

# Asian Resonance

## Knowledge Sharing Behaviour of Employees: A Study in Selected IT Organizations

**Rupinder Bir Kaur**

Assistant Professor  
University Business School,  
Punjab University,  
Chandigarh

**Vaneeta Agarwal**

Assistant Professor,  
Deptt. of Management Studies,  
University of Madras,  
Chennai

### Abstract

Knowledge management has gained much importance with the rise of knowledge intensive organizations. In the knowledge-based era, knowledge is the foundation of a firm's competitive edge. Knowledge management is often defined as a process of capturing, sharing, storing and using knowledge. The process by which individuals share ideas and support exchange of knowledge, thus creating new knowledge is termed as knowledge sharing. In practice, knowledge sharing is the core and the most difficult activity of knowledge management. To do this research, survey method was used.

The questionnaire used in the survey was a self-administered questionnaire whose reliability was tested through a pilot study. A total of 120 questionnaires were filled by employees in 3 different IT companies. The sample was obtained from the employees having more than 1 year of experience in the same organization. No significant relationship was found between any of the demographic variables and the willingness of employees in selected IT organizations. The three important factors that were found to influence the knowledge sharing in selected IT organizations were Technology, Social networking and Organizational support.

**Keywords:** Knowledge, Knowledge management, Knowledge sharing, Competitive edge

### Introduction

Nonaka and Konno<sup>1</sup> (1998) defined knowledge management as a process that simplifies the process of creating, sharing and disseminating as well as understanding the knowledge possessed by the individuals in an organization. The most crucial process in knowledge management is the sharing of knowledge between different individuals. (O'Dell & Grayson<sup>2</sup> 1998). Knowledge sharing is a process where the individuals in an organization exchange their knowledge and ideas through discussions and databases to create new knowledge or ideas. In the knowledge-based era, knowledge is the foundation of a firm's competitive edge.

Sharing of knowledge catches concern because it is an essential component of growth. Employees generally show their unwillingness in sharing their knowledge due to the fear of competition and the use of their valuable knowledge. Many organizations use technology to enhance knowledge sharing behavior, but still making it a success is a challenging work. Employees treat their knowledge as a source of power and so it is all the more difficult to convince and encourage them to share their knowledge.

In this era where knowledge plays a very important role, to meet the organization's objectives, organizations want to encourage and enhance knowledge sharing among their employees.. Knowledge sharing includes the methods and degree of willingness displayed by the employees to share their knowledge with others in the organization. Knowledge sharing includes sharing among not only individuals but also sharing across teams, different organizational units and between organizations (King<sup>3</sup> 2008). A person cannot be forced to share his/her knowledge as it is intrinsic but knowledge sharing behavior can be inculcated through facilitation and encouragement.

### Review of Literature

Researchers have conferred various factors that are believed to influence knowledge sharing behaviors of individuals. Some have discussed about the hard issues such as tools and technologies, their availability and usage (Alavi & Leidner<sup>4</sup>, 2001), and others emphasize the soft issues such as motivations and provision of incentives to encourage

# Asian Resonance

knowledge sharing (Ardichvili et al<sup>5</sup>, 2003). However, the focus of studies on knowledge sharing has been on the willingness from people to share knowledge.

According to a research conducted by Bock et al<sup>6</sup> (2005) Self-efficacy, extrinsic motivators, social-psychological forces and organizational climate factors were found to be the factors influencing knowledge sharing behaviour among employees.

A range of studies have stressed upon Organizational culture, personal values and trust as the most important factors affecting knowledge sharing in organizations. (McDermott and O'Dell<sup>7</sup>, 2001). Brown and Duguid<sup>8</sup> (2002) highlighted the significance of possessing knowledgeable people in the organization. Keisler and Sproull<sup>9</sup> (1994) in a study visualized the factors that support or restrain information and knowledge sharing in technologically advanced organizations. They studied factors like work experience, computer experience, year of training and perceptions about organizational ownership of information. Seba et al<sup>10</sup> (2012) suggested a strong relationship between the attitude towards knowledge sharing, and intention to share knowledge. They also stressed the influence of leadership, trust, organizational structure, time, and information technology on attitude to knowledge sharing were upheld.

Kugel & Schostek<sup>11</sup> (2004) study found that knowledge is shared only because of the monetary rewards and when the rewards system is withdrawn, the knowledge sharing behavior will decline. Grumbley<sup>12</sup> (1998) has also stressed on providing incentives to encourage the employees to share knowledge. In similar context, Syed-Ikhsan & Rowland<sup>13</sup> (2004) emphasized that organizations that provide "reward" systems will be able to encourage employees to share the knowledge easily.

Some researchers found out the significance of informal interactions in knowledge sharing. Connelly & Kelloway<sup>14</sup>, 2003 noticed that knowledge sharing or knowledge transfer has been actually occurring at the time of communicating or informal discussions with people. Thus, many organizations are now encouraging their employees to interact more frequently with each other and also create networks that could make knowledge sharing process unceremonious but fruitful.

Many organizations are increasing the knowledge sharing among the employees by introducing and adapting to new technologies. The organizations are creating different databases or "repositories" where the employees can contribute their expertise in a way that can be accessed by other employees as well (Ruggles<sup>15</sup>, 1998).

The significance of knowledge sharing is highlighted by numerous studies. Lee and Lin<sup>16</sup> (2004) developed an integrative research model that interconnects knowledge management enablers and processes with organizational performance. In their study Jalala et al<sup>17</sup> (2013) focused upon the knowledge-based view of organisational behaviour emphasizing the importance of knowledge for

organizations to retain their competitive advantage. Thus, according to them the success of knowledge sharing is vital because, if successful, it results in shared intellectual capital and Knowledge sharing success, to a great extent, lies in the employees' capability to share knowledge. Yesil et al<sup>18</sup> (2012) focused on the knowledge sharing process and its impact on innovation capability and innovation performance of the firms.

## Need for the study

Although the significance of knowledge sharing is quite apparent but still a lot of knowledge is never shared in the organizations. The impact of efficient knowledge sharing is extremely vital in professional service firms where the company's "product" is the knowledge of the employees have and how the knowledge is utilized in various projects. This study will contribute to the literature of knowledge sharing and will also help in understanding various factors that lead to formation of behavior of an individual towards sharing of knowledge. The paper emphasizes the identification of the willingness and ability of IT professionals to share their knowledge. It also stresses on correlating various factors influencing knowledge sharing in IT organizations.

## Knowledge Sharing Behavior

In order to measure knowledge sharing behavior, the parameter knowledge sharing behavior has been divided into willingness and ability, which says that in order to share knowledge the employees should be willing and also be able to share knowledge.

## Willingness of employees

It is measured through two parameters: Intention and Attitude.

## Ability of employees

The study is conducted on the employees having more than 1 year of work experience in the same organization so it is assumed that all the respondents have the capacity to share the knowledge.

## Factors influencing Knowledge sharing Behavior

To measure the extent of impact of various factors such as organizational support, technology, social interaction, extrinsic awards and self-efficacy affecting knowledge sharing behavior of the employees. In this study Knowledge Sharing Behavior is taken as the Dependent variable and Organizational Support, Technology, Social Interaction, Extrinsic Awards and Self-Efficacy are taken as the Independent variables.

## Objectives of the study

1. To assess the knowledge sharing behavior of the employees of IT sector.
2. To measure the extent of impact of various factors such as organizational support, technology, social interaction, extrinsic awards and self-efficacy affecting knowledge sharing behavior of the employees.
3. To measure the effect of age, educational experience and work experience on willingness to share knowledge among employees.

# Asian Resonance

## Research Hypotheses

### H<sub>01</sub>

There is no significant relationship between Technology and Knowledge Sharing Behaviour of IT professionals.

### H<sub>02</sub>

There is no significant relationship between Social Interaction and Knowledge Sharing Behaviour of IT professionals.

### H<sub>03</sub>

There is no significant relationship between Organizational Support and Knowledge Sharing Behaviour of IT professionals.

### H<sub>04</sub>

There is no significant relationship between Extrinsic Rewards and Knowledge Sharing Behaviour of IT professionals.

### H<sub>05</sub>

There is no significant relationship between Self Efficacy and Knowledge Sharing Behaviour of IT professionals.

### H<sub>06</sub>

There is no significant relationship between Age and Knowledge Sharing behavior of IT professionals.

### H<sub>07</sub>

There is no significant relationship between educational experience and Knowledge Sharing Behaviour of IT professionals.

### H<sub>08</sub>

There is no significant relationship between work experience and Knowledge Sharing willingness of IT professionals.

## Data Collection

The research project is an empirical study. Keeping in view the ambit of the research, primary data was collected. Secondary data was used for defining and redefining of the research problem. For the purpose to carry out this research a sample survey was extensively used. The three IT organizations i.e. Infosys Technologies Ltd, Accenture and Aricent form the database for this study. The sampling of the respondents was random and a total number of 120 employees were taken as the sample. A self administered questionnaire was prepared and data was collected. The questionnaires validity and reliability were checked. A pilot study was conducted taking 40 respondents. Here the reliability statistics was calculated and the value of Cronbach Alpha is 0.892 which is greater than 0.7. Hence, we can safely conclude that the scale is consistently reflecting the construct it was meant to measure.

## Data Analysis and findings

The attitude of employees towards knowledge sharing was found to be below mean. Out of the total 120 employees 35.8% employees were found to have positive attitude towards knowledge sharing. The intention of employees were also measured which resulted in 44.2 % employees having an intention to share their knowledge. This shows that majority of employees in Selected IT organizations were neither having positive attitude nor had

intentions to share knowledge with their co workers. Thus the overall willingness of employees (including attitude and intention) was found to be less.

**Table 1:** Table showing Below and Above mean frequencies of Willingness of employees towards Knowledge

	Frequency	Percent
Below Mean	67	55.8%
Above Mean	53	44.2%
Total	120	100%

Pearson Correlation was calculated to find out the factors that have significant relationship with willingness of employees to share knowledge. All five factors taken for study were found to have significant relationship with the willingness of employees. Thus hypotheses numbers 1,2,3,4 and 5 were rejected.

**Table 2:** Correlation table showing factors affecting willingness of employees towards Knowledge sharing

Variable	Pearson Correlation value
Technology	.508**
Social Networking	.339**
Extrinsic Rewards	-.182*
Organizational support	.432**
Self Efficacy	.397**

Extrinsic rewards showed a negative relationship indicating that higher rewards and incentives lead to higher reluctance on the part of the employees to share knowledge which can be attributed to their fear of knowledge loss and consequently further incentives.

## Demographic variables and willingness of employees to share knowledge

Out of the total 120 employees, 76.7% were of the age group of 21 to 25 years. 16.7% were of the age group of more than 25 and only 6.7 % were below 21 years of age. Respondents were asked about the educational qualification to be graduate or post graduate. Almost 40% were graduates and rest had qualification postgraduates and above. 46.7% of employees had work experience of less than 2 years and 49.2% of employees had work experience ranging from 2 to 5 years.

Chi square test was applied to find out whether there is any relationship between demographic variables on one side and willingness of employees to share knowledge. No significant relationship was found between any of the demographic variables and the willingness of employees in selected IT organizations. Thus, hypotheses numbers 6,7 and 8 were accepted.

**Table 3: Table showing Chi square values to find out relationship between willingness of employees and their demographics.**

Variable	Chi square values	Degrees of freedom
Age	1.249	2
Educational Qualification	3.358	2
Work Experience	4.567	2

# Asian Resonance

## Stepwise Regression Analysis

Stepwise regression analysis was applied to find out the variance explanation of the independent variables upon the dependent variable i.e. willingness of respondents to share knowledge. Technology and its availability was found to be the major factor explaining knowledge sharing willingness in selected IT organizations. It explained 25.8% of the total variance. Social interactions and Technology together

explained 31.8% and with organizational support, the explanation raises to 34.6%. Thus, the three important factors that were found to influence the knowledge sharing in selected IT organizations were Technology, Social interactions and Organizational support. This further shows that the organizational factors are more significant as compared to individual factors like rewards and self-efficacy with regard to knowledge sharing.

**Table 4**

**Table showing stepwise Regression Analysis showing variables explaining knowledge sharing among employees Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.508 <sup>a</sup>	.258	.252	3.54830
2	.564 <sup>b</sup>	.318	.306	3.41803
3	.588 <sup>c</sup>	.346	.329	3.36077

a. Predictors: (Constant), technology

b. Predictors: (Constant), technology, social interactions

c. Predictors: (Constant), technology total score, social networking total, org support total

## Conclusion

The overall objective of this study was to assess the Knowledge Sharing Behavior of the employees and to measure the extent of impact of various factors such as organizational support, technology, social interaction, extrinsic awards and self-efficacy affecting the Knowledge sharing of the employees. The setting used in this study was the Information Technology (IT) sector and the sample consisted employees from three IT companies. This research was prompted by the lack of attention given in the literature of Knowledge management about the factors influencing Knowledge Sharing Behavior. The main results of the research in this study were derived from questionnaire survey.

The willingness of employees to share knowledge in selected IT organizations was found below average. Chi square analysis showed that age, educational qualification and work experience have no relation with willingness to share knowledge. The findings were in opposite to the findings of Keisler and Sproull<sup>19</sup>(1994) who found impact of work experience on knowledge sharing. Correlation analysis showed that all the other factors like technology, social interactions and organizational support have some positive relation with knowledge sharing but rewards has negative relation with knowledge sharing. This study reemphasizes the study conducted by Connelly & Kelloway<sup>20</sup> which analyzed that informal communication through social interaction is one of the ways through which employees share knowledge.

Regression analysis showed the major contribution of organizational factors like technology, social interactions and organizational support in influencing the knowledge sharing among employees of selected organizations with technology emerging as the main factor impacting knowledge sharing behaviour. The findings were in line with the earlier

findings of Alam<sup>21</sup> et al (2009) who also found the technology as having a positive and significant influence on knowledge sharing behavior.

## Managerial Implications and Recommendations

Knowledge sharing impacts performance as shown by a study by Lee and Lin<sup>22</sup> (2004) who showed positive relation between knowledge management and organizational performance, Jalala et al<sup>23</sup> (2013) who concluded that knowledge sharing behavior provide competitive advantage to the organizations, Yesil et al<sup>24</sup> (2012) who found positive impact of knowledge sharing process on innovation capability and innovation performance of the organizations.

Since extrinsic rewards showed a negative relationship with knowledge sharing, the rewards should be not only linked to performance but also to knowledge sharing. The rewards and incentives should be designed in such a way so that they encourage knowledge sharing and rather than having a competitive approach the organizations should encourage collaborative reward approach.

Organizations should start motivating their employees to increase social interactions so that more and more knowledge is shared through Social Interactions. Organizations should create an organizational climate which encourages employees to share knowledge. As technology holds maximum explanation the organizations should create a climate that is highly adaptive to latest technologies so that the knowledge sharing among employees is enhanced. Age, educational qualification and gender do not effect knowledge sharing behavior so the organizations policies, procedures and systems should be designed in such a way as to enhance knowledge sharing among its employees as knowledge only can give competitive edge to any organization.

# Asian Resonance

## References

1. Nonaka L and Konno N (1998), "The Concept of 'ba': Building a foundation for knowledge creation", *California Management Review*, 40(3), 40-54
2. O'Dell, C and Grayson C.J (1998), "If only we knew what we know: Identification and transfer of internal best practices", *California Management Review*, 40(3), 154-174
3. King, W.R. (2008), "An integrated architecture for the effective knowledge organization" *Journal of Knowledge Management*, 12(2), 1367-1380.
4. Alavi, M., and Leidner, D. E. (2001) "Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues," *MIS Quarterly* (25:1), pp. 107-136.
5. Ardichvili, A et al, (2003) "Motivation and barriers to participation in virtual knowledge-sharing communities of practice", *Journal of Knowledge Management*, Vol. 7 Iss: 1, pp.64 – 77.
6. Bock G W, Zmud R.W , Kim Y and Lee J (2005), "Behavioural intention formation in knowledge sharing: Examining roles of extrinsic motivators, social psychological forces and organizational climate", *MIS Quarterly*, 29(1), 87-111
7. McDermott, R and O'Dell, C (2001), "Overcoming cultural barriers to knowledge sharing", *Journal of Knowledge Management*, 5(4), 311-21.
8. Brown J.S and Duguid P (2002), "Local Knowledge: Innovations in the Networked Age", *Management Learning*, Vol 33, No. 4, 427-437.
9. Kiesler, D S, & Sproull, L. (1994). What's mine is ours, or is it? A study of attitudes about information sharing. *Information Systems Research*, 5, 400-421.
10. Seba I and Rowley J and Lambert S (2012) "Factors affecting attitudes and intentions towards knowledge sharing in the Dubai Police Force", *International Journal of Information Management*, 32, pp. 372-380
11. Kugel J and Schostek C (2004), "Knowledge Sharing: Rewards for knowledge sharing" Available : <http://www.gurteen.com/gurteen.nsf/rewards-k-sharing>
12. Grumbley H (1998), "Knowledge Management", *Work Study*, 47(5), 175-177
13. Syed-Ihksan, S.O.S and Rowland F (2004), "Benchmarking knowledge management in a public organization in Malaysia", *An International Journal*, 11(2)
14. Connelly, C E and Kelloway E K (2003), "Predictors of employees' perceptions of knowledge sharing cultures", *Leadership and Organizational Development Journal*, 24(5), 294-301
15. Ruggles, R (1998), "The State of the Nation: Knowledge Management in Practice", *California Management Review*, 40(3), 80-89
16. H. F. Lin, and. G. Lee, (2004), Perceptions of senior managers toward knowledge-sharing behavior, *Management Decision*, vol. 42, pp. 108-125.
17. Jalala H A, Toulsonb P and Tweedc D, (2013) "Knowledge sharing success for Sustaining Organizational Competitive Advantage" *Procedia Economics and Finance*, pp.150 – 157
18. Yesil S, Koska A and Buyukbese T (2013), "Knowledge Sharing Process, Innovation Capability and Innovation Performance: An Empirical Study" *Social and Behavioral Sciences*, pp. 217 – 225
19. Kiesler, D S, & Sproull, L. (1994). What's mine is ours, or is it? A study of attitudes about information sharing. *Information Systems Research*, 5, 400-421.
20. Connelly, C E and Kelloway E K (2003), "Predictors of employees' perceptions of knowledge sharing cultures", *Leadership and Organizational Development Journal*, 24(5), 294-301
21. Alam S.S Z , Abdullah N A I and Zain Z.M (2009), "Assessing Knowledge Sharing behaviour among employees in SMEs: An Empirical Study", *International Business Research*, 2(2), 115-122
22. H. F. Lin, and. G. Lee, (2004), Perceptions of senior managers toward knowledge-sharing behavior, *Management Decision*, vol. 42, pp. 108-125.
23. Jalala H A, Toulsonb P and Tweedc D, (2013) "Knowledge sharing success for Sustaining Organizational Competitive Advantage" *Procedia Economics and Finance*, pp.150 – 157
24. Yesil S, Koska A and Buyukbese T (2013), "Knowledge Sharing Process, Innovation Capability and Innovation Performance: An Empirical Study" *Social and Behavioral Sciences* pp. 217 – 225