# Nurturing Interpersonal Trust in Knowledge Sharing Intention towards Industry 4.0

<sup>1</sup>Tay Lee Chin, <sup>2</sup>Tan Fee Yean

Abstract--- Knowledge management has captured the attention of researchers and practitioners. Knowledge sharing intention is the important element of knowledge management. Therefore, the purpose of this study is to examine the effect of interpersonal trust on knowledge sharing intention. Data was collected through self-administered questionnaires at higher institution education. The data was analyzed using Statistical Package for Social Science (SPSS) version 24. The findings show that interpersonal trust plays pivotal roles in promoting knowledge sharing intention. The implications of these findings are thoroughly discussed in the study.

Keywords--- knowledge management; knowledge sharing intention; interpersonal trust

## I. INTRODUCTION

Organizations success depends on the ability to share knowledge effectively (Cunningham, Seaman & McGuire, 2016). Effective knowledge sharing enhance organizational innovativeness by supporting the employees in dialogue sharing that lead to creation of new ideas (Lee, 2018). Knowledge sharing within the organization could be in the form of sharing experiences, information and job related knowledge (Centobelli, Cerchione& Esposito, 2017). Hence, organizations develop systems and process to facilitate knowledge sharing intention (Khari & Sinha, 2017). For instance, organizations develop databases to keep tools, files, videos and other materials that could be reused by the employees. However, how far knowledge sharing intention of the employees are not clearly understood. Hence, this study aims to investigate.

Besides that, interpersonal trust often considered as the crucial factor in the development of knowledge sharing intention especially in the competitive and high risk business environment (Teh& Yong, 2011). Interpersonal trust improves knowledge exchange, contributing knowledge exchange less expensive. Interpersonal trust also increases the chance that knowledge obtained is adequately absorbed to ensure the employees can utilize the knowledge. Nevertheless, lack of empirical researches has connected knowledge sharing intention to interpersonal trust (Mooradian, Renzl&Matzler, 2014). This study bridges the gap. Hence, the objective of this study is to examine how interpersonal trust promotes knowledge sharing intention.

## **II. LITERATURE REVIEW**

## II.I. What is knowledge sharing intention?

<sup>1,</sup>Graduate School of Business, SEGi University ,Malaysia 2,School of Business Management, University Utara Malaysia,Malaysia

International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 06, 2019 ISSN: 1475-7192

Knowledge sharing intention refer to the act of knowledge provider making knowledge available to others (Ipe, 2003). Besides that, knowledge sharing intention represent employees' commitment to carrying out the actions of sharing knowledge or information with colleagues in the future (Tella, 2015).

#### **II.II.** What is interpersonal trust?

Mayer, Davis and Schoorman (1995) defined interpersonal trust as the willingness of a party to be vulnerable to the another party based on the expectation that the other party will perform action important to the trustor. Fukuyama (1995) argue interpersonal trust relate to the expectation of honest and cooperative behavior in other's future actions.

## II.III. Interpersonal trust and knowledge sharing behavior

Previous studies (Hsu & Chang, 2014; Weir & Hutchings, 2005; Wang, Tseng & Yen, 2014) view interpersonal trust play essential role for knowledge sharing intention. Interpersonal trust make the employees feel confident that the employees he or she turns to understand he or she talking about and worth to learn, enable knowledge transfer between the employees (Le & Lei, 2018; Rutten, Blaas-Franken & Martin 2016; Koohang, Paliszkiewicz&Goluchowski, 2017). In the similar vein, Jain, Sandhu and Goh (2015) report higher level of interpersonal trust among employees establish a greater intention to engage in knowledge sharing. When the employees have a feeling of interpersonal trust between employees, the employees have greater intention to actively participate in the knowledge sharing process and willing share more useful knowledge with the others (Holste& Fields, 2010; Pee & Min, 2017). Furthermore, interpersonal trust permits the employees question other employees in depth without fear of damage to self-esteem or reputation, contributing knowledge creation and sharing among each other (Nonaka, 1990; Nonaka& Takeuchi, 1995). Meanwhile, in the team work environment, prior studies (Renzl, 2008; Ipe, 2003; Lee, Gillespie & Mann & Wearing, 2010) also found out that interpersonal trust positively associated with knowledge sharing intention. Team members normally share the knowledge if they trust the knowledge they share bring benefits for the teams and entire organizations (Hislop, 2005). For example, an engineer of a construction team is more likely to share knowledge to solve problem if the engineer aware knowledge sharing intention is beneficial to other engineers. Therefore, it can conclude that interpersonal trust has relationship with knowledge sharing intention.

## **III. METHODOLOGY**

#### **III.I.** Sample and procedure

This study utilized structured questionnaires to collect the data. A total of 200 questionnaires was distributed to the academic staff at the university. Of 200 questionnaires, 173 questionnaires were returned, resulting 87% response rate. The unit of analysis of this study is individual unit because it examines the knowledge sharing behavior of the academic staff.

## **III.II.** Measurements

Interpersonal trust was measured using 6 items scale adapted from Mohammed, Washika and Eyad (2017). The

example of items are "there is a great deal of openness among my co-workers in knowledge setting, "Knowledge sharing has fostered teamwork in my department or company". Similarly, knowledge sharing behavior was measured by 6 items adapted from Mohammed et al. (2017). Sample item are "I share knowledge actively on informal occasions", "I share knowledge actively on formal occasions". A five point likert scale that ranged from (1) strong disagree to (5) strongly agree was used as the response scale.

## **IV. FINDINGS**

Several analyses were conducted. First, internal consistency reliabilities (Cronbach's Alpha) of the independent and variable (i.e interpersonal trust and knowledge sharing intention) were evaluated. The results show that both variables' reliability values were in satisfactory level (i.e., interpersonal trust=0.701 and knowledge sharing intention=0.712 respectively). The reliability values above the cut off values of 0.6 as suggested by Sekaran and Bougie (2013).

Moreover, linear regression analysis was performed to examined the effect of interpersonal trust and knowledge sharing intention via Statistical Package for Social Science (SPSS) version 24. Prior performing linear regression analysis, few assumptions including normality, linearity and multicollinearity have been fulfilled. Table 1 describe the results of regression analysis.

The results of linear regression analysis revealed significant relationship between interpersonal trust and knowledge sharing intention (b=0.203, p<0.01). The results signify that academic staff at higher institute educations are likely to engage in knowledge sharing intention if the employees possess trust to other employees, thus increasing communication frequency and availability to share information and knowledge.

Unstandardized coefficient			Standardi zed	t	Sig
			coefficient		
	В	Std. Erro	В		
		r			
(Constant)	0.89	0.261		3.43	0.0
	7			9	0
Interperso	0.21	0.081	0.203	2.59	0.0
nal trust	0			9	0

Table 1 Regression results of interpersonal trust on knowledge sharing intention

## V. DISCUSSIONS AND CONCLUSION

The finding show that interpersonal trust significantly related to the knowledge sharing intention. This finding is consistent with Ozlati (2015), Buvik&Tvedt (2017), Park, Lambazar& RH (2015), Wang, Tseng & Yen (2014), Elianto and Nury (2016).Based on the findings, this study proposes several suggestions. It is crucial for the university to cultivate a working environment which is characterized by trust. The possible way is to execute open door policy that

International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 06, 2019 ISSN: 1475-7192

removing barriers among the employees and bring them closer. When the employees can obtain information easily, the employees develop a sense of trust and might be willing to share their knowledge in return. The university could organize team building activities consistently to support continuous and close relationships between the employees. Such frequent interaction develops interpersonal trust of the employees.

On the other hand, this study has some limitations. This study conducted among the academic staff of the higher institution learning organizations. The study excludes administration staff, technicians and others. Therefore, this study cannot generalize to the academic industry. Besides that, this study uses cross-sectional design that restrict the causal relationshipbetween interpersonal trust and knowledge sharing intention. Future researches should emphasize longitudinal studies to gain better insights into the dynamic relationships between interpersonal trust and knowledge sharing intention. Further, future study should look for alternative variables such as workplace spirituality and organizational climate (Khari & Sinha, 2017) to delve deeper into the knowledge sharing intention.

#### REFERENCES

- Buvik, M. &Tvedt, S. D. (2017). The influence of project commitment and team commitment on the relationship between trust and knowledge sharing in project teams. Project Management Journal, 48(2), 5-21
- [2] Centobelli, P., Cerchione, R., & Esposito, E. (2017). Knowledge management in startups: systematic literature review and future research agenda. Sustainability, 9, 361-369
- [3] Cunningham, J., Seaman, C., & McGuire, D. (2016). Perceptions of knowledge sharing among small family firm leaders: A structural equation model. Family Business Review, 30(2), 160-181
- [4] Elianto, W., &Nury, A. W. (2016). Building knowledge sharing intention with interpersonal trust as a mediating variable. JurnalManajemenTeknologi, 15(1), 67-76
- [5] Fukuyama, F. (1995), Trust: The Social Virtues and the Creation of Prosperity, The Free Press, New York, NY.
- [6] Ozlati, S. (2015). The moderating effect of trust on the relationship between autonomy and knowledge sharing: A national multi-industry survey of knowledge workers. Knowledge and Process Management, 22, 191– 205
- [7] Hislop, D. (2005), Knowledge Management in Organizations, A Critical Introduction, Oxford University Press, Oxford.
- [8] Holste, J. S. & Fields, D. (2010). Trust and tacit knowledge sharing and use. Journal of Knowledge Management, 14(1), 128-140.
- [9] Hsu, M. H., & Chang, C. M. (2014). Examining interpersonal trust as a facilitator and uncertainty as an inhibitor of intra-organizational knowledge sharing. Information Systems Journal, 24(2), 119-142.
- [10] Ipe, M. (2003). Knowledge sharing in organizations: a conceptual framework. Human Resource Development Review, 2(4), 337-59
- [11] Jain, K. K., Sandhu, M.S., & Goh, S.K. (2015). Organizational climate, trust and knowledge sharing: Insights from Malaysia. Journal of Asia Business Studies, 9(1), 54-77
- [12] Khari, C., & Sinha, S. (2017). Impact of workplace spirituality on knowledge sharing intention: A conceptual framework. Journal of Human Values, 23(1), 27-39

International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 06, 2019 ISSN: 1475-7192

- [13] Lee, J. (2018). The effects of knowledge sharing on individual creativity in higher education institutions: Socio technical review. Administrative Science, 8(21), 1-16
- [14] Lee, P., Gillespie, N., Mann, L. & Wearing, A. (2010). Leadership and trust: their effect on knowledge sharing and team performance. Management Learning, 41(4), 473-91
- [15] Mayer, R.C., Davis, J.H. &Schoorman, F.D. (1995). An integrative model of organizational trust. Academy of Management Review, 20(3), 709-34.
- [16] Nonaka, I. (1990). Redundant, overlapping organization: A Japanese approach to managing the innovation process. California Management Review, 32(3), 27-38.
- [17] Nonaka, I. & Takeuchi, H. (1995). The Knowledge-creating Company: How Japanese Companies Create the Dynamics of Innovation, Oxford University Press, New York, NY.
- [18] Park, M. J., Lambazar, T. D. U., & Rh. J. J. (2015). The effect of organizational social factors on employee performance and the mediating role of knowledge sharing: Focus on e-government utilization in Mongolia. Information Development, 31(1), 53-68
- [19] Pee, L., & Min, J. (2017). Employees' online knowledge sharing: the effects of person-environment fit. Journal of Knowledge Management, 21(2), 432-453.
- [20] Mooradian, T., Renzl, B., &Matzler, K. (2014). Who trusts? Personality, trust and knowledge sharing. Management learning, 37(4), 523-540
- [21] Renzl, B. (2008). Trust in management and knowledge sharing: the mediating effects of fear and knowledge documentation. International Journal of Management Science, 36(2), 206-220
- [22] Rutten, W. Blaas-Franken, J., & Martin, H. (2016). The impact of (low) trust on knowledge sharing. Journal of Knowledge Management, 20(2), 199-214.
- [23] Sekaran, U., &Bougie, R. (2013). Research Methods for Business: A Skill Building Approach. New Delhi: Wiley India.
- [24] Koohang, A., Paliszkiewicz, J., &Goluchowski, J. (2017). The impact of leadership on trust, knowledge management, and organizational performance: a research model. Industrial Management and Data Systems, 117(3), 521-537.
- [25] Tella, A. (2015) The factors determining knowledge sharing intention among information professionals in Nigeria: a pathmodel analysis. Regional Journal of Information and Knowledge Management, 1(1),1-19
- [26] Teh,P. L., & Yong, C. C (2011). Knowledge sharing in IS personnel: Organizational behavior's perspective. Journal of Computer Information Systems, 51(4), 11.
- [27] Weir, D., & Hutchings, K. (2005). Cultural embeddedness and contextual constraints: knowledge sharing in Chinese and Arab cultures. Knowledge & Process Management, 12(2), 89-98.
- [28] Wang, H. K., Tseng, J. F., & Yen, Y. F. (2014). How do institutional norms and trust influence knowledge sharing? An institutional theory. Management Policy and Practices, 16, 374-391