findings. The difference may be attributed to the nature of organizations that were covered in the studies. The findings further justify the relativity of organizational culture which differs from one region to another. While present study focused on SMEs in India where cultural diversity is immense, Lang’s study was conducted outside India in probably less heterogeneous organizations.

The findings of this study are supported by several previous studies by Choi and Lee (2000), Cummings and Teng (2003), Ikhsan and Rowland (2003). Earlier studies found organizational strategy as important factor in the successful transfer of knowledge. This was also reported in the findings of Perrin and Rolland (2002). The present study is in slight agreement with existing literature that viewed organizational culture and strategy as important for successful knowledge transfer in organizations. However, they did not show significance as presently found.

In confirming the importance of information technology on knowledge transfer success, Davenport and Prusak (1998) and Hwang (2003) did not support the current findings. Their studies showed that information technology provides suitable environment for learning and interaction among employees in an organization. Information technology is believed to aid the process of knowledge transfer as it makes the practicality of some of this knowledge to be real and seen in the organization. However, it did not show significant influence in the present study. Probably, information technology may have been taken for granted in the MNEs investigated. Notably, the findings have shown the importance of differences in societies and organizations despite their adoption of global practices. The location of an organization can be a major issue in explaining employees’ perception of its practices and willingness to transfer knowledge.

Training was confirmed as the most significant factor that predicted knowledge transfer success with the highest contribution of 44%. This is supported by previous findings (Stewart, 1994; Swieringa and Wierdsma, 2002). The results of their studies help to affirm training as the most effective way of achieving knowledge transfer. The assumption of knowledge-based theory of the firm by Grant (1996) supports the present finding as well. The authors’ conclusion is that effective knowledge transfer requires the retention of specialized knowledge in the form of training. The role of organizational factors examined in the study
identified training as the most important contributor to knowledge transfer success (44%). It contradicted Perrin and Rolland (2002) who confirmed face-to-face communication as a major factor that encourages knowledge transfer. Nevertheless, Safa, Shakir and Boon (2006) earlier identified the organizational factors to predict knowledge management, especially its transfer. Despite the support, current results did not show evidence that all the factors had a significant influence.

Hwang (2003) previously found information technology and organizational performance as important factors in knowledge transfer. Specifically, the study reported organizational performance as a key tool to facilitate knowledge management practices in organizations. As shown, the results of this study did not support the position by Choi and Lee (2000). In previous studies, organizational performance and knowledge transfer were found to be strongly related. Jones et al. (2007) similarly, reported a significant relationship between knowledge sharing and organizational performance. Their findings were not supported by present results. Again, the disparity in findings may be attributed to different settings where the studies were conducted.

A major conclusion that can be drawn in the present study is that training more than other organizational factors plays a significant role in the successful transfer of knowledge. It is the most important organizational factor in the knowledge transfer success. This conclusion has implication for knowledge management by organizations. It means that effective training is inevitable in order to ensure successful transfer of knowledge. Therefore, a major approach to ascertain that knowledge is successfully transferred in SMEs requires that managers place more emphasis on training and retraining of employees especially in developing economy such as India.

However, the scope and attitude of respondents to questionnaires were major limitations in the study. Initially nine organizations proposed for the study declined the request for participation. This made it difficult to compare knowledge transfer success. Many employees declined to participate in the study when approached. Broader scope and bigger sample size may have enhanced generalization of findings and strengthen the outcome of the study. Nonetheless, the study helped to strengthen the importance of organizational factors, especially training in knowledge transfer success. It expanded the literature on knowledge transfer from a developing country perspective which previously lacked attention in most literature. The interest that the study could stimulate among scholars and practitioners is also important. Rather than focusing on employees’ dispositional factors, the management of organizations may be sensitized to put emphasis on organizational factors, especially training that was shown to be a key in knowledge transfer success. This can help to promote policies that enhance organizational learning and development in a developing economy.

REFERENCES


