

Investigating Knowledge Transfer Mechanism in 5-Star Hotels in Indonesia

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Abstract— Current theorization of the efforts of organizations to utilize knowledge cannot conclusively explain how knowledge is used to improve employee performance and organizational effectiveness. This study aimed to examine the relationship among trust, knowledge transfer, and performance, and to explain the mechanism underlying such relationship. The study adopted a quantitative design through the distribution of seven semantic differential scales, and the study population comprised 63 five-star hotels in Bali Province, Indonesia. The sampling technique used was proportional random sampling resulting in 54-unit sample, and the number of respondents was 216 employees. The data were analyzed with the help of smartPLS software-3.0. The results revealed that trust had a significant effect on knowledge transfer and performance. It was also found that knowledge transfer played an important role as a mediating variable which could improve employee performance. Theoretical implications pertain to the role of knowledge transfer as a mediating path of leadership role to improve employee performance, while the practical implications concern the importance of building trust, the success of knowledge transfer, and the impact on employee performance. Research limitations are discussed in the paper.

Keywords— *trust; knowledge transfe, job performance, mediation*

I. INTRODUCTION

The important role played by knowledge in the sustainability and excellence of an organization has been investigated by many researchers, given that knowledge is considered as the main source of organizational competitiveness [1], yet there is no literature that discusses the

quality of shared knowledge including the mechanism and process of knowledge change in order to increase competitive advantage as argued by [2], in a knowledge based view. Knowledge transfer is very important for every individual in an organization as an effort to add insight and innovation.

Many variables play a role in the success of knowledge transfer such as motivation [3], absorptive capacity [4], and trust [5], but in this paper we try to build a model that knowledge transfer not only plays a role in improving performance but as a strategic pathway mediator.

The role of trust in the process of knowledge transfer has been examined by [6], finding that it plays an important role in the success of knowledge transfer in an organization. Trust exerts a very strong influence on knowledge acquisition [7] from the start of the exchange of information and resources as problem solving thanks to the trusted support of partners [8]. When trust is tested, it is very important to consider the time factor, because the relationship between partners develops and changes over time [9]. Although until now there is no definite concept of trust [10], but its role is believed to be very important in the success of knowledge transfer.

The relationship between knowledge transfer and job performance has been examined by [3], who found that knowledge transfer has a significant effect on employee performance because knowledge helps in improving the quality of employees.

The present study tries to close the gap in the literature concerning the strategic role played by knowledge transfer in strengthening the relationship between trust and job performance. The research method of the present study provides in-depth process analysis through second order structural equation modeling to explain froxy latent variables built by dimensions and indicators.

Literatur Review

A. Trust

Trust is an abstract concept known in psychology, sociology, economics, and strategy management. Trust as individual beliefs and willingness to act on the basis of words, actions and decisions [11].

Trust is a complex integration from psychological, sociological and economic dimensions forming all experiences that cannot be reduced [12]. Furthermore, the other researcher clearly noted that "believing in an alliance partner is the result of the entire process, not from the sum of the component parts, but from a holistic assessment in the past, present and future of the relationship with that partner" [13].

B. Knowledge Transfer

Knowledge transfer can be defined as the process of people learning through knowledge transformation [14]. Knowledge transfer measures employees obtaining, disseminating and exchanging knowledge and intellectual property with other employees in an organization [15]. The purpose of transfer of knowledge, quick learning task (the target) after the learning task is different but similar to it [16]. Effective knowledge transfer will increase organizational productivity and efficiency.

C. Job Performance

Employee performance has been studied in both industrial and organizational psychology, especially that related to workplace [17]. For organizations that are able to manage human resources and to optimize the ability of employees will produce employees with performance that has implications for the achievement of the organizational goals. Employee performance derives from the achievement of an employee at the personal level or something he or she has been done. Employee performance can also be interpreted as the result of the work activity expected by the employee and how the activity is completed. Employee performance involves quality and quantity of output, attendance, accommodativeness and punctuality of output.

II. RESEARCH METHOD

A. Population and samples

The population of 5-star hotels in Bali Province comprised 63 units at the time when the study was conducted and the sampling frame consisted of 54 units. The sampling technique used was simple random sampling method that is a non-replacement method, meaning that each member of the population has the same opportunity to be chosen once. So out the 54 hotels making up the sample frame, 3 respondents from each hotel were asked to fill out the research questionnaire. The total number of respondents (employees) was 216 employees acting as the unit of analysis in this study.

B. Research procedure

This study employed quantitative design to examine the relationship between variables of the research. The data collection was carried out by distributing questionnaires and conducting interviews with employees to obtain information pertaining to the research variables.

The trust subscale uses 5 dimensions, namely integrity, competence, consistency, loyalty and openness and total 15 indicators. Knowledge transfer subscale uses 4 dimensions, namely learning, knowledge sharing, negotiation and communication and total 12 indicators, and finally the job performance subscale uses 7 dimensions namely quality, quantity, timeliness, job knowledge, collaboration, innovativeness and creativeness and total 15 indicators.

Prior to the distribution of the questionnaires, the research team provided coaching on the variables and objectives of the research so that objectivity could be maintained. The questionnaires were distributed to 230 employees and they were briefed before they fill them out, so that the research objectives could be achieved. Questionnaires that were returned in full usable for analysis were 216 or 93.9% indicating that the questionnaire return rate was very high.

C. Instrument and Measurement scale

The measurement scale used was semantic differential [17] that is a scale of 1-7. This method was developed by Osgood, Suci and Tannenbaum in 1957. This method is used for scale measurement if the respondents have a variety of attitudes or characters, the respondents can give a perception in the range of positive answers up to negative (bipolar).

If a respondent gives a 7, it means that the response is strongly agree; however if the answer is 1 it means that the response is strongly disagree. This technique is based on the assumption that an object has a number of dimensions of connotative senses that can be placed in a range of multidimensional characteristics.

D. Hypotheses

a) The relationship between trust and knowledge transfer

The role of trust in IJVs is "important", because it has an impact on opportunistic behavior common in IJVs [19]. Trust has a positive effect on knowledge transfer [20]; [21] and knowledge transfer is supported by trust [8]. Based on the description above, the first hypothesis is that trust will have a significant positive effect on knowledge transfer.

b) The relationship between knowledge transfer and job performance

Knowledge transfer has a significant effect on employee performance [22]. Knowledge transfer had a significant effect on employee performance because knowledge helped in improving the quality of employees [3]. Based on the description above, hypothesis 2 is that knowledge transfer will have a significant positive effect on job performance.

c) The relationship between trust and job performance

Trust has an important effect on job performance [23]; [24]. Based on the description above, hypothesis 3 is that trust will have a significant positive effect on job performance.

III. RESULTS AND DISCUSSION

This study aimed to examine the relationship among trust, knowledge transfer and job performance, both direct and indirect. The analysis of the data using SmartPLS 3.0 consisted of 3 steps, namely outer model measurement, inner model measurement, and hypothesis testing.

A. Test of outer model

This study used three analytical tools to obtain information on the quality of data, namely convergent and discriminant validity of indicators and composite reliability for block indicators.

Convergent validity is used to measure the validity of an indicator as a measure of a construct indicated by the value of the outer loading factor. Research that is in the early stages of the development of measurement scale called exploratory research a factor loading of 0.50-0.60 is still considered sufficient [25]. In this study, the cut-off value of 0.60 was used.

The discriminant validity test to measure the validity of an indicator in a variable can be done by comparing the square root average of variance coefficient extracted (\sqrt{AVE}) coefficient of each latent variable with the correlation coefficient between other latent variables in the model. The recommended AVE value is above 0.50.

It was found that the square root value of AVE for the trust variable was 0.867, which was greater than the correlation coefficient between the trust variable and the other variables, 0.857; 0.459; and 0, 368. The square root value of AVE for knowledge transfer variable was 0.801, which was greater than the correlation coefficient between knowledge transfer variable and other variables, 0.459; 0.764 and 0.644. The square root value of AVE for job performance variable was 0.871, which was greater than the correlation coefficient between job performance variable and the other variables, 0.644. This indicates that indicators reflecting the dimensions of the variables in this study have a good discriminant validity.

Composite reliability measures the reliability value among the indicators of a variable. The result of the indicator testing can be said to be reliable if the composite reliability and cronbach alpha have a value of > 0.70 . The results showed that the composite reliability values ranged from 0.741 to 0.979 (> 0.70); therefore, it was evident that the indicators that reflected the dimensions of the latent variables were reliable. Similarly, the value of cronbach alpha that ranged from 0.728 to 0.960 (> 0.70) indicated that the indicators making up the dimensions of the research variables were reliable and could be declared free from random error problems (MacKenzie et al, 2011; Singleton and Straits, 2010).

B. Test of Inner Model

Testing of the research model was carried out through a feasibility test showing the ability of the model to explain the variation in the dispersion of values on the dependent latent variables indicated by the factors that influenced them. This can be seen first from the results of R^2 analysis, and second by using the predict relevance method of Stone Geiser (Stone, 1974 and Geisser, 1971) and Goodness of Fit (GoF). Computation of Q^2 and GoF uses the R-square coefficient (R^2). R^2 value of 0.67 is relatively strong, 0.33 is moderate and 0.19 is weak [25].

The results revealed that the R^2 value for trust was 0.661, for knowledge transfer was 0.735, and for job performance was 0.753. R^2 values showed that the model can be categorized as a strong model because the values were above 0.67. The average value was 0.716, which means that the relationship model of the constructs trust, knowledge transfer, and job performance could be accounted for by 71.6 percent, while the remaining 28.4 percent could be explained by other variations outside the model. That the dispersion of R^2 adjusted value was smaller than the dispersion of R^2 values suggested that changes or expansion of the research model by including other latent variables was still possible [26].

The next step was to evaluate the feasibility of the model to obtain an overall model description [27] and expressed in the form of Q^2 formula [28]. Q Square Predictive Relevance (Q^2) measures how good the observations produced by the model are. Q^2 has a range of values ranging from 0 to 1. A value closer to 1 means that the model has better predictive ability. Q^2 value can be calculated by the following formula:

$$Q^2 = 1 - [(1-R^2y1) (1-R^2y2)]$$

$$Q^2 = 1 - [(1-0,735) (1-0,753)]$$

$$Q^2 = 1 - [(0,265) (0,247)]$$

$$Q^2 = 1 - 0,065$$

$$Q^2 = 0,9350 \text{ (very good } Q^2 \text{ predictive relevance)}$$

It was found that the Q^2 value was 0.9350, indicating that the model showed very good observation, that is 93.50% the relationship among the variables could be explained by the model while the remaining 6.5% were other factors not examined in the research model.

Goodness of fit (GoF) was used to validate the overall model because it is a single measure of the outer model and inner model. The GoF value has a range between 0 which shows the model is not good, while a value away from 0 getting closer to 1 indicates that the model is good. The formula used to determine the GoF value is as follows;

$$\begin{aligned} \text{GoF} &= \sqrt{\text{com} \times R^2} \\ &= \sqrt{0,681 \times 0,716} \\ &= \sqrt{0,489} \\ &= 0,699 \end{aligned}$$

It was found that the GoF value was 0.699 suggesting that the model was a fit predictive one, which indicates that the precision of the measurement model was relatively good. Based on the criteria for GoF values, i.e. 0.10 (GoF small),

0.25 (Moderate GoF) and 0.36 (GoF large), the research model could be categorized as GoF Large.

Effect size testing (f^2) aims to provide more detailed information about variations in values that can be explained by a group of independent variables on the dependent variable in a structural equation system (Cohen, 1998). The effect size criteria (f^2) is as follows: 0.02-0.15 (small effect), 0.15 - 0.35 (moderate effect) and > 0.35 (strong effect). If the value of f^2 obtained is in the range of 0.02, it means that the variation in value that can be explained is classified as small. If the value of f^2 is in the range of 0.15, it is classified as moderate, and if the value of f^2 is in the range of 0.35 or above, the equation system can be classified as large effect [25].

TABLE I. EFFECT SIZE

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
T -> JP	0.368	0.371	0.099	3.704	0.000
Average	0.368				

As shown in Table I above, an average of 0.368 is a strong indication of the formation of the pattern of mediation relationships in this study.

C. Hypotheses Testing

Testing of hypotheses in this study was carried out in two stages, namely testing the direct effects and testing the indirect effects of exogenous variables on endogenous variables. Table II shows the coefficient values based on the results of SmartPLS 3.0 output.

TABLE II. HYPOTHESIS TESTING

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
T->KT	0.857	0.860	0.022	38.768	0.000
KT ->JP	0.459	0.446	0.096	4.778	0.000
T -> JP	0.368	0.371	0.099	3.704	0.000

a) The Relationship between trust and knowledge transfer

Table II shows that trust had a significant positive effect on knowledge transfer, where the path coefficient value was 0.857 with t-statistic of 38.768, which is greater > 1.96 which means significant positive. The results of this test indicated that hypothesis 1 was accepted.

b) The relationship between knowledge transfer and job performance

Table II shows that knowledge transfer had a significant positive effect on job performance, where the value of the path coefficient was 0.459 with a t-statistic of 4.778, > 1.96 which means significant positive. The results of this test indicate that hypothesis 2 was accepted.

c) The Relationship between Trust and Job Performance

Table II shows that trust had a significant positive effect on job performance, where the path coefficient value

shown was 0.368 with a t-statistic of 3.704, > 1.96 which means significant positive. The results of this test indicate that hypothesis 3 was accepted.

Subsequent to the detection of partial relationships among the variables was testing the mediating variables that aim to detect the position of the mediating variables in the research model. This test was intended to see the role of knowledge transfer in its position as a mediating variable in the relationship between trust and job performance.

TABLE III. MEDIATING VARIABLE TEST

Model	Path Coeff	t-hitung	t-table	VAF	Reamrk
T->KT	0.857	38.768	> 1.96	0.516	Partial mediation effect
KT ->JP	0.459	4.778	> 1.96		
T -> JP	0.368	3.704	> 1.96		

Table III presents information about the direct effect of trust on knowledge transfer with a coefficient of 0.857 and a t-statistic of 38.768, > 1.96 which means significant (a). The effect of knowledge transfer on job performance with a coefficient value of 0.459 and a t-statistics os 4.778, > 1.96 which means significant (b). The effect of trust on job performance with a coefficient of 0.368 and a t-statistics of 3,704, > 1.96 which means significant (c). The three relationships between variables are significantly positive but the coefficient value c<b, suggesting partial mediation. Therefore, justification needed to be done through analysis of variance accounted for (VAF) by dividing the indirect effect value with the total effect. $0.857 * 0.459 = 0.93363$. The total effect value was found to be $0.93363 + 0.368 = 0.761363$ so the VAF value was $0.93363 / 0.761363 = 0.516656$.

Based on the calculation, the VAF value was found to be 0.516, VAF values range from 0.20 to 0.80, this suggested partial mediation [26] which meant that the effect of trust on job performance could be explained by the presence of knowledge transfer variable and other variables.

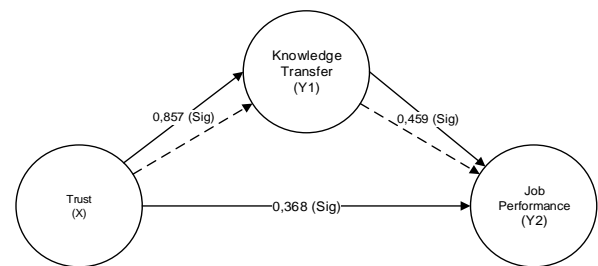


Fig. 1. Research Model Analysis

IV. RESULT AND DISCUSSION

The development of the tourism as a leading sector in the Province of Bali makes Bali the best tourism destination in Asia, thus leading to a very rapid growth of five-star hotels and others environment. This sector causes the demand for workers who have international qualities and competitiveness. Improving the quality of human resources can be done through knowledge transfer to improve performance, innovation, commitment, sustainability and competitive advantages.

This study examined the mechanism of knowledge transfer in two stages, which provides insight into the results of the relationship among variables where the impact of trust was proven to be significant on knowledge transfer and job performance, and the second stage concerned the identification and explanation of the mediating effects of knowledge transfer in the research model.

In the first stage, it was found that trust had a significant positive effect on knowledge transfer, meaning that trust had a role in encouraging the process and success of knowledge transfer. This result is consistent with the results of [19]; [20]; [21]; and [8]. In this process, integrity was the most dominant dimension (0.953) given the willingness to transfer knowledge requires trust in colleagues. Knowledge transfer had a significant effect on job performance supporting the results of the study [3] and [22]. The highest dimension that played an important role was communication (0.950) which means that the process of transferring knowledge must go through the easiest communication path so that the process runs well; finally, trust had a significant effect on job performance that employees who have trust tend to have a commitment to improve performance. The results of the analysis are in line with [23] and [24].

In the second stage, the role of knowledge transfer as a mediating variable standing between trust and job performance is also an important finding in this study. Although the direct path of trust to job performance was significantly positive, but by passing the knowledge transfer path, employee performance will increase. This means that knowledge transfer is a strategic option because increased performance and work innovation can result from the knowledge gained. In individual perspectives, employees can take advantage of the knowledge transfer process which can increase knowledge, skills, mindset, motivation and innovative job performance.

V. CONCLUSION

This study has theoretical implications in enhancing body of knowledge, especially the significant relationship among the examined variables and proving the role of knowledge transfer as a mediating variable. Although the mediation role was found to be partial but the path to improving performance through knowledge transfer still has strong implications because employees gain multiple benefits, namely increased knowledge and increased innovation that supports performance. And practically, especially at the individual level, it suggests that the mechanism of knowledge transfer starts from trust, given the relationship between employees requires trust, communication, commitment and ownership.

This research obviously had limitations, such as the population consisted of only SMEs Exports in one province and it is expected that in the future it will be done on SME subjects so that the results can be generalized. Perception research is susceptible to bias effects, especially how employees evaluate their own performance so that a more

credible and comprehensive assessment is needed. Future research is expected to use leadership variables because the process of knowledge transfer and job performance can be achieved with the presence of the role of the leader as a trigger in building knowledge exchange within the organization.

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REFERENCES

- [1] Chen, I.Y.L., Chen, N.S. and Kinshuk (2009), "Examining the factors influencing participants' knowledge sharing behavior in virtual learning communities", *Educational Technology & Society*, Vol. 12 No. 1, pp. 134-148.
- [2] Teece, D.J., Pisano, G., and Shuen, A. (1997). *Dynamic Capability and Strategic Management*. *Strategic Management Journal*. Vol. 18 No. 7 Pp. 509-533
- [3] Arsawan, IWE., Sanjaya, IB., Putra, IKM., Sukarta, IW (2017). The effect of expatriate knowledge transfer on subsidiaries' performance: a moderating role of absorptive capacity. *IOP Conf. Series: Journal of Physics: Conf. Series* 953 (2017) 012082
- [4] Cohen, W., and Levinthal D. (1990). Absorptive Capacity: A New Perspective on Learning and Innovation. *Adm. Sci. Q.* 35:128-52
- [5] Sklavounos, N.S. and Hajidimitriou, Y.A., (2011). The Contextual Factors that Affect the Development of Trust at the Initial Stages of International Joint Ventures. *Management of International Business and Economics Systems (MIBES) Transactions*, Vol. 5(2), p.p. 125-135
- [6] Becerra, M., Lunnar, R., Huemer, L., (2008). Trustworthiness, risk, and the transfer of tacit knowledge between alliance partners. *Journal of Management Studies* 45 (4), June, 691-713.
- [7] Park, B.I. et al., (2008). Knowledge Acquisition and Performance: The Role of Foreign Parents in Korean IJVs. *Asian Business & Management*, Vol. 7, No. 1, pp. 11-32
- [8] Meier M (2011) Knowledge management in strategic alliances: a review of empirical evidence. *Int JManag Rev* 13:1-23
- [9] Ren, H. et al., (2009). Performance of International Joint Ventures: What Factors Really Make a Difference and How?. *Journal of Management*, Vol.35, No.3, p.p. 805-832
- [10] Korsgaard MA, Brower HH, Lester SW (2014) It isn't always mutual: a critical review of dyadic trust. *J Manag* 41(1):47-70
- [11] Lewicki, R.J. and Wiethoff, C., (2000). Trust, Trust Development, and Trust Repair. In: M. Deutsch and P.T. Coleman (Eds.), *The handbook of conflict resolution: Theory and practice*. San Francisco, CA: Jossey-Bass
- [12] Hajidimitriou, Y.A. and Sklavounos, N.S., (2006). The Importance of Trust for the Success of International Strategic Alliances. *Proceedings of Management of International Business and Economics Systems Conference (MIBES) 2006*. Larissa, Greece.
- [13] Parkhe, A., (1998). Building Trust in International Alliances. *Journal of World Business*, 33 (4), pp. 417-437.
- [14] Nonaka, I., and Takeuchi, H. (1995). *The Knowledge Creating Company: How Japanese Companies Create the Dynamic of Innovation*. New York: Oxford University Press
- [15] Montana, J.C. (2000). The legal System and Knowledge Management. *Inform. Manag.* 34:54-57
- [16] Taylor, P. Stone, and Y. Liu. (2005). Value functions for RL-based behavior transfer: A comparative study. In *AAAI Conference on Artificial Intelligence*,

- [17] Abdullah, Nu. J. S., Ismail, I. A., and Idrus, Khairuddin. (2015). Organizational Antecedent With Job Satisfaction, Work Performance as Mediator and Knowledge Sharing Practices among Academician at Malaysia Research Universities. *International Journal of Economics and Financial Issues*, Vol.5. Pp. 57-62
- [18] Johnson, G., Scholes, K., and Whittington, R. (2008). *Exploring Corporate Strategy: Text & Cases*. 8th edition. Prentice Hall
- [19] Park, J. et al., (2011). The role of IT human capability in the knowledge transfer process in IT outsourcing context. *Information & Management*, Vol. 48, No. 1, pp. 53-61.
- [20] Geneste LA, Galvin P (2013) Trust and knowledge acquisition by small and medium-sized firms in weak client-firm exchange relationships. *Int Small Bus J* 33:277–298.
- [21] Squire B, Cousins PD, Brown S (2009) Cooperation and knowledge transfer within buyer-supplier relationships: the moderating properties of trust, relationship duration and supplier performance. *Br J Manag* 20(4):461–477
- [22] Ofobruku, Sylvester Abomeh And Yusuf, Bushira Mohammed (2016). Effect Of Knowledge Transfer On Employees' Performance In Selected Small Business In Asaba, Nigeria. *Arabian Journal Of Business And Management Review (Oman Chapter)* Vol. 6, No.2, September 2016
- [23] McEvily B, Zaheer A (2005) Does trust still matter? Research on the role of trust in inter-organizational exchange. In: Bachman R, Zaheer A (eds) *Handbook of trust research*. Edward Elgar, Cheltenham
- [24] Gaur AS et al (2011) Environmental and firm level influences on inter-organizational trust and SME performance. *J Manag Stud* 48(8):1752–1781
- [25] Chin, W.W. (2010). How to Write Up and Report PLS Analysis. In V. Esposito Vinzi, W.W Chin., J Henseler H. Wang (Eds), *Handbook of Partial Least Squares: Concepts, Methods and Applications in Marketing and Related Fields*. Pp. 655-690. Berlin: Springer
- [26] Hair J.F., Black W.C, Babin BJ Aderson RE. (2010). *Multivariate Data Analysis*. Sevented, Prentice hall, Englewoods Cliffs
- [27] Stone, M. (1974). Cross-Validatory Choice and Assesment of Statistical Predictions. *Journal of the Royal Statiscal Society. Series B (Methodological)*, Vol. 36. NO. 2. Pp. 111-147
- [28] Geisser, S. (1971). The Inferential Use of Predictive Distributions. In *Foundations of Statistical Inference* (V.P Godambe and D.A Sportt, eds) Pp. 45M69. Toronto, Montreal: Holt, Rinehart & Winston