KNOWLEDGE SHARING AS THE BASIS OF LEARNING IN INNOVATION PATTERN IN SMALL AND MEDIUM SCALE ENTERPRISE/SME

Hafiz Rahman

Department of Management, Faculty of Economics - Universitas Andalas, Padang

e-mail: hafiz.rahman@fekon.unand.ac.id

ABSTRACT

The study discusses process and implementation of knowledge sharing as the basis of learning in the innovation process that is undertaken in small and medium scale enterprises /SMEs with the contextual overview on the West Sumatran SMEs in Indonesia. As the context of the study, a specific SME in West Sumatra was taken as the case study. The study is an empirical-exploratory research where the qualitative method in terms of descriptive analysis was used as the main research approach. It also uses content analysis from the result of an in-depth interview as its main data analysis. A case study approach is used to collect data and information from the informants of the study. It can be inferred from the study that knowledge sharing has allowed an equal dissemination of information between people in the organisation of SME. Employees and owners spread information, knowledge as well as experience equally one to each other and this has led to the creation of a conducive environment in which learning processes can be smotthly undertaken. Such learning processes directly ease the innovation processes that is schemed and undertaken by the SME.

Keywords: knowledge sharing, knowledge donating, knowledge collecting, learning and innovation processes

ABSTRAK

Artikel ini membahas proses dan implementasi knowledge sharing sebagai sebuah dasar bagi pembelajaran dalam proses inovasi yang dterjadi pada usaha kecil dan menengah/UKM dengan konteks pada UKM di Provinsi Sumatera Barat, Indonesia. Sebagai bagian dari konteks, maka dilakukan pemilihan UKM spesifik yang dijadikan sebagai studi kasus. Studi ini merupakan penelitian empiris-exploratory yang menggunakan metode kualitatif dalam bentuk analisa deskriptif. Studi ini juga menggunakan analisa konten sebagai hasil dari in-depth interview untuk menganalisis data yang telah berhasil dikumpulkan. Pendekatan studi kasus digunakan untuk mengumpulkan data dan informasi dari informan penelitian. Studi ini menyimpulkan bahwa knowledge sharing akan memberikan dampak berupa adanya pembagian informasi yang merata antara sesama individu didalam UKM. Para karyawan dan pemilik UKM saling menyebarkan informasi, pengetahuan serta pengalaman secara merata pada sesamanya. Situasi ini lebih lanjut menciptakan lingkungan yang kondusif dimana proses pembelajaran dapat terlaksana dengan baik. Proses pembelajaran yang dilakukan tersebut secara langsung mempermudah proses inovasi yang direncanakan dan dilakukan oleh UKM.

Kata kunci: berbagi pengetahuan, menyumbangkan pengetahuan, mengumpulkan pengetahuan, proses belajar dan inovasi

1. Introduction

As it has been widely known and understood, SMEs are viewed as the engine of growth and economy of a region and a country. Many studies and contextual cases of the countries in the world have shown how SMEs positively contribute to macro economic indicators of a country, such as to GDP, minimizing unemployment rate, export, investment and innovation (Lafuente et al., 2007; Naude, 2007; Thurik, 2008). The same situation can also be found in the case of Indonesia (Indonesian Office of Statistics and Indonesian Ministry of Cooperatives and Empowerment of Small-Medium Entrepreneurs, 2012), as well as the West Sumatra Province in Indonesia as the context of the study in this paper. Considering the importance of SMEs in the economy of a region and a country, thus government policies, strategies and programs to develop and empower SMEs have emphasised to the focus on improving competitiveness of SMEs in order to structurally transform economy developing in countries (Naude, 2007; Thurik, 2008) and to obtain new sources of productivity growth and competitiveness in the more developed countries (Schramm, 2004; Baumol, 2007).

One the sources competitiveness for SMEs is in term of their ability to undertake innovation in the business. To get developed, SMEs need to have a correct track to undertake innovation process during their business operation. As Teece et al. (1997) pointed out, SMEs as an organisation, need to maintain their competitive advantage by undertaking innovation so they can assure the survival of their business operation in a longer time. However, innovation in **SMEs** is always interrelated to several factors such as employees as an individual, business environment, owner etc. A conducive

individual, business environment, owner and other SMEs stakeholders will further create sufficient condition for knowledge sharing inside and within SMEs. In the case of Indonesian SMEs, as Rahab et al. (2011) mentioned, organisational factors, management support and organizational rewards effect on knowledge sharing activities at the organisation/firm, which further influences firm's innovation capability.

Therefore, it is clear that in order to undertake innovation, SMEs need to consider the element of knowledge inside and within themselves as the main condition. An innovation needs a suitable knowledge and as a consequence, parties in SMEs also need sufficient knowledge to support innovation process and to familiarise themselves with the climate innovation. To get sufficient knowledge within the parties in SMEs, there should be a knowledge sharing from each of the employee. This can be undertaken by allowing the process of knowledge transfer and exchange in knowledge donating terms of and knowledge collecting within the organisation, which will let members of the organisation to get suitable and sufficient knowledge to undertake innovation process in the organisation.

2. Literature Review

The importance of knowledge in the organisation grows bigger and got more particular attention during the past years. Knowledge has already been viewed as a part of key elements for the modern organisation to achieve and to maintain their competitive advantage. It is believed that the improvement of organisational performance is strongly associated with individuals' learning process and transfer of learned knowledge to the workplace, Song et al. (2008).

In the view of Davenport and firms, which Prusak (2000)effectively use knowledge and apply it will get more sustainable faster, competitive advantage. In the firm's perspective, the adoption of knowledge will enable the flow of information to be spreaded within the firm and further, it can positively create value of the firm (O'Dell & Hubert, 2011). The growing flow of information and the value creation within the firm will further establish collective knowledge of the people inside of the firm that can be used to achieve company goals, which are normally identified in two possible goals (Song et al., 2008): [a] to create the new knowledge and accelerate innovation as a way to gain competitive advantage on the market, and [b] to share existing knowledge in order improve to company's effectiveness. As DeLong, (2004), Gupta & Sharma, (2004) and Senge (1990), the integration knowledge combination of individuals in the company is viewed as the major asset for the company. It becomes and grows as the more important asset rather than any other assets in achieving company's goals and objectives. Therefore, it can be said that

the knowledge within the firm is a unity of three elements: [a] people, [b] process and, [c] technology, Dzunic et al. (2012) and it usually is undertaken in several stages: [a] knowledge creation, [b] knowledge capture, [c] knowledge storing, [d] knowledge sharing and, [e] knowledge application, Macintosh (1995).

Extending the concept knowledge sharing, van den Hooff and de Ridder (2004) mentioned that it is a process in which individuals mutually change knowledge (explicitly and/or implicitly) so it can together create new knowledge in the organisation. In the other occassion, Boer et al. (2011) mentioned that knowledge sharing is defined as a process which closely related to communication and learning. Knowledge sharing is a key process in the specialisation, fragmentation and distribution of knowledge. Therefore, developing knowledge sharing in an organisation can establish a better transformation in performances across activities in that organisation. ilustrates the (2005),process knowledge sharing which can impact performance of an organisation in figure

Decision Execution Success Performance to share of sharing of sharing organisational knowledge knowledge knowledge setting Yes. Intentionally, High Complete complete Incidentally, Partial Average partial yes No, None Poor No none Source: Boer (2005)

Figure 1
Knowledge Sharing Process and Its Relationship to Organisation Performance

As Lin (2007) and van den Hooff and van Weenen, (2004), knowledge sharing can be divided into two forms, namely: [a] knowledge collecting, which is a process where a person encourages other person in the organisation to share knowledge and their intellectual capital with him/her, and [b] knowledge which is meant as donating. awareness of a person in the organisation to share his/her intellectual capital to someone else in the organisation. Knowledge donating has six dimensions, as follows:

- a) Ability of colleagues of an employee to understand new knowledge,
- b) Awareness to share information with colleagues within the department
- c) Willingness to share skills with colleagues within the department
- d) Ability of colleagues outside of the department to understand knowledge given
- e) Willingness to share information with colleagues outside of the department
- f) Willingness to share skills with colleagues outside of the department

Meanwhile, knowledge collecting has five dimensions, as follows:

- a) The willingness of colleagues in the department to inform every answer which has been asked
- b) The willingness of the colleagues in the department to inform every skill that he/she has
- c) The willingness of colleagues outside of the department to inform every answer which has been asked
- d) The willingness of colleagues outside of the department to inform his/her skills
- e) The use of social software in the company

Both of those knowledge sharing processes (donating and collecting) will allow the establishment and can create an environment in the organisation – where people can exchange information, can learn from each other, can get similar sufficient knowledge to undertake business operation/process and further, can use them as the basis to innovate in oder to establish competitive advantage of the organisation. As Slavkovic and (2013)found, knowledge management has a direct and positive impact on the process innovation and administrative innovation and every improvement in the processes related to knowledge management will also mean encouraging innovation in the organization. which ensures competitiveness in the long term period. Nonaka and Takeuchi (2005) further mentioned that sufficient knowledge sharing process will influence innovation in the organisation since it can create collective learning and rises collective benefits for members of the organisation since it can also supply knowledge within the organisation at large.

As Quintana et al. (2011) viewed, innovation is an outcome from a knowledge perspective. Specifically, George et al. (2008); Galunic and Rodan (1998)have considered innovation comes from a process of knowledge exchange and recombination. Ouintana et al., (2011) have further argued the relationship between knowledge and innovation. They stated that "an innovation is in essence new knowledge, and therefore that it is possible to conceptualize innovation as an outcome from a knowledge-based perspective". This means that the essence of innovation process and the innovation as an outcome of that process depend on the existence of knowledge in an organisation in which the collective knowledge of the people inside the

organisation plays a major role to perform innovation.

In the context and from the evidence of the implementation of knowledge management by SMEs in Widianingsih Indonesia. (2013)mentioned that the implementation of knowledge management in SMEs as a business entity and its application by individuals working in SMEs have significantly bring prositive impact to the effectivity and efficiency of SMEs and their business operation. Meanwhile, individuals who are working in SMEs are allowed to involve into an innovative processes within which the knowledge management is used. Mulyana et al. (2015) viewed that both knowledge donating and knowledge collecting significantly affect the innovation capability of batik SMEs in Central Java. Indonesia. Meanwhile. from behavioural point of view in one specific SMEs as a case study, Silalahi and Sundiman (2016) argued individual behaviour towards knowledge sharing encompasses an essential role in developing individual innovation capability which further bring positive impact to the creation of competitive advantage within an organisation. As other organisations throughout the world, we can see from the findings and arguments above that SMEs in Indonesia which apply knowledge management practices within their organisations will allow the innovation pattern, process and capability by MSEs. These will further lead to the creation of competitive advantage of the organisation.

3. Research Method

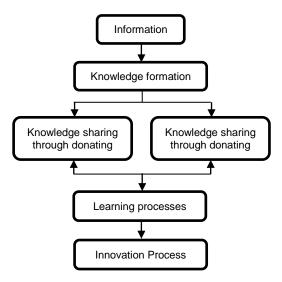
This study is an empirical study which uses SMEs in West Sumatra Province in Indonesia as its context. It has a qualitative method in terms of descriptive study as its main approach, and uses content analysis from the result

of an in-depth interview as its main data analysis. A case study approach is conducted to collect data and information from the informants of the study, which are owner and employees of a SME in West Sumatra Province in Indonesia. As Flyvbjerg (2006) and Zucker (2009), a study comprehensive case is a description of an individual case and its analysis; i.e., the characterization of the case and the events, as well as a description of the discovery process of these features that is the process of research itself. Therefore, the case study emphasises on the exploration of the research phenomenon in one single context in order to get characterization of the case as well as its description. This study uses one particular SME in the culinary business in West Sumatra – in which the case study wass undertaken. The reason why we choose one case study SME is related to the nature of this study which intends to explore the implementation knowledge of management in an enterprise, in this essence, a SME. However, as it is done to only one case study SME, we realize that it still needs further exploration and explanation since it probably cannot generalize the result. As the design of this study, we firstly analysed the dimension of knowledge sharing in the company, which is in terms knowledge donating and knowledge collecting. We then link them with the analysis of learning process in the company as the result and impact of knowledge sharing that has been undertaken by the members of the company. Lastly, we link the learning process as the product of knowledge sharing in the company with the type of innovation that is undertaken by the company. In each step of this design, interview to the informants conducted to get information and description.

3.1 Research Framework

The study uses the following research framework as its guidance during the research process.

Figure 1. Research framework in knowledge sharing and innovation process in SMEs



Using the figure 1 as the basis of our understanding, the main important aspect in regards of the impelemntation of knowledge management in SMEs is availability the information of throughout the organisation. availability of information will create an accummulated knowledge formation among people inside the organisation, which can be in the form of tacit knowledge/implicit knowledge and explicit knowledge. The existence of awareness and the needs of people inside unconciously organisation will knowledge forming a exchange mechanism in the organisation which mechanism allows people in the organisation to share knowledge with their colleagues. This sharing knowledge, voluntarily or not, will further let people to learn something from each other. This such learning process, at the end, will lead to the creation of vibrant circumstances, where innovation processes and patterns can be

voluntarily undertaken by people in the organisation.

4. Results and Discussion

The case study company in this study is CV. X (should remain anonymous) - which is located in the neighbourhood/kelurahan of Payolansek, Payakumbuh (about 3 hours drive to the north west of Padang – the capital city), West Sumatra - Indonesia. The case study company was established on 1997, and it is considered as a SME in terms of its turn over which is around IDR 65 mio. per month. The company is having its business in culinary business and it is one of the famous culinary SME in that area. To date, the company has produced more than 20 product lines (initially it was only 2 product lines on 1997) that are sold and marketed throughout Sumatra and West Sumatra in particular. The company has 25 employees who are located in 5 departments - and for the purpose of this study, we appointed one employee from each department to become informants of the study. In total, interview as the major source of information in this study was conducted to 6 informants, who are employees (5 people) and an owner.

It can be inferred from the study that knowledge sharing has allowed an equal dissemination of information between people in the organisation of SME. People, i.e. employees and owner, spread an equal information, exchanging and transfering knowledge as well as share experience one to each other. This situation has led to the creation of a conducive environment in which learning processes can be smoothly undertaken. Such learning processes between people in the company will directly ease the innovation processes that is planned, scheduled and schemed by the company. This finding is relevant with the study of Kamasak and Bulutlar (2009) who found that whenever people in an organisation can share their real experience and spread accummulate knowledge to each other, then this will ease and improve creativity andinnovation in the organisation.

This study is following Lin (2007) and van den Hooff and van Weenen (2004) to divide knowledge sharing in two forms, which is knowledge donating and knowledge collecting. In terms of knowledge donating, this study considers the following dimensions as its unit of analysis:

- a) Ability of colleagues of an employee to understand new knowledge,
- b) Awareness to share information with colleagues within the department
- c) Willingness to share skills with colleagues within the department
- d) Ability of colleagues outside of the department to understand the knowledge given to them
- e) Willingness to share information with colleagues outside of the department
- f) Willingness to share skills with colleagues outside of the department

The study has found that people (owner and employees) in the case study context have undertaken all dimensions of knowledge donating. In terms of the ability of colleagues of an employee to understand new knowledge, informants of the study revealed that colleagues will also get a new knowledge as soon as they got that new knowledge. Their colleagues in the same department learnt fast for the new knowledge that has been spreaded. In terms of the awareness to share information with inside colleagues the department, informants of the study revealed that they are voluntarily willing to share new

information that they got from any sources of information. An open-space working station inside and between the department has created a conducive environment for them to talk to each other in order to share, transfer and exchange new information. This situation has allowed the smoother and the faster flow of information exchange between employees in that particular department.

Regarding the willingness to share with colleagues inside department, informants of the study mentioned that they will voluntarily help and assist their colleagues in the department to acquire new skills that they have just got, such as an effective packing skills, quality improvement, how use equipments effectively efficiently, process of waste etc. The willingness to voluntarily share skills with the colleagues has made all people in the particular department of the company can acquire standard skills and knowledge to support company's business operation.

In terms of the ability of colleagues outside of the department to understand the knowledge given to them, informants of the study said that after they have donated knowledge that they got, their colleagues revealed that they understand the knowledge given to them faster. Communication, good social relationship as well as open-space working station are believed to positively contribute to this process. Supporting this process, each of the informant revealed that they are always willing to share information and skills that they have to their colleagues outside of the department. Such an easy and voluntarily process of donating information and skills combined with positive communication attitude, openspace working place, trusting, long-term relationships among the employees and harmonious relationship between

employees and the owner of the company have made people in all departments to become easier understand every knowledge that has been donated to them. As Wang and Noe (2010) and Dysvik et al. (2015) those given condition are the pre-requisite for a reciprocal knowledge sharing in a company. All conducive situation and condition regarding the knowledge donating amongt the employees have further created a sufficient collective knowledge among employees in the company. As a consequence, this allows transfer/exchange of knowledge becomes more efficient and effective amont people in the company. This has further led to an easy innovation process which is involving employees that would be undertaken by the company. Referring as to Galunic and Rodan (1998) and George et al. (2008) an innovation comes from a process of knowledge exchange and recombination - in which knowledge donating is considered as a major part of

Related to knowledge collecting which has the dimensions of:

- a) The willingness of colleagues in the department to answer every question which has been asked
- b) The willingness of the colleagues in the department to inform every skill that he/she has
- c) The willingness of colleagues outside of the department to answer every question which has been asked
- d) The willingness of colleagues *outside* of the department to inform his/her skills
- e) The use of social software in the company

This study has found that in terms of points [a], [b], [c] and [d], the case study company has undertaken all of those dimensions. It means that either

colleagues inside or outside of each department in the company are willing to answer every question from their colleagues that is addressed to them. The study also found that every employee in the company is willing to let his/her colleagues knowing his/her skills. As in knowledge donating, communication process, an open-space working place, trust, long-term relationships among the employees and harmonious relationship between the employees and owner of the company are found as the main factors that influence the knowledge collecting process, specifically in terms of [a] giving true answers to every question that has been asked by the member of the company (inside or outside of each department) and, [b] the willingnes to let every colleague knows every skill belongs to each member of the company.

However, the study also found that the company has no social software in place to support knowledge collecting by members of the company. This social software can be in the form of handphone, specific communication equipment, etc. When we asked why the company has no social software in place, informants of the study revealed that they don't need this such of equipment. The reason lies on the fact that the members of the company are living in the same neighbourhood, which is very close to each other (either socially or in distance) and this neighbourhood is also close to the company. The locality of the members of the company has made them think that they can communicate and/or collect information, skills and knowledge easily from their colleagues – as soon as they need it. However, as a response to the rise of the global market and competition in which SMEs are required to keep innovate, the use of social software is something needs to be carefully planned. As the study of Sunarti and Yunita (2016) to the innovation in SMEs in Depok, West Java found that the use of social software in the form of responsive mobile social software can assist SMEs in their promotion, cooperation, exhibition, trade mission and knowledge of how to develop the business.

To get an insight regarding the use of knowledge sharing through donating and collecting as a learning process in innovation in the company, we further asked informants of the study to reveal types of innovation that they have undertaken after the share knowledge with other. Answering each question, informants of the study revealed that they are doing the following dimension of innovation after they share knowledge with each other:

- 1. Implementing small adaptation to the products voluntarily, in order to reach and to fill demands from potential customers
- 2. Re-introduce products after small adaptation and improvement
- 3. Efficiency to the existing products improvement of customer service to the existing cutomers

the dimension of Analysing innovation that has been conducted by the company, we can summarise that it is sourced and it is as a response to customer's demand and need. In other words, the majority of the dimension of innovation undertaken by the company is based on the orientation to its customers. As Kohli and Jarowski (1990) this dimension of innovation is known as the market-pull innovation, in which the company reacts, takes responses and considers demands and needs from its customers. In the view from innovation a field of study, market-pull innovation is closely related to the concept of incremental

innovation/exploitative innovation. If we consider the size, the scale and the ability of SMEs, various researches have found that the most SMEs are usually undertaking incremental innovation as the main modus of innovation. As Norman and Verganti, incremental innovation is simply viewed as undertaking and producing something which is better rather than the previous one. Similar to other previous studies and researches, we also found that an incremental innovation was undertaken by this company.

Analysing the dimension knowledge sharing, learning process and innovation in this company, it can be seen that the knowledge donating and knowledge collecting among employees has allowed and has created a conducive learning process for each member of the employee and the owner of the company as the main sources to innovate. Such learning process will then lead the employees together with the owner of the company to apply an incremental innovation to the products of the company.

5. Conclusion

It can be clearly seen in the case study context that the process of knowledge sharing and learning processes happened to all people in the organisation. It can be observed from the interview that every employee and the owner of SME in the case study context did not hesitate to ask somebody else and to answer questions that addressed to them. Every employee either in the same department or from inter-departmental section with lateral organisational relationship is able to share knowledge, skills and ideas in the innovation processes of the organisation. This circumstance creates the same standard basic knowledge, skills and experience to employees as the baseline for

learning processes in the organisation. A relatively similar experience, knowledge and skills that creates conducive learning process within the company has further allowed and eased the innovation process in the organisation — which produces incremental innovation as the major type of innovation in the company.

As this study was exploratory undertaken in one particular SME, then it would be worth to use this study as the basis to expand the topic, which might be undertaken quantitatively to generalize our understanding about the topic of the research.

REFERENCE

- Baumol, W. J. (2007). Entrepreneurship, trade competition and the explosion of World Trade. *Kaufmann-Planck Annual Summit on Entrepreneurship Research and Policy* 2007. https://doi.org/10.2139/ssrn.1001099
- Boer, N. I. (2005). Knowledge sharing within organizations: A situated and relational perspective. *Ph.D. Research*. Rotterdam: Erasmus Business School, Erasmus University.
- Boer, N. I., Berends, H., & van Baalen, P. (2011). Relational models for knowledge sharing behavior. *European Management Journal*. 29(2), 85-97. https://doi.org/10.1016/j.emj.2010.10.009
- Davenport, T. H., & Prusak, L. (2000). Working knowledge: How organisations manage what they know. *ACM IT Magazine and Forum*. https://doi.org/10.1145/347634.348775
- DeLong, D. W. (2004). Lost knowledge: Confronting the threat of an aging workforce. New York: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195170979.001.0001
- Dysvik, A., Buch, R., & Kuvaas, B. (2015). Knowledge donating and knowledge collecting: the moderating roles of social and economic LMX. *Leadership and Organization Development Journal*, *36*(1), 35-53. https://doi.org/10.1108/LODJ-11-2012-0145
- Dzunic, M., Boljanovic, J. D., & Subotic, J. (2012). The importance of concepts of knowledge and learning organizations in managing the knowledge: Flow in organizations. *Management, Knowledge and Learning International Conference* 2012. Celje-Slovenia: MakeLearn.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*. 12(2), 219-245. https://doi.org/10.1177/1077800405284363
- Galunic, C., & Rodan, S. (1998). Resource recombination in the firm: Knowledge, structures and the potential for Schumpeterian innovation. *Strategic Management*

- Journal, 9(12), 1193-1201. https://doi.org/10.1002/(SICI)1097-0266(1998120)19:12<1193::AID-SMJ5>3.0.CO;2-F
- George, G., Kotha, R., & Zheng, Y. (2008), Entry into insular domains: A longitudinal study of knowledge structuration and innovation in biotechnology firms. *Journal of Management Studies*, 45(8), 1448-1474. https://doi.org/10.1111/j.1467-6486.2008.00805.x
- Gupta, J., & Sharma, S. (2004). *Creating Knowledge Based Organizations*. Boston: Idea Group Publishing. https://doi.org/10.4018/978-1-59140-162-9
- Kamasak, R., & Bulutlar, F. (2009). The influence of knowledge sharing on innovation. *European Business Review*, 22(3), 306-317. https://doi.org/10.1108/09555341011040994
- Kohli, A. K., & Jarowski, B. J. (1990). Market Orientation: The Construct, Research Propositions and Managerial Implications. *Journal of Marketing*, *54*(2), 1-18. https://doi.org/10.2307/1251866
- Lafuente, E. M., Vaillant, Y., & Rialp, J. (2007). Regional differences in the influence of role models: Comparing the entrepreneurial process in Rural Catalonia. *Regional Studies*, 41(6), 779-795. https://doi.org/10.1080/00343400601120247
- Lin, H. F. (2007). Knowledge sharing and firm innovation capability: an empirical study. *International Journal of Manpower*, 28(3/4), 315-332. https://doi.org/10.1108/01437720710755272
- Mulyana, M., Assegaff, M., & Wasitowati, W., (2015). Pengaruh knowledge donating dan knowledge collecting terhadap innovation capability kasus pengembangan UKM batik di Provinsi Jawa Tengah-Indonesia. *Jurnal Manajemen Teknologi*, 14(3), 246-264. https://doi.org/10.12695/jmt.2015.14.3.2
- Naudé, W. A. (2008). *Entrepreneurship in Economic Development*. Helsinki, Finland: United Nations University World Institute for Development Research (UNU-WIDER).
- Nonaka, I., & Takeuchi, H. (2005). *The Knowledge-Creating Company*. Press, New York: Oxford University.
- Norman, D. A. & Verganti, R. (2012). Incremental and radical innovation: Design research versus technology and meaning change. *Design Issues*, 30(1), 78-96. https://doi.org/10.1162/DESI_a_00250
- O'Dell, C., & Hubert, C. (2011). New Edge in Knowledge: How Knowledge Management Is Changing the Way We Do Business. Chichester: Wiley.

- Quintana, E., Casselman, R. M., Reiche, B.S., & Nylund, P. A. (2011). Innovation as a knowledge based outcome. *Journal of Knowledge Management*, *15*(6), 928-947. https://doi.org/10.1108/13673271111179299
- Rahab, R., Sulistyandari, S., & Soedjono, S. (2011). The development of innovation capability of small medium enterprises through knowledge sharing process: An empirical study of indonesian creative industry. *International Journal of Business and Social Science*, 2(21), 112-123.
- Schramm, C. J. (2004). Building entrepreneurial economies. *Department of Foreign Affairs, July-August*, 83(4), 104-115. New York, Washington D.C: Council of Foreign Relations. https://doi.org/10.2307/20034050
- Senge, P. (1990). The Fifth Discipline: The Art and Practice of the Learning Organization. London: Century Business.
- Silalahi, H. C., & Sundiman, D. (2016). Knowledge sharing sebagai sumber inovasi dan keunggulan bersaing pada usaha kecil dan menengah (ukm) sektor bengkel otomotif (Studi kasus CV. Ariron Jaya Tehnik), *Profit (Jurnal Penerapan Ilmu Manajemen dan Kewirausahaan)*, *I*(1), 84-93.
- Sunarti, S., & Yunita, Y. (2016). Prototype of knowledge management system responsive mobile android untuk inovasi UKM Kota Depok dengan Metode Most Admired Knowledge Enterprise (MAKE). *Indonesian Journal on Computer and Information Technology*, *1*(2), 17-26.
- Slavkovic, M., & Babic, V. (2013). Knowledge management, innovativeness and organizational performance: Evidence from Serbia. *Economic Annals*, 58(199), 85-107. https://doi.org/10.2298/EKA1399085S
- Song, M., van der Bij, H., & Weggeman, M. (2006). Factors for improving the level of knowledge generation in new product development. *R & D Management*, *36*(2), 173-187. https://doi.org/10.1111/j.1467-9310.2006.00424.x
- Statistik Indonesia. (2012). *Statistical Yearbook of Indonesia 2012*. Jakarta: Badan Pusat Statistik.
- Statistics Indonesia. (2012). *Trends of Selected Socio-Economic Indicators of Indonesia* 2012. Jakarta: Badan Pusat Statistik.
- Teece, D. J., Pissano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z
- Thurik, R. (2008). Entrepreneurship, Economic Growth and Policy in Emerging Economies. Rotterdam: ERIM.

- Tsai, W. (2001). Knowledge transfer in intra-organisational networks: Effects of network position and absoroptive capacity on business innovation and performance. *Academy of Management Journal*, 44((5), 996-1004. https://doi.org/10.2307/3069443
- van den Hooff, B., & de Ridder, J.A. (2004). Knowledge sharing the context: the influence of organisational committment, communication climate and CMC usage on knowledge sharing. *Journal of Knowledge Management*, 8(6), 117-130. https://doi.org/10.1108/13673270410567675
- van den Hooff, B., & van Weenen, F. D. L. (2004), Committed to share: Commitment and CMC use as antecedents of knowledge sharing, *Knowledge & Process Management*, 11(1), 13-24. https://doi.org/10.1002/kpm.187
- Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, 20(2), 115-131. https://doi.org/10.1016/j.hrmr.2009.10.001
- Widianingsih, L. P., (2013). Knowledge management dalam mendorong inovasi dan daya saing pada usaha kecil menengah, *Jurnal Gema Aktualita*, 2(1), 44-52.
- Wenekkers, S., & Thurik, R. (1999). Linking entrepreneurship and economic development. *Journal of Small Business Economics*, 13, 27-55. https://doi.org/10.1023/A:1008063200484
- Zucker, D. M. (2009). How to do case study research. *Teaching Research Methods in Humanities and Social Sciences*. Massachusetts: University of Massachusetts Amherst.