

## ANTECEDENTS TO KNOWLEDGE SHARING BEHAVIOUR: TRUST CLIMATE AS THE FACILITATOR AND ATTACHMENT TO KNOWLEDGE AS THE DETRACTOR

*Sathya Narayanan SIVAPRAKASAM<sup>1</sup>, Manikandan VELRAJAN<sup>2</sup>*

<sup>1</sup>*Higher Colleges of Technology, Abu Dhabi, UAE*

<sup>2</sup>*Manonmaniam Sundaranar University, India*

*E-mail: ssivam@hct.ac.ae*

**Summary:** Knowledge sharing is considered vital for the success of the organisations as the knowledge driven economy demands knowledge specific asset building rather than physical asset building). In this study, the role of trust environment, the perceived benefits, Expected reciprocation and the sense of attachment to knowledge affecting the knowledge sharing behaviour of employees in Knowledge centric organisations are assessed. A structural model fit of the variables involved in the study revealed that expected reciprocation and a trust based environment is positively affecting the knowledge sharing behaviour. Attachment to knowledge will strongly hinder the knowledge sharing initiatives whereas perceived benefits will not have any direct impact on knowledge sharing. This study suggests that Organisations can not encourage knowledge sharing amongst its employees by merely providing incentives and benefits. It requires a trust based environment which can strongly encourage knowledge sharing and simultaneously mitigate the employee's attachment to knowledge (perceived loss of knowledge power) which emerged as a strong detractor of knowledge sharing behaviour.

**Keywords:** Knowledge Sharing, Knowledge Attachment, Trust

### 1. Introduction

Knowledge is considered to be a source of competitive advantage and it represents rare, inimitable and non-substitutable assets (Liebeskind, 1996). Although Knowledge sharing is recognised as one among the important factors which facilitate the survival of the organisation, the factors which encourage or discourage knowledge sharing behaviour in organisations are not well understood (Bock et al, 2005). To date several authors have studied the antecedents to knowledge sharing including organisational factors like a culture of trust and innovation, management and supervisor support, rewards and incentives, team characteristics etc. and individual factors like attitude, ownership of knowledge, reciprocation, etc. (Wang and Noe, 2010). Uniqueness in knowledge will be a source of power and personal gains in terms of cash bonuses and promotion (Husted and Michailova, 2002). This power source may act as a deterrent to knowledge sharing because employees fear losing their distinctiveness. Only a few studies have been made on the impact of power on knowledge sharing (Liao, 2008; Renzl, 2008).

Perceived loss of knowledge power is considered to be a detractor of knowledge sharing (Chennamaneni, 2006) whereas perceived benefits, Reciprocation and trust climate is considered to be a facilitator of knowledge sharing as identified in the earlier studies (Wang and Noe, 2010). The role of the afore-mentioned factors is not assessed through a Structural Equation Model which will be the unique contribution of the study. No documented research has studied the role of Trust climate as an antecedent to the knowledge sharing behaviour with the perceived benefits and the perceived loss of knowledge power as mediators. This is warranted because trust plays a major role in balancing a psychological contract between

employers and employees and it has the potential to provide employee satisfaction and commitment (Atkinson, 2007). The ability of trust as an antecedent in reducing the perceived loss of knowledge power and increasing the perceived benefits before having a positive impact on knowledge sharing has to be tested.

## 2. Hypotheses Development

Trust as an antecedent: In the knowledge sharing context, trust is considered to be very effective in reducing the perceived costs of knowledge sharing (Kankanhalli, Tan and Wei, 2005). Equally, trust is considered to be an important antecedent to knowledge sharing in the previous studies (Butler, 1999; Chowdhury, 2005, Wu et al., 2007). This premise leads to the hypothesis on the antecedent role of trust on the knowledge sharing behaviour of employees.

*H1. Trust climate has a significant positive impact on the knowledge sharing behaviour of employees.*

Mayer and Gavin (2004) proposes through their study on the need to investigate the mechanism through which the trust has an impact on the knowledge sharing. Therefore, measuring the direct and indirect effects of trust on knowledge sharing carries significance. Renzl (2008) proposes that trust can facilitate knowledge sharing by reducing the perceived loss of unique value by holding on to the power. This is measured as perceived loss of knowledge power (Gray, 2001). This sense of holding on to knowledge as a source of power and fearing to lose that power leads to knowledge attachment which could act detrimental to knowledge sharing. This premise leads to the second and third hypotheses.

*H2. Trust climate significantly reduces the sense of attachment to knowledge*

*H3. Attachment to knowledge will significantly reduce the knowledge sharing behaviour*

Wang and Noe (2010) argue that perceived benefits as an antecedent to knowledge sharing is one of the most widely attempted studies. Emerson (1981) suggests that knowledge sharing by individuals is evaluated based on the perceived ratio of benefits to costs and their knowledge sharing decisions are based on perceived respect, reputation and incentives. This leads to the following hypotheses. The norm of reciprocity refers to the expectations that knowledge sharing should be mutual and considered fair by both the sharing and receiving parties. Prior studies suggest that individuals share knowledge with an expectation that the others will oblige to the individual's future knowledge requests (Kankanhalli et al., 2005; Bock et al., 2005). No relevant studies have identified the impact of the perceived benefits on the reciprocity. It can be hypothesised that the higher the perceived extrinsic benefits from knowledge sharing, higher the reciprocal expectations for fair exchange of knowledge between two parties.

*H4: Perceived benefits (measured in terms of perceived reputation and incentives) have a profound positive impact on the knowledge sharing behaviour.*

*H5: Perceived benefits of knowledge sharing positively influences the expected knowledge reciprocity*

*H6: Knowledge Reciprocity significantly increases the knowledge sharing behaviour.*

Beyond these the role of trust climate and its impact on the perceived benefits also need to get assessed because employees may expect benefits from knowledge sharing aided by a climate of trust. Moreover, the perceived benefits may reduce the sense of attachment to the knowledge because the incentives and reputation associated with knowledge sharing will encourage the individuals to give up their knowledge. Meanwhile, the reciprocity associated with knowledge sharing may increase the sense of attachment to knowledge because expectations to share knowledge are influenced by other's intentions to reciprocate. As this context is perceived as quid pro quo, the tendency of individuals may generally prefer to hold on to knowledge than to risk sharing it. This leads to the following hypotheses:

*H7: The trust climate has a significant positive impact on the perceived benefits of knowledge sharing*

*H8: The perceived benefits of knowledge sharing will significantly reduce the attachment to knowledge*

*H9: The reciprocity will have a positive effect on the attachment to knowledge.*

Based on the above hypotheses, a conceptual framework is developed so as to assess the model using structural equations.

### **3. Sampling procedure**

The respondents for this study are representing knowledge workers who are predominantly from software development and Information Technology industry. As reaching a sample size of above 425 is considered robust to represent the population, a snowballing sampling procedure is followed but very much restricted to the knowledge industries.

### **4. Results**

The Structural Equation analysis is carried out on the data using AMOS 21.0 through a two-stage approach. The measurement properties of the constructs are initially assessed before analysing the structural relationships between the constructs. Several nested models are tested for fit and through examining the changes in Chi-Square of the several nested models, the theoretical model turned out to be a good fit with CFI= 0.96. The theoretical model turned out to be significant with Chi-square/degrees of freedom ratio at 2.142 and P value showing significant difference (as the sample size and number of variables are larger, this significant difference in the overall model fit is expected). The RMSEA value and SRMR value stood at .049 and .0588 respectively, indicating parsimonious model fit. The goodness of fit indices equally are in acceptable limits (GFI= 0.931, AGFI= 0.908).

The standardised path estimates (Table 1.) reveal that the knowledge sharing behaviour of employees is highly influenced by the organisation's trust climate (H1 supported with beta estimate at 0.256 and  $p < .01$ ). On the other hand the attachment to knowledge has a significant negative effect on the knowledge sharing behaviour as hypothesized (H3 supported with standardised beta estimate at -0.280 and  $p < .01$ ). Both are almost equal in effect on the individual's knowledge sharing intentions but in opposite directions. But it is interesting to observe that the trust climate can significantly reduce the negative intentions associated with knowledge attachment (H2 supported very strongly with standardised beta estimate at -0.311 and  $p < .01$ ). This underscores the mitigating role played by the organisational trust climate in reducing the fear of losing knowledge power. The perceived benefits in terms of incentives and reputation do significantly influence knowledge sharing behaviour (H4 not supported: as evident from the beta estimate with .104 and  $p > .05$ ). This showcases the insignificant role played by the organisational benefits on determining the knowledge sharing behaviour in comparison to the role played by trust or knowledge attachment.

The perceived reciprocity in knowledge sharing has a strong positive relationship with knowledge sharing behaviour (H6 supported: as evident from the beta estimate with .221 and  $p < .01$ ). Quid pro quo expectations in knowledge sharing logically have a strong impact on the actual knowledge sharing behaviour. One of the strongest positive relationship is the impact of perceived benefits on reciprocity (H5 supported: with beta estimate .593 and  $p < .01$ ). This is quite logical in its explanation that extrinsic benefits encourage quid pro quo transactions in knowledge sharing.

*Table 1. Results of Structural Equation Analysis*

| Hypotheses/ Relationship                      | Estimate | Significance | Sign | Support |
|---|----------|--------------|------|---------|
| H1- Trust Climate→ Knowledge Sharing          | .256     | **           | +    | Yes     |
| H2- Trust Climate→ Knowledge Attachment       | -0.311   | **           | -    | Yes     |
| H3- Knowledge Attachment → Knowledge Sharing  | -.280    | **           | -    | Yes     |
| H4- Perceived Benefits → Knowledge Sharing    | .104     | X            |      | No      |
| H5- Perceived Benefits → Reciprocity          | .593     | **           | +    | Yes     |
| H6- Reciprocity → Knowledge Sharing           | .221     | **           | +    | Yes     |
| H7- Trust Climate→ Perceived Benefits         | .422     | **           | +    | Yes     |
| H8- Perceived Benefits → Knowledge Attachment | -0.031   | X            |      | No      |
| H9- Reciprocity → Knowledge Attachment        | .190     | *            | +    | Yes     |

\*\* p<0.01 \*p<0.05 X-Not Significant

Further analysis reveals that trust climate has also a very strong impact on the perceived benefits from knowledge sharing (H7 supported: with beta estimate .422 and p<.01). This is contextually revealing in its meaning because the increased trust levels can naturally enhance the perceived benefits from knowledge sharing. But the perceived benefits share no relationship with attachment to knowledge (H8 not supported: as evident from the beta estimate with -.031 and p >.05). This is also surprising because when individuals perceive to get benefits from knowledge sharing it is expected that the tendency to hoard the knowledge can come down significantly. This means that extrinsic benefits do not have the power to reduce the attachment to knowledge and it cannot be able to decrease the fear of power loss due to knowledge sharing. The role of reciprocity in determining the attachment to knowledge tendencies is also significant (H9 supported, but with a weaker impact with beta estimate .190 and p<.05).

## 5. Limitations and Future Directions

This study involves knowledge workers across various organisations. Although there is a consistency across the choice of the respondents they belong to various industries, proving external validity requires greater care in sampling from a single industry to emphasise homogeneity of samples. This work is purely quantitative in nature and is exposed to the inherent vulnerabilities of any quantitative research. Future qualitative studies should be carried out to triangulate these findings.

This study didn't consider any new variables and in a sense has repeated earlier studies with minor modifications to the relationships. In future, the role of conflicting intentions to knowledge sharing has to be tested as the individual's mind is not always consistently tuned towards knowledge sharing. This means that employees will go through a flux during which on some occasions feel encouraged to knowledge sharing and in some other occasions feel not to share knowledge. Such conflicting intentions and their impact on knowledge sharing behaviour need to be studied in the future.

## 6. Conclusion

Organisations while taking initiatives to encourage knowledge sharing behaviour has to facilitate a trust climate as a primary antecedent. While the trust can encourage knowledge sharing it can significantly allay down the fear of individual's loss of knowledge power. The organisations should also design incentives and recognition programme which can indirectly encourage knowledge sharing through creating necessary reciprocity platforms. The above

measures will help organisations to encourage knowledge sharing and reducing the knowledge attachment tendencies.

## References

1. Bock, G. -W., Zmud, R. W., Kim, Y. -G., & Lee, J. -N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 29(1), 87–111.
2. Atkinson, Carol (2007) "Trust and the psychological contract", *Employee Relations*, Vol. 29 Iss: 3, pp.227 - 246
3. Husted, K., & Michailova, S. (2002). Diagnosing and fighting knowledge-sharing hostility. *Organizational Dynamics*, 31(1), 60–73.
4. Jackson, S. E., Chuang, C. -H., Harden, E. E., Jiang, Y., & Joseph, J. M. (2006). Toward developing human resource management systems for knowledge-intensive
5. Liao, L. -F. (2008). Impact of manager's social power on R&D employees' knowledge-sharing behaviour. *International Journal of Technology Management*, 41(1/2), 169–182.
6. Liebeskind, J. P. "Knowledge, Strategy, and the Theory of the Firm," *Strategic Management Journal* (17:Special Issue), 1996, pp. 93-108
7. Renzl, B. (2008). Trust in management and knowledge sharing: The mediating effects of fear and knowledge documentation. *Omega*, 36(2), 206–220.
8. S. Wang, R.A. Noe / Knowledge sharing: A review and directions for future research *Human Resource Management Review* 20 (2010) 115–131