The Effect Of Knowledge Sharing On Business Performance Moderated By Innovation Product In The Small And Medium Enterprises In Indonesia

Sri Wahyu Lelly Hana Setyanti, Lilik Farida

Abstract: The objectives of this research were to analyze: (1) the effect of knowledge sharing on business performance of Small and Medium Enterprises (SMEs), (2) the effect of product innovation on business performance of SMEs, and (3) the effect of knowledge sharing on business performance of SMEs moderated by product innovation. Samples of the research consisted of 80 SMEs in East Java, Indonesia. Path Analysis was used to test the proposed hypothesis. Results showed that: (1) knowledge sharing has a positive and significant effect on business performance of SMEs, (2) product innovation has a positive and significant effect on business performance of SMEs, and (3) knowledge sharing has a positive and significant effect on business performance of SMEs, and (3) knowledge sharing has a positive and significant effect on business performance of SMEs, and (3) knowledge sharing has a positive and significant effect on business performance of SMEs, and (3) knowledge sharing has a positive and significant effect on business performance of SMEs, and (3) knowledge sharing has a positive and significant effect on business performance of SMEs, and (3) knowledge sharing has a positive and significant effect on business performance of SMEs, and (3) knowledge sharing has a positive and significant effect on business performance of SMEs, and (3) knowledge sharing has a positive and significant effect on business performance of SMEs, and (3) knowledge sharing has a positive and significant effect on business performance of SMEs moderated by product innovation.

Index Terms: small medium enterprises, Knowledge Sharing, Product Innovation, Business Performance.

1 INTRODUCTION

In Indonesia, the number of Small and Medium Enterprises (SMEs) is more than the number of medium and large enterprises. According to the latest data from Indonesian Ministry of Cooperatives and SMEs, in 2016 there are 57 million SMEs and it is predicted that this number will continue to grow in the upcoming years. In 2015, the number of SMEs in Indonesia was 48.9 million, or 99.98 percent of the total business units, employing 85.4 million workers. The exported SMEs' products to foreign countries had increased from IDR 110.3 trillion in 2014 to IDR 122.2 trillion in 2015. However, from the total national of non-oil and gas exported products, the number of exported SMEs' products was declining slightly from 20.3 percent in 2014 to 20.1 percent in 2015 [1]. SMEs play an important role in national economic growth. SMEs also has a significant role in increasing Gross Domestic Product (GDP), providing employment, and reducing unemployment level. The existence of SMEs supports the growth of largescale enterprises [2]. Most SMEs are very dynamic, responsive to market changes and consumers' demand, innovative, and are operating efficiently. That is why SMEs also have flexible characteristic compare to the big companies and the decision making system in SMEs does not require a complicated bureaucracy to be able to respond to market needs immediately [3]. SMEs give positive contribution for the economic growth not only in developing country such as Indonesia, but also in developed countries [2]. SMEs in Indonesia has contributed in creating an innovation in business and it is expected that SMEs will not only able to manufacture products as needed by consumers, but will also capable to create more added value to its products [2].

- Dr. Sri Wahyu Lelly Hana Setyanti, SE., M.Si is a lecturer in the Management Department, University of Jember (UNEJ) Jember, Indonesia. Email : lelyhana.fe@unej.ac.id
- Lilik Farida, SE., M.Si is a lecturer in the Management Department, University of Jember (UNEJ) Jember, Indonesia. Email : <u>lilikfarida100@yahoo.co.id</u>

Some training and empowerment programs have been conducted by the government in supporting SMEs for the better and superior business performance in the future. One of the programs is by creating a partnership program with bigger enterprises, improving the competence in information and technology sectors, and managing better knowledge management. One of the weaknesses of SMEs is in implementing knowledge management systems and having limited access to information, knowledge, and technological resources [10]. Most SMEs are facing internal problems in terms of financing the business operation or limited funding sources, limited human resources, and limited business network which can potentially hinder its development. Furthermore, the external problems are less conducive business climate, limited business facilities and infrastructures, negative effect of regional or local autonomy, free trade era, products with a short life span, and limited access to the market [11]. Based on data from the Indonesian Bureau of Statistics or BPS, SMEs contributed in absorbing 97% of total employment in Indonesia [1]. However, the increased contribution of SMEs is not followed by the quality of the resources used in operating the business. Related to human resources, the low quality of human resources is affecting the low level of mastery in technology and management, low innovation capabilities, and lack of control over the market [2]. The changes occurring in the market must be immediately addressed by SMEs to keep their existence in business in order to achieve superior business performance. Basically, the mastery of knowledge is related to the business performance of SMEs. Human resources are the key factors of an innovative SME. The mastery of technology by all members of the SMEs is the most important thing that must be implemented by SMEs in order to maintain their business performance. The key to achieve superior business performance on SMEs is by having good mastery of knowledge and implementing innovative behavior as applied on the product innovation [4]. Previous research has shown the importance of knowledge in activities that promote the improved performance by implementing knowledge sharing that is managed through a simple knowledge management that can be applied by SMEs [5]. The role of knowledge sharing in stimulating new product innovation is crucial for SMEs in creating customer value and achieving the best business performance [6]. Innovation is not only encouraging

the growth of organizational profits, but also improving the ability to penetrate markets and attract customers. That is why SMEs should create such innovation as in a product innovation as part of the development of SMEs [7]. The success of product innovation requires a process and an environment that supports that process of knowledge sharing in order to create superior performance of SMEs [6]. The objective of this study is to analyze the effect of knowledge sharing process in SMEs in the creation of innovative products to improve the business performance. Research Objectives: Referring to research objectives, researcher proposes several issues as the followings:

- 1. How does knowledge sharing affect business performance of SMEs?
- 2. How does product innovation affect business performance of SMEs?
- 3. How does knowledge sharing, moderated by product innovation, affect business performance of SMEs?

Knowledge itself is the integration of information, ideas, experience, intuition, skills, and valuable lessons that creates added value for the company. A more innovative company is a company that is able in acquiring, disseminating, and responding to such knowledge [8]. Interesting phenomenon found in SMEs is the creation of interactive process in producing innovative products through knowledge sharing activities. A critical factor in implementing knowledge management in an SME is the knowledge sharing [9]. knowledge sharing as a process where individuals reciprocally exchange knowledge and information through social interaction, based on their experiences and skills to share and receive knowledge within the entire organization in order to create new knowledge [10]. Product innovation in SMEs is one of the important strategies and processes run by SMEs to maintain its position in the market. Product innovation is defined as the process of adopting a new technology into a product so that the product has an added value. Product innovation aims to maintain the sustainability of the business unit because the existing products are always changing according to the changing needs and tastes of consumers and changes in technology that lead to shorter product life cycles and increased competition. According to Myers and Marquis, product innovation is a combination of various processes that interplays one another. In the small and medium businesses, product innovation is one activity in maintaining market share. Innovation can be applied to the goods, services, or ideas received by a person as something new, but even though the ideas might have been emerged in the past, it still could be considered innovative for consumers who just received those ideas. Measurement of business performance in SMEs can be the form of financial assets, non-financial assets, in both tangible and intangible, including human capital [12]. Business performance measurement is related to sales growth, net income growth, and return on investment . In this study, measurement of business performance in SMEs is measured by using the size of the market share sales growth, and profitability [13].

2 METHODOLOGY

This research is an explanatory research that seeks to explain the effect of independent variable, which is knowledge sharing, on dependent variables, business performance, moderated by product innovation, in SMEs in Indonesia. Quantitative method is used to test the proposed hypothesis. Samples of this research were consisted of 80 SMEs in East Java. Indonesia. Data were collected from the questionnaires employing a 1 to 5 measurement scale. Path analysis was used as the analysis technique run by using SPSS. Statistical results of the study are shown in the Table 1 below:

Table 1	. Statistical Ana	lysis Results
---------	-------------------	---------------

No	Variables Relationship	Path Coefficient (r)	C.R	Sig.	Description	
1.	Knowledge Sharing	0.681	3.78	0.002*	Accepted	
2.	Product Innovation	0.524	3.22	0.001*	Moderation	
	Business Performance	0.346	2.76	0.002*	Moderation	
*Significant at $\alpha = 5\%$						

Significant at $\alpha = 5\%$

Table 1 shows the positive and significant effect of knowledge sharing variable on business performance variable, while product innovation variable has a positive and significant effect on business performance variable of SMEs in East Java, Indonesia. It means that product innovation was moderating the effect of knowledge sharing on business performance. The results of hypothesis testing are shown in Figure 2 below:

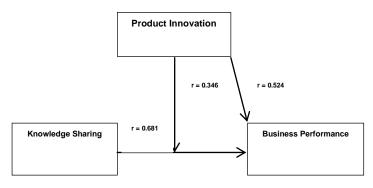


Figure 2. Results of Hypothesis Testing

3 RESULT AND DISCUSSION

The Effect of Knowledge Sharing on Bussiness Performance

Results of the study showed that knowledge sharing has a positive and significant effect on business performance of SMEs. These results support the research results that knowledge sharing has a positive and significant effect on business performance of SMEs. Knowledge sharing factor, as one of the resources of SMEs, is difficult to be replicated and it could encourage a significant improvement on business performance of SMEs [13]. Results of this study are also consistent with the research results which showed that by creating a formal knowledge flow mechanism to all levels of the organization would affect the business performance improvement on SMEs [13, 15]. Other studies explain that the ability of SMEs in knowledge sharing activities, includes creating, sharing, and transferring knowledge, has a very big influence on business performance improvement [16].



The Effect of Product Innovation on Bussiness Performance

Results of the study showed that product innovation has a significant and positive effect on business performance of SMEs. It is in line with the results of research that SMEs must maintain product innovation in order to improve their business performances [13]. Results of the study are also consistent with research [12] and the research that stating the product innovation in SMEs significantly affects the increasing of its business performance through significant improvement activities by utilizing effective and efficient technology appropriate for the SMEs [11].

The Effect of Knowledge Sharing on Bussiness Performance Moderated by Product Innovation

According to the statistical and hypothesis testing results, it is proved that there is a positive effect of knowledge sharing on business performance of SMEs moderated by product innovation. These results are in line with studies of Wang and [13]. which concluding that knowledge sharing can improve business performance of SMEs when it is combined with the product innovation and is implemented continuously on a sustainable basis.

4 CONCLUSION

The objective of this study was to analyze the effect of knowledge sharing on business performance, the effect of product innovation on business performance, and the effect of knowledge sharing on business performance moderated by product innovation. The results showed that all three proposed hypotheses indicated positive and significant effects among variables. This means that the empowerment of SMEs in East Java Province, Indonesia should be mainly focused on the activities of creating, acquiring, and sharing knowledge to improve business performance by enhancing the activity of product innovation, especially in terms of product quality based on the latest technology to be able to respond to the market needs.

REFERENCES

- [1] Bureau of Statistics Indonesia, East Java, 2015.
- [2] Dhewanto, Wawan, and Indradewa, Rhian and Ulfah, Wardah Naili, Manajemen Inovasi Untuk Usaha Kecil dan Mikro, Penerbit Alfabeta, Bandung, 2015.
- [3] Idar, R. And Mahmood, R and Idar, R., "Entrepreneurial and market orientation relationships to performance : The SME perspective", Interdisciplinary Review of Economics and Management, Vol 1, 2, pp 1-8, 2011.
- [4] Wang, Shining and Wang, Nianxin, "Knowledge Sharing, Innovation and Performance", Expert Systems with Applications, Vol 13, pp. 8899-8908, 2012.
- [5] Quaddus, Mohammed and Jun Xu, "Towards Understanding of Knowledge Sharing Among Small Businesses in Australia: Development of a Research Model", Australasian Conference on Information Systems, 770-779, 2008.
- [6] Gaynor, G.H, Handbook of Technology Management, McGraw-Hill Companies, Inc., 1996.

- [7] Bigliardi, B., Pierluigi C, A.I. Dormio, "Innovative Characteristics of Small Medium Enterprises", Journal of Technology Management & Innovation, Vol. 6, Issue 2, pp. 83-93, 2011.
- [8] Darroch, Jenny, "Knowledge Management, Innovation and Firm Performance", Journal of Knowledge Management, p. 101-115, 2005.
- [9] Du, Rong, and Ai, Shizhong, and Ren, Yuqing, "Relationship Between Knowledge Sharing and Performance", Experts System with Applications, Vol 32, pp. 38-46, 2007.
- [10] Drucker, P.F., Post Capitalist Society, HarperCollins, New York, NY, 1993.
- [11] Avlonitis, George J, and Salavou, Helen E., "Entrepreneurial Innovation of SMEs", Product Innovativeness and Performance, Journal of Business Reseach, Vol. 60, pp. 566-575, 2007.
- [12] Zou, K.Z, "Innovation, Imitation and new product performance: the case in China", Industrial Marketing management, 35, 394-402, 2006.
- [13] Wang, Shining and Wang, Nianxin, "Knowledge Sharing, Innovation and Performance", Expert Systems with Applications, Vol 13, pp. 8899-8908, 2012.
- [14] Ford, JD, Schellenberg, DA., "Conceptual Issue of Linkage in The Assestment of Organizational Performance", Academic Manage Review, 7, 49-58, 1998.
- [15] Ngah, Rohana and Kamaruzaman Jusoff, "Tacit Knowledge Sharing and SMEs Organisational Performance", International Journal of Economics and Finance, Vol. 1, No. 1, pp. 216-220, 2009.
- [16] Taminiau, Yvette, Wouter, Smith and De Lange, Annick, "Innovation in Management Consulting Firm Through Informal Knowledge Sharing", Journal of Knowledge Management, Vol 13, No. 1, pp. 42-55, 2009.

