

# Key Factors Influencing Knowledge Sharing

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**Abstract**—This paper aimed to analyzed the factors influencing knowledge sharing. An integrative literature review was employed as a tool in analyzing step. Total twenty academic papers which concerned with knowledge sharing were chosen. Thirty five factors were mentioned in those literatures. As a result, five factors which were most mentioned in earlier literatures were chosen as a key success factors in knowledge sharing practice. These were included leadership, organizational culture, trust, motivation, and information technology.

**Keywords**—knowledge sharing, key factors, integrative literature review

## I. INTRODUCTION

THE words ‘knowledge sharing’ and ‘knowledge transfer’ are often used interchangeably. Knowledge sharing defined as the activities through which knowledge such as information, skills, or expertise is exchanged among people, friends, families, or organization [1]. Moreover, Wang and Noe [2] described that the knowledge sharing refers to the movement of knowledge between individual in order to help others and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures. Knowledge transfer refers to the movement of knowledge between different units, divisions, or organizations rather than individual. In this study, we use the word ‘knowledge sharing’ when discussing the movement of knowledge of employees.

Niedergassel [3] argued that the term ‘knowledge sharing’ could represent the more accurate description when the knowledge is transferred from a sender to a recipient, the sender does not possess the knowledge after the act of transferring it. This is not the case, as the sender retains the knowledge when sharing it with the recipient. [3]cited the basic model of knowledge sharing of Brockhoff [4]. This model consists of the knowledge source, recipient, object to share, process of sharing and the sharing context as shown in Figure 2.

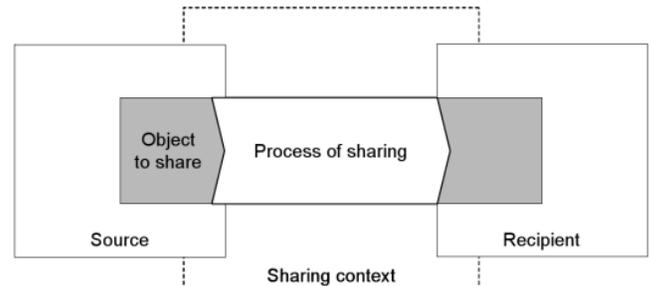


Fig. 1 Basic model of knowledge sharing  
Source: [3], p.73

Much earlier literatures identified that normally the knowledge was not easy to flow or share within organization, especially, tacit knowledge which were included such as knowledge and work experience. Therefore, this paper aimed to analyze the factors influencing knowledge sharing within organization.

## II. METHODOLOGY

An integrative literature review technique, which was based on [5], was employed in this study. The first step was to formulate the research question of this research. Therefore, the research question was; what factors influence on knowledge sharing?

Second step was to clarify the meaning and criteria of literatures. Then, this research had already described 1) the meaning of knowledge sharing in above section, and 2) factors influencing knowledge sharing were the factors that could drive the knowledge sharing. These may categorized into three dimensions and four sub-dimension as shown in Table 1.

TABLE I  
DIMENSIONS AND FACTOR INFLUENCING KNOWLEDGE SHARING

Source: [6]

Dimension	Sub-dimension	Factors
Organizational level	Culture	Sharing culture/cooperation and collaboration culture/learning culture

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TABLE I (CONT.)  
DIMENSIONS AND FACTOR INFLUENCING KNOWLEDGE SHARING

Dimension	Sub-dimension	Factors
	Structure	Incentive and reward/work design/management support/norm/political directives
	People	Arduous relationship/shared understanding/similar knowledge frame/social interaction
	Technology	IT infrastructure/IT know-how/IT support
Individual level		Motivation/prior experience/absorptive capacity/source credibility
Knowledge level		Explicit and tacit knowledge/causal ambiguity/knowledge articulability/knowledge embeddedness

The selected literatures were totally 20 academic papers which were between 2003 and 2014 as shown in Appendix.

III. RESULTS

As a result, from twenty academic papers it founded that there were thirty five mentioned factors influencing knowledge sharing. These were included information technology, culture, motivation, leadership, trust, management system, organization environment, awareness, personality, self-efficacy, ability to share, job satisfaction, organization structure, work procedure, office lay out, face to face interaction, reciprocity, repute, altruism, acknowledgement, vision and goal, social network, explicit knowledge, tacit knowledge, education level, training course or seminars for knowledge sharing, perceived reciprocal benefits, perceived loss of knowledge power, perceived reputation enhancement, service availability, strength of social ties, time, enjoyment in helping others, KMS quality, and transactive memory system.

In addition, the frequently and percentile of research papers were shown in Table 2.

TABLE II  
FREQUENCY AND PERCENTILE OF EACH FACTOR

Factor	Frequency	Percentile
Information technology	10	50
Motivation	9	45
Trust	9	45
Organizational culture	7	35
leadership	6	30

Consequently, the researchers had summarized five factors that were most mentioned and had highest frequency. These were trust, motivation, leadership, information technology, and organizational culture.

Then, the conceptual framework for further study was provided as shown in Fig 2.

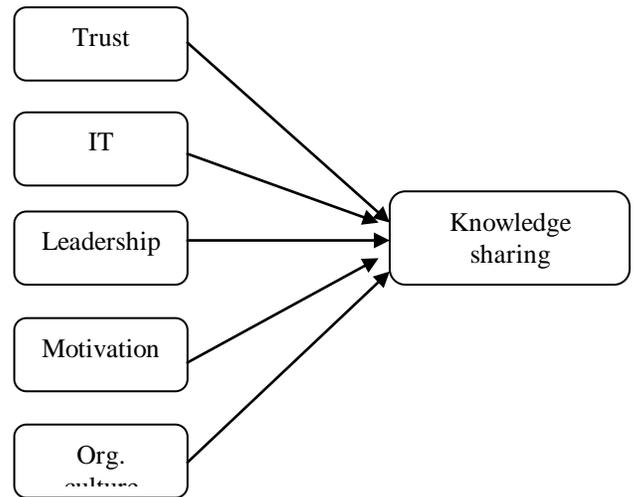


Fig. 2 Conceptual Framework

IV. LIMITATION AND FURTHER RESEARCH

The limitation of this study was; this study analyzed only twenty academic papers. Further research may study more factors in order to found more relevant factors that influenced knowledge sharing. Moreover, this study did not examine the most critical factor or prioritize the factors. Thus, further study could determine the critical factor that influences on knowledge sharing. In addition, the conceptual framework may be proved in various contexts in order to determine their results.

REFERENCES

- [1] W. R. Bukowitz and R. L. Williams, *The Knowledge Management Fieldbook*: Financial Times Prentice Hall, 1999.
- [2] S. Wang and R. A. Noe, "Knowledge sharing: A review and directions for future research," *Human Resource Management Review*, vol. 20, pp. 115-131, 2010/06// 2010.
- [3] B. Niedergassel, *Knowledge Sharing in Research Collaborations: Understanding the Drivers and Barriers*: Gabler Verlag, 2011.
- [4] K. Brockhoff, *Produktpolitik* vol. 4th edition. Stuttgart, 1999b.
- [5] R. J. Torraco, "Writing integrative literature reviews: Guidelines and examples," *Human resource development review*, vol. 4, pp. 356-367, 2005.
- [6] C. Yang and L.-C. Chen, "Can organizational knowledge capabilities affect knowledge sharing behavior?," *Journal of Information Science*, vol. 33, pp. 95-109, 2007/02/01/ 2007.
- [7] K. Möller and S. Svahn, *Crossing East-West boundaries: Knowledge sharing in intercultural business networks*: Helsinki School of Economics, 2003.
- [8] J. T. Karlsen and P. Gottschalk, "Factors affecting knowledge transfer in IT projects," *Engineering Management Journal*, vol. 16, pp. 3-11, 2004.
- [9] N. Panteli and S. Sockalingam, "Trust and conflict within virtual inter-organizational alliances: a framework for facilitating knowledge sharing," *Decision Support Systems*, vol. 39, pp. 599-617, 2005.
- [10] G.-W. Bock, R. W. Zmud, Y.-G. Kim, and J.-N. Lee, "Behavioral intention formation in knowledge sharing: examining the roles of extrinsic motivators, social-psychological factors, and organizational climate," *MIS Q.*, vol. 29, pp. 87-111, 2005/03// 2005.
- [11] N. Supar, A. A. Ibrahim, Z. A. Mohamed, M. Yahya, and M. Abdul, "Factors affecting knowledge sharing and its effects on performance: a study of three selected higher academic institutions," in *International Conference on Knowledge Management (ICKM)*, 2005.

- [12] S. Kim and H. Lee, "The Impact of Organizational Context and Information Technology on Employee Knowledge-Sharing Capabilities," *Public Administration Review*, vol. 66, pp. 370-385, 2006 2006.
- [13] H. Ahmad, N. Sharom, and C. S. Abdullah, "Knowledge Sharing Behaviour in the public sector: the business process management perspectives," 2006.
- [14] I. Svetlik, E. Stavrou-Costea, and H.-F. Lin, "Knowledge sharing and firm innovation capability: an empirical study," *International Journal of manpower*, vol. 28, pp. 315-332, 2007.
- [15] W. S. Chow and L. S. Chan, "Social network, social trust and shared goals in organizational knowledge sharing," *Information & Management*, vol. 45, pp. 458-465, 2008.
- [16] S. Y. Choi, Y. S. Kang, and H. Lee, "The effects of socio-technical enablers on knowledge sharing:: an exploratory examination," *Journal of Information Science*, 2008.
- [17] C.-C. Huang, "Knowledge sharing and group cohesiveness on performance: An empirical study of technology R&D teams in Taiwan," *Technovation*, vol. 29, pp. 786-797, 2009.
- [18] M. Bakhari and Z. M., "The Contribution of Technological Factors on Knowledge Sharing Quality among Government Officers in Malaysia," in *Knowledge Management*, P. Virtanen and N. Helander, Eds., ed: InTech, 2010.
- [19] A. Lam and J.-P. Lambermont-Ford, "Knowledge sharing in organisational contexts: a motivation-based perspective," *Journal of Knowledge Management*, vol. 14, pp. 51-66, 2010.
- [20] P. Lee, N. Gillespie, L. Mann, and A. Wearing, "Leadership and trust: Their effect on knowledge sharing and team performance," *Management Learning*, 2010.
- [21] N. M. Noor and J. Salim, "Factors Influencing Employee Knowledge Sharing Capabilities in Electronic Government Agencies in Malaysia," *International Journal of Computer Science*, vol. 8, pp. 106-114, 2011/07// 2011.
- [22] S. Chai, S. Das, and H. R. Rao, "Factors affecting bloggers' knowledge sharing: An investigation across gender," *Journal of Management Information Systems*, vol. 28, pp. 309-342, 2011.
- [23] I. Seba, J. Rowley, and S. Lambert, "Factors affecting attitudes and intentions towards knowledge sharing in the Dubai Police Force," *International Journal of Information Management*, vol. 32, pp. 372-380, 8// 2012.
- [24] C. W. Chen, M. L. Chang, C. P. Tseng, B. C. Chen, and Y. Y. C. Chang, "Critical human factor evaluation of knowledge sharing intention in Taiwanese enterprises," *Human Factors and Ergonomics in Manufacturing & Service Industries*, vol. 23, pp. 95-106, 2013.
- [25] Z. T. Alhalhouli, Z. B. Hasan, and C. S. Der, "Factors affecting knowledge sharing behavior among stakeholders in Jordanian hospitals using social networks," *International Journal of Computer and Information Technology*, vol. 3, pp. 919-928, 2014 2014.

Appendix 1 Sample of literature review

Factors	Researchers																			
	Low et al. (2003)	Möller, K. and S. Svahn (2003)	Karlsen, J. T. and P. Gotschalk (2004)	Panteli, N. and S. Sockalingam (2005)	Bock, G.-W. et al. (2005)	Supar, N. et al. (2005)	Kim, S. and H. Lee (2006)	Ahmad, H. et al. (2006)	Svelik, I. et al. (2007)	Chow, W. S. and L. S. Chan (2008)	Choi, S. Y. et al. (2008)	Huang, C.-C. (2009)	Bakhar, M. and Z. M (2010)	Lam, A. and J.-P. Lambermont-Ford, 2010)	Lee, P. et al. (2010)	Noor, N. M. and J. Salim (2011)	Chai, S. et al. (2011)	Seba, I. et al. (2012)	Chen, C. W. et al. (2013)	Alhalhouli, Z. T. et al. (2014)
Information technology	✓																			
Culture	✓		✓																	
Incentive/Motivation	✓																			
Leadership	✓																			
Trust																				
Management System	✓																			
Organization environment					✓															
Awareness																				
Personality																				
Self-efficacy																				
Ability to share																				
Job satisfaction																				
Organization structure																				
Work procedure			✓																	
Conflict		✓																		

Appendix 1 (Cont.) Sample of literature review

Factors	Researchers																				
	Low et al. (2003)	Möller, K. and S. Svahn (2003)	Karlsen, J. T. and P. Gottschalk (2004)	Panteli, N. and S. Sockalingam (2005)	Bock, G.-W. et al. (2005)	Supar, N. et al. (2005)	Kim, S. and H. Lee (2006)	Almad, H. et al. (2006)	Sveilik, I. et al. (2007)	Chow, W. S. and L. S. Chan (2008)	Choi, S. Y. et al. (2008)	Huang, C.-C. (2009)	Bakharj, M. and Z. M (2010)	Lam, A. and J.-P. Lambermont-Ford, 2010)	Lee, P. et al. (2010)	Noor, N. M. and J. Salim (2011)	Chai, S. et al. (2011)	Seba, I. et al. (2012)	Chen, C. W. et al. (2013)	Alhalhouli, Z. T. et al. (2014)	
Office layout																					
Face to face interaction																					
Reciprocity																					
Repute																					
Altruism																					
Acknowledgement																					
Vision and goal																					
Social network																					
Subjective norm																					
Explicit knowledge																					
Tacit knowledge																					
Education level																					
Training course or seminars for knowledge sharing																					