The Effect of Knowledge Sharing on the Service Innovation Performance:An Empirical Study on Restaurant in North Kalimantan, Indonesia

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Article Info	Abstract
	This research was conducted on restaurant business in North Kalimantan Province, Indonesia. To improve the performance of service innovation, companies need knowledge gained from knowledge sharing activities. A number of 150 employees working in the restaurant businesses in North Kalimantan participated in this study. The data were collected using survey method with questionnaire. The survey responses submitted by respondents in this study indicated that the influence of knowledge sharing on the performance of service innovation showed significant results. Knowledge sharing activities in this study have a positive effect on innovation performance of restaurant business services in North Kalimantan.

1. INTRODUCTION

The development of the era in the current era of globalization has opened the door of a very high competition, this applies also to the culinary industry such as restaurants. The growth of the culinary industry in Indonesian soil is currently very rapid, one of them is shown by the increasing number of new restaurants by offering various new menu to customer service with unique packaging.

This form of service in the culinary industry requires closeness between employees and consumers. In this case the services provided by employees to customers will be part of the products offered by the company (Lee and Hidayat, 2018). Furthermore, customers who have consumed the service products will ultimately assess the quality of services that have been provided by the company. Hu et al. (2009) explains that customers who have enjoyed the innovative services provided by the company will be participants in assessing the service products that have been provided. Satisfied customers for every service it receives make it a loyal customer (Kotler and Keller, 2009). Hu et al. (2009) says that those who work in the service industry must be able to keep and attract new customers by meeting the demands of customer needs. In serving every customer, the company needs closeness between employees and consumers.

Therefore an emphasis on knowledge sharing between management and employees needs to be developed (Lin, 2007). Effective knowledge sharing practices allow for reuse and regeneration of knowledge at the individual and corporate level (Chaudhry, 2005). Furthermore Matzler et al. (2008) said that knowledge sharing will contribute positively to the company's performance, especially on improving service quality. Sharing knowledge will create opportunities to maximize the company's ability to meet its needs and generate more efficient business solutions to enhance competitive advantage (Lin, 2007). Lin (2007) and Darroch (2005) describe the sharing of knowledge as a culture of social interaction that involves the exchange of employee knowledge, experience, and skills through all elements within the company that ultimately enhance the company's innovation capabilities and sustain the company.

This is in accordance with the opinion of Hollins and Shinkin (2006) who said that the performance of service innovation can help improve the company's economic growth. The increasing number of customers who consume product service innovation can be an indicator of the success of the company to implement innovation (Lee and Hidayat, 2018). This makes the performance of service innovation an important issue at the moment (Levitt, 2002).

Innovation capabilities by firms need to be supported by important factors of knowledge

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sharing activities. This study aims to examine the effect of knowledge sharing on service innovation performance in restaurant businesses in North Kalimantan. This study is feasible to review because there is still a lack of research on knowledge management in the culinary or restaurant sector compared to the production or manufacturing sectors (Hallin and Marnburg, 2006; Hu et al. 2009; Lee and Hidayat, 2018).

This research was conducted in North Kalimantan Province, Indonesia. North Kalimantan is a province with a positive growth rate. It is shown through the data of Bank Indonesia in 2017 that the occurrence of economic growth in the province of North Kalimantan from three quarters, economic growth of North Kalimantan rose on average above 6%. Based on these data, economic growth in North Kalimantan reached 6.6% compared to 2016 with an average growth rate of only 3.75%. The increase in economic growth in North Kalimantan is supported by the growth and development of the food industry and restaurant sector. The flourishing of new restaurants in North Kalimantan has led to intense competition, which in turn requires restaurant owners to continuously innovate in order to survive and sustain.

2. METHODOLOGY

2.1 Theoritical Background

2.1.1 Knowledge Sharing

Davenport and Prusak (1998) define knowledge as non-permanent, formed by the experience, value, contextual information, and supportive skill side of a person in the frame of mind to evaluate and incorporate new experiences and information. The ability of companies to effectively utilize knowledge is highly dependent on the individuals within it, which make knowledge, share, and use knowledge (Ipe, 2003). Furthermore Ipe (2003) explains that utilizing knowledge is only possible when people can share their knowledge and build knowledge of others. Liao et al. (2006) in his research explains that knowledge sharing is an important process in the company at this time. Knowledge sharing is considered successful in generating shared intellectual capital, an increasingly important source.

Davenport and Prusak (1998) define knowledge sharing as a process of distributing the skills and experience voluntarily required throughout the organization. Similarly, Bartol and Srivastava (2002) concluded that knowledge sharing is a form of exchange of information, ideas, support and expertise between one individual and another in a company.

When someone shares his knowledge there is an important thing that becomes the basis of a person to share his knowledge. It is motivation. According to Lam and Ford (2008) there are two motivations a person possesses when sharing knowledge is extrinsic motivation and intrinsic motivation.

Based on an explanation of the sharing of knowledge above, knowledge sharing within the context of this research can be defined as the interaction process that occurs among team members to share information or knowledge. This is done to improve service innovation through the creation of (new) knowledge within the company (Indarti, 2010).

2.1.2 Service Innovation Performance

Hu et al. (2009) defines the performance of service innovation as something new or something enhanced and done by the company to create significant added value either directly to the company or directly to customers. Similar sentiment Gloet and Terziovski (2004) say that innovation will improve performance, solve problems, add value and create competitive advantage for the company. Therefore a more understanding of the nature of innovation is needed. Enterprise management must ensure that innovation can be assembled into a corporate culture (Cottrill, 1998 in Gloet and Terziovski, 2004). Furthermore, in the process of innovation is very dependent on knowledge (Nonaka and Takeuchi, 1995).

Scott and Bruce (1994) say that the central issue in management innovation is management attention. Managing attention is believed to be more difficult, as it concerns the adaptation of individuals to their environment. Based on the development of innovation there are important things to note that the existence of innovative behavior. Furthermore, Scott and Bruce (1994) concluded that individuals with innovative behavior sought support for the ideas they created and sought to build cooperation on the new idea.

Companies that are said to be successful are companies that have a greater difference in terms of products, services and reputation of the company as a whole (Doyle and Wong, 1998). Matear et al. (2004) in his research explains that the development of new services is the process of managing new or adopted ideas in order to be efficient for the creation of sustainable competitive advantage for the company. In an innovation management company is needed because to create and develop fresh ideas that must continue to flow as quickly as possible and at all times in anticipation of the development of a dynamic world (Indarti, 2010).

Chan et al. (1998) found that hotel services, restaurants and tourism businesses still tend to focus

on improving the quality of innovation. Further Jeong and Oh (1998) propose the need for a new service quality approach by replacing the old ways of service. The service sector at this time has grown rapidly, with such developments it is necessary to develop studies on the performance of service innovation in this sector (Hallin and Marnburg, 2006; Hu et al., 2009).

2.2 Hypotesis Development

2.2.1 The Influence of Knowledge Sharing on Service Innovation Performance

As explained earlier that knowledge as an important asset in creating sustainable growth and corporate competitive advantage (Kogut and Zander, 1992; Nonaka and Takeuchi, 1995; Grant, 1996). The process of identifying, capturing and utilizing knowledge within the company contributes substantially in creating competitive advantage (Yuselen and Yigitbas, 2010). Knowledge management has been found to have a positive effect on service innovation performance (Hu et al., 2009). This means managing knowledge is also an important process of change to connect between individuals, teams, departments and companies through sharing knowledge as a learning company. Learning is a perfect part of innovation, as it provides knowledge through the skills and competencies needed to build innovation (Nonaka and Takeuchi, 1995).

Previous research has focused more on the impact of knowledge management in supporting, enhancing innovation and innovating processes in different business functions (Hallin and Marnburg, 2007). Sveiby (2001) explains that knowledge sharing can be done within the company's internal environment as well as on the company's external environment. Therefore, the interaction between internal knowledge and external knowledge can influence the level of knowledge in innovating Liao et al. (2007). The existence of such interaction can influence the improvement of internal capability and openness to knowledge-sharing activities which in turn will improve the company's innovation performance. The same thing was also conveyed by Erika and Leigh (1997) that knowledge sharing activities of the team have resulted in a more coordinated team performance. Knowledge sharing can assist employees in disseminating good and relevant information to their fellow employees.

Based on the above statement can be concluded that knowledge sharing activities can improve the performance of service innovation in the company. This opinion is reinforced by research conducted by Lin (2007) that knowledge sharing positively affects the manufacturing industry's innovation capability. More specifically in the context of the service industry, Hu et al. (2009) proves that knowledge sharing activities positively affect the performance of service innovation in the hospitality sector. Based on the description can be drawn hypothesis as follows:

H: Knowledge sharing positively effects on service innovation performance.

2.3 Sample and sampling methods

The population in this study were employees working in restaurants in North Kalimantan, Indonesia. The sample size in this study was 150 employees. This number has met the needs of the minimum sample size in multiple regression analysis (Hair et al., 2010). The sample was taken by using non probability sampling method with purposive sampling technique. Purposive sampling technique is a non-probability sampling in which samples were selected based on population characteristics and study objective (Yanto, 2010; Yanto, 2016). The criteria used are restaurant employees who have worked and have had experience of at least 1 year in their field. These criteria are chosen because it is assumed that employees who have at least 1 year working experience in their field have experience in sharing knowledge and familiar with the culture within their company.

2.4 The research instrument

This research uses survey method. The data were collected using questionnaires that have been developed by previous researchers. The construct shared the knowledge and performance of its measurement service innovation using a questionnaire developed by Hu et al. (2009). To support a good response rate in data collection then the questionnaire will be distributed directly to all respondents. Each of these variables is measured using a 5 likert scale (1 strongly disagree, 5 strongly agree). Knowledge sharing variables have two dimensions: reputation and altruism (Davenport and Prusak, 1998; Walz and Niehoff, 2000). The knowledge sharing variable is operationalized with 11 items of statement developed by Hu et al. (2009). The focus of this measurement is to know knowledge sharing activity is done within the company based on the perception of restaurant employees. Furthermore, service innovation performance variables have two dimensions: innovative behavior and new service development (Scott and Bruce, 1994; Matear et al., 2004). Variable performance of service innovation was measured using 14 statement items developed by Hu et al. (2009). This measurement is intended to show the level of innovation in restaurants in North Kalimantan, Indonesia.

2.5 Data Analysis

The author uses descriptive statistical analysis to see the central tendency. Subsequently, regression analysis was conducted to investigate the relationship among variables (Yanto, 2010; Yanto, 2016). In this study, regression analysis is used to show the relationship between the dependent variable (Y) and the independent variable (X). Testing of statistical analysis was done by using SPSS software.

3. RESULTS AND ANALYSIS

3.1 Responden Profile

Table 1 presents the profile of 150 restaurant's employee who participated in this study. Based on Table 1, 72% of respondents are male and 28% are female. Most are in the mature age range of 26-35 years (40%). Meanwhile, most respondents had working experience with the year are ranging from 4-6 years (68.7%). It can be interpreted that the respondents' working experience in restaurant

business in North Kalimantan are workers who have a fairly good working period and classified as a productive age.

The education level of the majority of respondents in this study is 66 (44%) of vocational schools. From these data indicates that the level of education that most employees have in restaurant business in North Kalimantan is a diploma. Furthermore, in terms of marital status, respondents involved in filling in the questionnaire data in this study which has the largest percentage of unmarried respondents as many as 101 people (67.3%). From the description shows that the majority of employees in each department of restaurant business in North Kalimantan are unmarried employees.

3.1 Results of Hypothesis Test

Hypothesis testing was conducted by using regression analysis. The results are shown through the model in the Table 2.

Table 1.
Profile of Respondents

Dimension	Category	Number of responden	Percentage
Gender	a. Male	108	72%
	b. Female	42	28%
Age	a. 17-25 year	44	29,3%
	b. 26-35 year	60	40%
	c. 36-45 year	21	14%
	d. > 46 year	25	16,7%
Organizational Tenure	a. 1-3 years	17	11,3%
	b. 4-6 years	103	68,7%
	c. > 7 years	30	20%
Education	a. High school	41	27,3%
	b. Vocational school	66	44%
	c. University	28	18,7%
	d. Master's	15	10%
Marital Status	a. Married	49	32,7%
	b. Single	101	67,3%

Table 2.
Hypothesis Testing Results Using Regression

Variable	Model		
	β	T	Sig.
Knowledge Sharing	0,650	5,970	0,00**
F	98,493		0,00
R^2	0,687		
Adjusted R^2	0,683		

* $p<0,05$, ** $p<0,01$.

The hypothesis suggests that there is a positive influence of knowledge sharing on service innovation performance. Hypothesis test results in

Table 2 shows that knowledge sharing has a significant positive impact on innovation performance of restaurant business services in

North Kalimantan. It can be seen from the value (β = 0.650, p <0.01). Based on these statistical results, the hypothesis proposed in this study is supported.

Based on the results of statistical analysis, it is shown that knowledge sharing has a positive and significant impact on service innovation performance in restaurant business in North Kalimantan. Based on a significance level of 1%, indicating that knowledge sharing is a good variable to use to predict service innovation performance. The confidence level of these variables in predicting service innovation performance is very high. This is indicated by the level of knowledge sharing variable error in explaining the service innovation performance is very small that is equal to 1%.

In the context of restaurant businesses in North Kalimantan, knowledge sharing with service innovation performance has a one way relationship. This means that when a restaurant business in North Kalimantan has a high level of knowledge sharing, it will make it easier for restaurant businesses in North Kalimantan to innovate in the services provided to customers. Implementing knowledge sharing will provide the creation of new knowledge within the company (Nonaka and Takeuchi, 1995). Thus, support for the hypotheses in this study, in line with the theories referred to (Nonaka and Takeuchi, 1995; Davenport and Prusak, 1998) and earlier research results (Hu et al., 2009).

4. CONCLUSION

This research is aimed at obtaining empirical evidence of the influence of knowledge sharing on innovation performance of restaurant business services in North Kalimantan. Knowledge sharing activities in this study have a positive effect on innovation performance of restaurant business services in North Kalimantan. As for the conclusión, this research can prove that knowledge sharing has a positive effect on service innovation performance of restaurant business in North Kalimantan.

Implementation of this research there are some limitations that are expected to be an ingredient in providing improvement suggestions for further research on relevant topics. Limitations and suggestions in this study are:

- This study uses cross sectional study so that only able to explain a phenomenon at one time only, the consequence can not know the influence of time change. Service innovation is a diffusion process that can change over time, so future research can test service innovation with longitudinal studies.
- Future research can be done in the context of different organizational cultures so that there can be differences in the effect of organizational culture on the innovation

performance of restaurant business services (eg by comparing international restaurant management with local restaurant management).

5. REFERENCES

1. Bank Indonesia (2017). North Kalimantan Regional Economic and Financial Review.
2. Bartol, K. M., & Srivastava, A., (2002). Encouraging knowledge sharing: the role of organizational reward systems. *Journal of Leadership & Organizational Studies*, 9(1): 64–76.
3. Chan, A., Go, F. M., & Pine, R., (1998). Service innovation in Hong Kong: Attitudes and practice. *The Service Industries Journal*, 18(2): 112-124.
4. Davenport, T.H., & Prusak, L. (1998). Working knowledge: how organizations manage what they know. *Harvard Business School Press*, Boston, MA.
5. Doyle, P. & Wang, V. (1998). Marketing and competitive performance: an empirical study. *European Journal of Marketing*, 32: 5.6 – 5.14.
6. Erika, P., & Leigh, T. (1997). Negotiation teamwork: the impact of information distribution and accountability on performance depends on the relationship among team members. *Organizational Behavior and Human Decision Processes*, 72 (3): 364-383.
7. Gloet, M., and Tersziovski, M. (2004), Exploring the relationship between knowledge management practices and inovation performance. *Journal of Manufacturing Technology Management*, 15 (5), 402-409.
8. Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17 (Winter Special Issue): 109-122.
9. Hallin, C. A., and Marnburg, E. (2008). Knowledge management in the hospitality industry: a review of empirical research. *Tourism Management*, 29 (2), 366-381.
10. Hair, J.F. Jr., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2010). *Multivariate Data Analysis*, 7th ed. New Jersey: Prentice Hall.
11. Hu, M., L., , Horng, M. Jeou-Shyan., & Sun, Y., H., C. (2009). Hospitality teams: knowledge sharing and service innovation performance. *Tourism Management*, 30: 41-50
12. Indarti, N. (2010). The effect of knowledge stickiness and interaction on absorptive capacity. *Thesis*. University of Groningen, Groningen, The Netherlands.
13. Ipe, M. (2003). Knowledge Sharing in Organizations: A Conceptual Framework. *Human Resource Development Review*, 2: 337

14. Kogut, B., & Zander, U. (1992). Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology. *Organization Science*, 3(3): 383- 397.
15. Kotler, P. (2006). *Marketing Management*. 12th edition. New Jersey: Prentice Hall.
16. Lee, C., W. & Hidayat, N. (2018). The Impact of Absorptive Capacity on Service Innovation Performance: An Empirical Study on Banking in East Borneo Indonesia. *Journal of Applied Finance & Banking*, 8 (5): 105-116.
17. Liao, S., H., Fei, W., C., & Chen, C.,C. (2007). Knowledge sharing, absorptive capacity, and innovation capability: an empirical study of Taiwan's Knowledge-intensive industries. *Journal of Information Science*, 33: 340
18. Lin, H., F. (2007). Knowledge sharing and firm innovation capability: an empirical study. *International Journal of Manpower*, 28 (3/4): 315-332
19. Matear, S., Gray, B., J., & Garrett, T. (2004). Market orientation, brand investment new service development, market position and performance for service organizations. *International Journal of Service Industry Management*, 15 (3/4): 284-301.
20. Matzler, K., Renzl, B., Julia M, Herting, S., & Mooradian, T.A. (2008). Personality traits and knowledge sharing. *Journal of Economic Psychology*, 29: 301-313.
21. Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How japanese companies create the dynamics of innovation*. New York: Oxford University Press.
22. Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: a path model of individual innovation in the workplace. *Academy of Management Journal*, 37 (3): 580-607
23. Sveiby, K. (2001). A knowledge based theory of the firm to guide in strategy formulation. *Journal of Intellectual Capital*, 2: 344-358.
24. Walz, S. M., & Niehoff, B. P. (2000). Organizational citizenship behaviors: their relationship to organizational effectiveness. *Journal of Hospitality & Tourism Research*, 24 (3): 301-319.
25. Yucelen, M., & Yigitbas, K. (2010). An exploration of knowledge management and service innovation strategies in the Turkish hotel industry. *EuroCHRIE Tourism & Hospitality Educators Conference*. Amsterdam, The Netherlands, 25-28 October, 2010
26. Yanto. (2016). *Statistika Inferensi untuk Penelitian dengan Minitab*. Yogyakarta: Penerbit Andi.
27. Yanto. (2010). *Mengolah Data Statistik Parametrik dan Nonparametrik untuk Penelitian dengan Minitab 15*. Jakarta: Penerbit Universitas Atma Jaya Jakarta.