



## REQUIREMENT FOR KNOWLEDGE SHARING BEHAVIOR: A REVIEW OF EMPIRICAL FINDINGS

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### ABSTRACT

*Knowledge sharing behavior has become an essence for knowledge management. Across centuries, knowledge was proved as an important source of success in any field. Without denying the important of knowledge management system, practical implementation has found that the existence of technology alone is not enough in encouraging knowledge sharing behavior among employees. Nonetheless, through the lens of sharing culture, the factor of voluntary knowledge sharing behavior among workers at workplace has been explored. Regardless, nobody could deny the role of knowledge to everybody in any organization. By understanding the role of knowledge in the organization and their capabilities to use its knowledge resources for advantage, an organization is actually in the process of becoming a knowledge-based organization and able to transform and shift its knowledge potential into wealth. There are certain factors were highlighted in this paper with relevant elaborations supported with past reviews and journals which focuses on three factors that are individual factors, organizational factors and technological factors. After all, this paper reviews past empirical studies on factors that can affect successful knowledge sharing behavior in organization. Thus, this study is hoped to give bright ideas and understanding about the important in encouraging employees to contribute and practicing knowledge sharing behavior at workplace.*

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**Keywords:** Knowledge management, Knowledge sharing behavior, Organizational factors, Individual factors, Technological factor

### INTRODUCTION

Knowledge is powerful if people tend to use it properly with right ways. Knowledge is something that is very important to everyone as it is one of the resources for individuals to develop themselves each day.

We may learned that in an organization, human resources is an asset and once the workers resigned to retire or join to another organization, the knowledge they bring indirectly also could be dissolved because the knowledge, skills and abilities are owned to that person and not totally belongs to the organization. Lynd (1939) argued that knowledge would flow freely when people tend to rebuild

their organizations in order to create opportunities and helps in solving the problems and issues. According to [Boath and Smith \(2007\)](#), many companies are now looking at an ongoing, irreplaceable loss of the knowledge, experience and wisdom that could be the main source of competitiveness and profitability. They added and strongly mentioned in encouraging people to not losing the workforce who is represented the great body of knowledge. Knowledge is company's most valuable intangible assets as it involves routines and creative way of doing the job. Knowledge would create advantages when organizations develop its ability to build and access its resources of knowledge ([Chatzkel, 2003](#)). Thus, it is important to note about the importance of knowledge sharing behavior in the organization and makes a better plan to ensure that the knowledge they have previously is sustainable even any of the employee leave. The main objective of this paper is to explore methods of encouraging employees to share their knowledge in the organization. The discussion of this paper begins with the importance of knowledge sharing behavior, and its challenges. The discussions then followed by discussing the roots of knowledge, and ends with a discussion on past empirical study of knowledge sharing behavior by focusing on three factors, namely organization, individual and technology.

### **Challenges in Encouraging Knowledge Sharing Behavior**

It is not easy to absorb the knowledge sharing behavior culture as a norm in the organization. In the literature, there are widely discussions on the challenges faced by the organization in encouraging their employees to share their knowledge and ideas. For example, organization's scholars who are analyzing factors that inhibit knowledge sharing among subunits found that the lack of extensive communication and direct relationship between employees at different subunits has been the main contribution. The weak-tie theory which is originally advanced by [Granovetter \(1985\)](#) mentioned that distant and infrequent relationships which presents as weak-ties are efficient for knowledge sharing behavior as these people bring the accessibility to novel information by connecting other disconnected individuals and groups in the organization. In contrast, strong ties are likely to lead in redundant information as they tend to exist among a small group of people where everybody knows what the others know ([Hansen, 2010](#)). Generally, willingness and ability may become two explanations of the transfer problem. Although both parties are willing to make the efforts to transfer the knowledge, however they may unable to shift it smoothly as of the cause of inherent difficulty of the task ([Hansen, 2010](#)).

In other writing, [Chowdhury \(2006\)](#) believed that one of the most challenging part in encouraging knowledge sharing behavior is that the people need to trust between each other for ensuring the spontaneously and efficiently knowledge sharing to be happened. However, he argued that in Asia the individuals commonly do not trust among them and their possess knowledge. The people are also has low confidence in sharing their knowledge and expertise. Most Knowledge Management (KM) models are formed based on a Western framework where the freedom of expression and individualism are accepted as social norms ([Chowdhury, 2006](#)). However, it is not necessarily suits many organizations context in Malaysia. Psychologists have been accepted that Asians are

commonly less vocal and critical at the workplace compared to Westerners. The knowledge sharing behavior would become more difficult to the extent that the knowledge involved is complex.

## **THE STUDY OF KNOWLEDGE SHARING**

### **Definition of Knowledge Sharing**

Basically, knowledge sharing behavior is an instrumental value that provides various perspective and definitions from researchers and human practitioners since decades. Knowledge sharing behavior is more about 'share' manner from everybody to share what they know. The behavior of sharing the knowledge might sometimes is the norm that management team have to stress for in order to get long-term effects which is believed would bring an opportunities for every members of the organization to be part of company's asset. [Davenport and Prusak \(1998\)](#) has defined knowledge sharing behavior as the process involving knowledge exchange between individuals and groups of people. While [Connelly and Kelloway \(2003\)](#) defined knowledge sharing behavior as behavior's set which involve exchanging of information or assistance with others.

### **Roots of Knowledge Management: Knowledge Sharing**

The year of 1950s was the decade of electronic data processing ([Gamble and Blackwell, 2001](#)). That decade was also bridging with structured management approaches like management by objectives (MBO) ([Gamble and Blackwell, 2001](#)). There were a focuses on different structure of organizational forms and effects of centralization and decentralization on 1960s which can be seen as some of the reaction towards previous decade. The 1970s saw useful of trying and get all the team members rowing in the same path. This was the decade of experiencing curve and strategic planning as introduced by individual like Henry Mintzberg. In the 1980s therefore seen people like Michael Porter who is wrote on profound impact on the way people looked at the competition basis. Management on that time took more attention in corporate culture, Total Quality Management (TQM) and downsizing. By the 1990s, the focuses were more towards releasing human resources which is competitively potential. Management was more interested in learning, unlearning and experience to be taken into account. [Drucker \(1999\)](#) strongly mentioned that information and explicit knowledge grows as importance on organizational resources. [Senge \(1994\)](#) has interest on the organizational learning which is a cultural dimension of knowledge management. Technologies were followed then like hypertext or groupware applications. Perhaps, [Nonaka and Takeuchi \(1995\)](#) were studied on how Japanese companies creating knowledge and innovation. Thus, in the early of 2000s, knowledge management has growing as a unifying corporate goal. Nowadays, the intention is to produce integration of organization through the culture of knowledge sharing in recognizing the value of intellectual capital or human capital and in understanding that competition was also depends on the ability to deploy and exploit knowledge.

## **EMPIRICAL FINDINGS ON FACTORS AFFECTING KNOWLEDGE SHARING BEHAVIOR**

### **Organizational Factor**

#### **Management System**

Organizations are adopting initiatives in KM and investing in information and technological communication in the form of Knowledge Management Systems (KMS) in order to leverage and managing knowledge resources in the organization (Davenport and Prusak, 1998). In reaction to this, a new class of application in information systems called KMS has emerged. KMS can be defined as an application of information systems to manage organizational knowledge (Alavi and Leidner, 2001). The KMS and knowledge repositories play its role in boost up organizational effectiveness (Markus, 2001). KMS which consist of information and communication technology facilitate collaborative work and knowledge sharing capability but only if they are actually used (Chennamaneni, 2006). The example is open-network sharing which can be referred to as the knowledge sharing among group members through a KMS as a central database system (Cheng *et al.*, 2009). It involves variety of knowledge assets shared by multiple individual of the organization in the system. Commonly, knowledge sharing is viewed well in the research of KMS implementation however it might not address adequately on the perspective of individual (Cyr and Choo, 2010). Past research in information systems has identified that the act of individuals which followed to their beliefs on the availability and the ease of using the systems (Chennamaneni, 2006). As example, the architecture of a mobile learning management system has been proposed by Chen *et al.* (2008) which is could supported better mobile learning for a small group of learners by effective social interaction. The absence of consideration of how individual and interpersonal including the characteristics of organization influence knowledge sharing behavior is the important reason for the failure of KMS in facilitating knowledge sharing (Veolpel and Davenport, 2005).

#### **Incentive System**

Sometimes, organizations confront to motivate their employees in participating into the Knowledge Sharing Behavior by using extrinsic motivators like monetary incentives such as performance-related pay or bonuses, challenging work assignments, promotions, training chances, job security or any combinations of motivators. When the top management decided in enforcing such incentive system specifically for knowledge sharing behavior, it is indirectly urge the employees to be involved in such behavior which would improve the productivity level and excitement in completing their job.

Knowledge sharing cannot be promoted by rewards; the way to expand real knowledge sharing is to “build meaning into the workplace” (Finerty, 1997; Morey *et al.*, 2002). People would want to share their knowledge when they really care on what they do (Morey *et al.*, 2002). It is make sense as people or workforce in the organization is the human being. Normally, the workers would only care about their salary, anything relates on money to cope with the increasing cost of living and

hoping to bring good financial in their family for their own good. Thus, the organization should treat their workforce as their family. It is indirectly would pull them ahead in involving into organizations activities including sharing their knowledge and experiences to the other members of the organization. Yes, reward is still needed to convey their appreciations of their worker's contribution but yet there must be a study to check on how far it is effective in absorbing knowledge sharing behavior practices among employees as it is afraid it could down the motivational level for those who are unable to contribute in such a way. The incentive system should be up to date in order to ensure it is following the latest environmental factors inside and outside the organization so that nobody would feel neglected. [Abdullah et al. \(2008\)](#) studied on seven main Malaysia local universities which are founded that suitable incentives and rewards should be given for sharing, searching and KMS uses as a mode of motivation.

### **Organizational Culture**

Organizational culture can be said as context evolving within where specific situations are embedded ([Dennison, 1996](#)). [Hsieh et al. \(2009\)](#) indicated that organizational culture is believed to be as the most significant input towards the effectiveness of KM that associated with values, beliefs and work system which can encourage knowledge sharing. Organizational culture is important for knowledge sharing as it needs a supporting organizational culture ([Huang et al., 2008](#)). However, a study from [Rad et al. \(2011\)](#) showed findings where organizational culture did not impose any influence on knowledge sharing. The results was contradicts to most of the research results ([Hoof and Huysman, 2009](#)) and discussion theoretically from the existing knowledge sharing behavior literature where organizational culture are often being as important determinants of knowledge sharing behavior. For example, [Hall and Goody \(2007\)](#) mentioned that organizational culture affect people's attitude towards sharing the knowledge.

The culture would be tightly bonded when almost everyone share the same norm within the organization they are working for. Therefore, organizational culture indirectly has the possibilities to affect the knowledge sharing behavior among employees. It is true as everyone in the organization especially the newbies would tend to behave in a way that can be accepted by the current workers that represent the culture and norm of the organization. Culture is something that is difficult to breach. It is likely as identity of a group. Similar from the individual perspective or nation's country, everybody holds and act as in line with the culture factors supported by other environmental and surrounding. They would be no problem if the culture of the organization already enhance and encourage its employees engaging in knowledge sharing behavior but it might be a problem if the culture not supported that behavior at all which can loses and fail many of organizations functions.

## INDIVIDUAL FACTORS

### Individual Attitude

Attitude was found to be another factor that influenced employees' intention in sharing the knowledge. Past finding showed that employee's attitude towards knowledge sharing behavior influenced by subjective norms (Ryu *et al.*, 2003). Thus, managers should pay much more attention into employees' attitude towards knowledge sharing behavior even the effect of attitude in knowledge sharing behavior was not the strongest factor. Attitude is not easy to change. It is all depends on the individual's level of willingness to change into positive one. In addition, community's perceived fairness was found to be associated with their attitude of sharing the knowledge (Bock *et al.*, 2005; Kankanhalli *et al.*, 2005; Wasko and Faraj, 2005). Yang and Wu (2008) explained that we have to consider that knowledge sharing as a personal behavior which therefore an individual's attitude into knowledge sharing may influence their behavior of knowledge sharing. Being in an organization, they will be a variety of employees attitude especially anything that relates to fulfill their job. Everybody is different. Thus, the individual attitude and knowledge sharing behavior may have relationship that could be explained by doing a research.

## TECHNOLOGY FACTOR

Sveiby (1997) suggested that IT systems to be as hygiene factors of KM. Technology existence benefited employees to share their knowledge internally as well as across wide geographical separation. According to Connelly and Kelloway (2003), the technology of knowledge sharing may serve a tangible or visible symbol of support from management for the knowledge sharing behavior. They also believed that technology would makes employees to access easily and increases the willingness to share their knowledge as it suits most of the people especially for those who are very shy or busy and people who prefer to avoid face to face conversation.

However, employees do not simply using the knowledge sharing technology and tools as they are not exactly sure how it works or do not understand the expected ways to behave (Davenport, 1994; Connelly, 2000). White (1957) described technology as both material technology (IT, hardware) and social technology (systems and people). Nowadays, the solution using technology is already in hand. With the increase of technology advancement, many companies and organizations has developed some system that could enhance and encouraging knowledge sharing behavior among workers such as through portal, organization's website, and so forth. Davenport indicated that "*The world is littered with the remains of KM programs that companies built and then nobody came*" (O'Dell, 1999). Actually there is a significant relationship between IT and KM. There are possibilities of IT connections which could enabling sharing however in of itself does not motivate it. Indeed, technology implementation while neglected others factors that motivate knowledge sharing will just reinforce current behavior (Davenport, 1994). Without denying the significant of tools and technologies in supporting knowledge sharing, practical implementation proved that the

mere of technology did not guarantee the knowledge sharing behavior will be occurred (Orlikowski, 1996; Ruggles, 1998; McDermott, 1999; Cross and Baird, 2000). Technology should be described or seen as reinforcing other activities of KM at best while it could be downright off-putting at worst (Hickins, 1999; Cross and Baird, 2000).

## CONCLUSIONS

In a nutshell, it is very important to make a clear understanding and crawl in depth about the important and requirements of knowledge sharing behavior among employees in the organization. As past review already stated and mentioned facts about the reluctant and challenges of the knowledge sharing based on three factors, it is good for human resource practices especially to recover and do homework to overcome and applied all those need into the real working scenes. In order to fill in the gap to solve or maintaining such good knowledge sharing behavior, updates about the technology should also be emphasized by the management of the organization. The successful of knowledge sharing behavior could be expressed by the brilliant management strategies that encounter the good use of its workforces to transfer the knowledge into the real working conditions. Yes, it is not an easy but as long as the efforts going through all the addressed important views and points about it: knowledge sharing behavior, nothing is impossible to be achieved. Being as one in the organization would at least help to move one step forward for the organization level of achievement and moral of motivation among its employees to share the knowledge as the benefits to all.

## REFERENCES

- Abdullah, R., M.H. Selamat., A. Jaafar, S. Abdullah and S. Sura, 2008. An empirical study of knowledge management system implementation in public higher learning institution. *International Journal of Computer Science and Network Security*, 8(1): 281-290.
- Alavi, M. and D.E. Leidner, 2001. Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1): 107-136.
- Boath, D. and D.Y. Smith, 2007. *Managing knowledge to fuel growth*. Boston: Massachusetts: Harvard Business School Press.
- Bock, G.W., R.W. Zmud, Y.G. Kim and J.N. Lee, 2005. Behavioral intention formation in knowledge sharing: Examining the role of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 29(1): 87-111.
- Chatzkel, J.L., 2003. *Knowledge capital: How knowledge-based enterprises really get build*. Oxford: University Press, Inc.
- Chen, G.D., C.K. Chang and C.Y. Wang, 2008. Ubiquitous learning website:Scaffold learners by mobile devices with information-aware techniques. *Computers and Education*, 50: 77-90.

- Cheng, M.Y., J.S.Y. Ho and P.M. Lau, 2009. Knowledge sharing in academic institutions: A study of multimedia university malaysia. *Electronic Journal of Knowledge Management*, 3(7): 313-324.
- Chennamaneni, A., 2006. Determinants of knowledge sharing behavior: Developing and testing an integrated theoretical model. Unpublished doctoral dissertation, university of texas, arlington.
- Chowdhury, N., 2006. Building knowledge management in malaysia. *Inside Knowledge*, 9(7). Available from <http://www.kmtalk.net/article.php?story=20060727043623849>
- Connelly, C., 2000. Predictors of knowledge-sharing in organizations. Unpublished master's thesis, august, queen's school of business, queen's university, kingston, ont.
- Connelly, C.E. and K. Kelloway, 2003. Predictors of employees' perceptions of knowledge sharing cultures. *Leadership & Organizational Development Journal*, 24(5/6): 294-301.
- Cross, R. and L. Baird, 2000. Technology is not enough: Improving performance by building organizational memory. *Sloan Management Review*, 3(41): 69-78.
- Cyr, S. and C.W. Choo, 2010. The individual and social dynamics of knowledge sharing: An exploratory study. *Journal of Documentation*, 6(66): 824-846.
- Davenport, T., 1994. Saving it's soul: Human-centered information management. *Harvard Business Review*: 119-131.
- Davenport, T.H. and L. Prusak, 1998. *Working knowledge*. Boston: Harvard Business School Press.
- Dennison, R.D., 1996. What is the difference between organizational culture and organizational climate? A native's point of view on a decade of paradigm wars. *Academy of Management Review*, 3(21): 619-654.
- Drucker, P., 1999. Knowledge worker productivity: The biggest challenge. *California Management Review*, 41(2): 79 – 94.
- Finerty, T., 1997. Knowledge – the global currency of the 21st century. *Knowledge Management*, 1: 20-26.
- Gamble, P.R. and J. Blackwell, 2001. *Knowledge management: A state of the art guide*. Kogan page.
- Granovetter, M., 1985. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3): 481-510.
- Hall, H. and M. Goody, 2007. Km, culture and compromise: Interventions to promote knowledge sharing supported by technology in corporate environment. *Journal of Information Science*, 33(2): 181–188.
- Hansen, M.T., 2010. The search-transfer problem: The role of weak ties in sharing knowledge across organization subunits. *Innovation and Knowledge Management SAGE Library in Business and Management*, 4: 175-210.
- Hickins, M., 1999. Xerox shares its knowledge. *Management Review*, 8(88): 40-45.



- Hoof, V.D. and M. Huysman, 2009. Managing knowledge sharing: Emergent and engineering approaches. *Information Management*, 46: 1-8.
- Hsieh, P.J., B. Lin and C. Lin, 2009. The construction and application of knowledge navigator model: An evaluation of knowledge management maturity. *Expert Systems with Applications*, 36: 4087-4100.
- Huang, Q., R.M. Davison and J. Gu, 2008. Impact of personal and cultural factors on knowledge sharing in china. *Asia Pacific Journal of Management*, 25: 451-471.
- Kankanhalli, A., B.C.Y. Tan and K.K. Wei, 2005. Contributing knowledge to electronic knowledge repositories: An empirical investigation. *MIS Quarterly*, 29(1): 113-143.
- Lynd, R.S., 1939. *Knowledge for what? The place of social science in american culture*. Princeton. New Jersey: Princeton University Press.
- Markus, M.L., 2001. Towards a theory of knowledge reuse: Types of knowledge reuse situations and factors in reuse success. *Journal of Management Information Systems*, 18(1): 57-94.
- McDermott, R., 1999. How to build communities of practice in team organizations: Learning across teams. *Knowledge Management Review*, 2(2): 32-36.
- Morey, D., M. Maybury and B. Thuraisingham, 2002. *Knowledge management classic and contemporary works*. London: The MIT Press Cambridge.
- Nonaka, I. and H. Takeuchi, 1995. *A knowledge creating company: How japanese companies create the dynamics of innovation*. Oup New York.
- O'Dell, C., 1999. Knowledge transfer: Discover your value proposition. *Strategy and Leadership*, 2(27): 10-15.
- Orlikowski, W.J., 1996. Learning from notes: Organizational issues in groupware implementation. *Computerization and controversy: Value conflicts and social choices*. San Diego: CA Academic Press
- Rad, G.P., N. Alizadeh, Z. Miandashti and H.S. Fami, 2011. Factors influencing knowledge sharing among personnel of agricultural extension and education organization in iranian ministry of jihad-e agriculture. *Journal of Agricultural Science and Technology*, 4(13): 491-501.
- Ruggles, R., 1998. The state of the notion: Knowledge management in practice. *California Management Review*, 40(3): 80-89.
- Ryu, S., S.H. Ho and I. Han, 2003. Knowledge sharing behavior of physicians in hospitals. *Expert Systems with Application*: 113-122.
- Senge, P., 1994. *The fifth discipline fieldbook: Strategies and tools for building a learning organization*. Doubleday, new york.
- Sveiby, K., 1997. *The new organizational wealth*. San Francisco: Berrett-Koehler.
- Veolpel, S.C. and T.H. Davenport, 2005. Five steps to creating a global knowledge sharing system: Siemens' share net. *The academy of management executive*: 600-613.

- Wasko, M.M. and S. Faraj, 2005. Why should i share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, 29(1): 35–57.
- White, W.H., 1957. *The organization man*. London: Jonathan Cape.
- Yang, H.L. and C.T. Wu, 2008. Knowledge sharing in organization. *Forecasting Social Change*, 75: 1128-1156.