

THE INFLUENCE OF KNOWLEDGE CAPABILITY FOCUS, KNOWLEDGE CAPABILITY ACTIVITIES AND ORGANIZATIONAL RISK TAKING ON SMES BUSINESS MODEL INNOVATION

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Abstract: This study aims to examine the effect of knowledge capability focus, knowledge capability activities and organizational risk taking on SME business model innovation. The object of this research was the SME of *Batik Lasem* in Rembang Regency, Central Java. The total population was 107 SMEs and the respondents who were sampled in this study were 100 SMEs taken from those returning the questionnaire. Data collection techniques utilized a questionnaire, while the data analysis technique used multiple linear regression. The results show that knowledge capability focus and knowledge capability activities have a positive but insignificant effect on SME business model innovation, while organizational risk taking has a significant positive effect on SME business model innovation.

Keywords: Knowledge Capability, Focus, Activities, Organizational Risk, Business Model Innovation (BMI)

1. Introduction

Small and Medium Enterprise (SME) have a quite large role for economic development in Indonesia. According to the data from the Coordinating Ministry for Economic Affairs in 2019, SMEs contributed 60% or 8,573 trillion rupiahs to Indonesia's Gross Domestic Product (GDP). SMEs also contributed to absorb 97% of the total workforce, and collected up to 60.4% of the total investment. *Batik Lasem* in Rembang Regency becomes an economic leading sector whose development must be continuously improved amid the Covid-19 pandemic condition.

Business competition in the midst of a pandemic condition requires some competitive strategies that need to be improved continuously. One of them is by paying attention to business model innovation. Many researches on business model innovation have been carried out, especially for companies with large asset capitalization and company forms. This kind of model innovation is very important, as supported by Khanagha et al., (2014), who states that business model innovation is an innovation activity in business models that consists of incremental changes in individual business model components, expansion of existing business models, introduction of parallel business models, and model disruption businesses which may potentially need to replace existing models with fundamentally different ones. The novelty of this research is that this research examines the effect of knowledge capability focus, knowledge capability activities, and organizational risk taking on SME business model innovation. Meanwhile, the difference with previous research lies on the use of variables that

focus on knowledge capability and organizational risk taking, especially taking a smaller business activity in the form of SME.

2. Literature Review

Knowledge Capability Focus

According to Bagnoli and Vedocato (2012), knowledge capability focus includes the relevance of certain strategic orientations and knowledge management ones. There are four strategic orientations that can be developed, those are:

- 1) Structured Utilization Strategy. Companies will focus on leveraging their existing knowledge while also codifying it. The choice of such a strategy results in lower product effectiveness (than the exploratory alternative) and higher process effectiveness (than the tacit alternative).
- 2) Intuitive Utilization Strategy. The company using this strategy will stress on leveraging existing knowledge. The choice of such a strategy leads to lower product effectiveness (than the exploratory alternative) and lower process effectiveness (than the codification alternative). This seems to be the least effective strategy (of the four mentioned here).
- 3) Structured innovation strategy. This strategy focuses on exploring as much new knowledge as possible while codifying it. The choice of such a strategy leads to higher product effectiveness (than the exploitation alternative) and higher process effectiveness (than the tacit alternative). Of the four existing strategies, it seems to be the most effective one.
- 4) Intuitive innovation strategy. The companies will stress on exploring as much new knowledge as they can. The choice of such a strategy results in higher product effectiveness (than the exploitation alternative) and lower process effectiveness (than the codification alternative).

Knowledge Capability Activities

Knowledge capability activities develop the strong dynamic strategic planning capabilities and reconfigure the organizational strategy development (Teece, 2014). Therefore the activities can effectively allocate and reallocate resources to the most appropriate strategy at the right point and at the right time. In knowledge capability activities, the organization is seen as an entity that creates, stores, and disseminates knowledge. Knowledge capability activities are implemented to conceptualize the knowledge management which consists of information distribution activities, learning values, memory and symbolic information usage (Hughes and Hodgkinson, 2020).

Organizational Risk Taking

Organizational risk taking reflects the company's willingness to exploit uncertain business initiatives. This shows the extent to which the organization supports risk-taking versus control behaviours (Smith et al., 2005). These behaviours are embedded in the corporate climate and able to affect many aspects of how organizations acquire, share, and enhance their knowledge (Cameron and Quinn, 2011). Companies with a high tolerance for risk taking can encourage their knowledge management behaviours that support an external focus on the environment and an internal focus on proactive knowledge sharing.

Business Model Innovation

A business model is a way of how a company will make money, as supported by Gambardella and McGahan (2010) who define a business model as a model in which a company applies a new approach to commercialize the company's basic assets. Moreover,

innovation can be defined as the creation of a new idea and knowledge to facilitate new business goals aiming to improve internal business structures and processes and to create market driving for products and services. Innovation includes radical and incremental innovation.

Foss and Maebi (2016) argue that the emphasis of business model innovation is on the relationship of the activities that underlie the components of the business model. Business model innovation occurs when a company engages in reactivation (changing the basic set of activities offered to customers), repartitioning (changing company boundaries), relocation (changing the location of the unit where the activity is carried out), or relinking (changing the linkages between organizational units that perform the activity).

Hypothesis

Based on previous research, the hypotheses proposed in this study include:

- H₁: Knowledge capability focus has significant positive effect on SME business model innovation
- H₂: Knowledge capability activities has significant positive effect on SME business model innovation
- H₃: Organizational risk taking has significant positive effect on SME business model innovation

The research model can be seen in Figure 1.

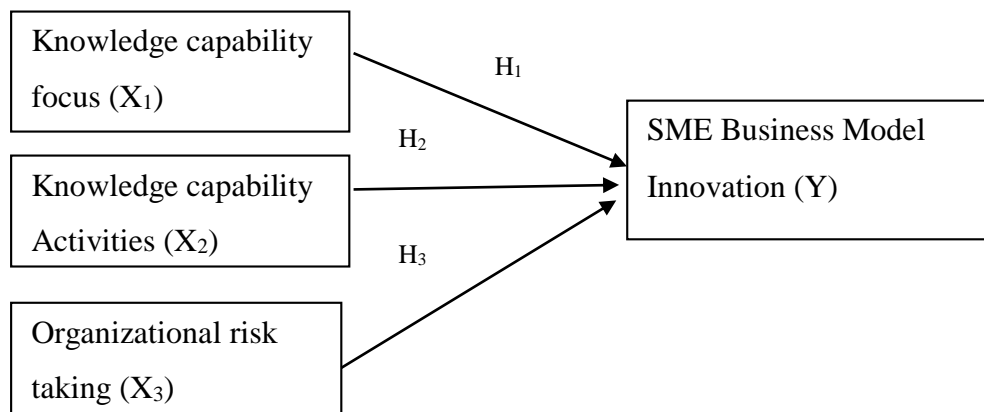


Figure 1
Research Model

3. Method

Research Method

The research belongs to explanatory research with quantitative technical analysis.

Type and Source of Data

The types of research data were subject data, and the sources of data were primary data using a questionnaire technique given to the respondents.

Population and Sample

The population in this study were the *Batik Lasem* SME in Rembang Regency, with a total population of 107 SMEs. This study used a saturated sample, in which all the population

were sampled. From the distributed questionnaires, there were 100 questionnaires returned, so that the sample became 100 SMEs.

Variable's Operational Definition

1) Knowledge capability focus (X_1)

According to Bagnoli and Vedocato (2012), knowledge capability focus includes the relevance of certain strategic orientations and knowledge management ones. The indicator of knowledge capability focus refers to research by Bagnoli and Vedocato (2012), consisting of product, market and production process.

2) Knowledge capability Activities (X_2)

The knowledge capability activities proposed in this study include the conceptualization of knowledge management which consists of information distribution activities, learning values, memory and the use of symbolic information (Hughes and Hodgkinson, 2020). The indicators of knowledge capability activities are the value of learning, distribution of information, and use of information.

3) Organizational Risk Taking (X_3)

Understanding organizational risk taking is the company's willingness to exploit uncertain business initiatives. It shows the extent to which the organization can support the risk-taking versus the control behaviour (Smith et al., 2005). Organizational risk taking indicators taken from the research result of Doebgen et al., (2019) consist of financial, safety and investment.

4) Business Model Innovation (Y)

Khanagha et al., (2014), argues that business model innovation is an innovation activity on a business model that includes incremental changes in individual business model components, the expansion of existing business models, the introduction of parallel business models, and business model disruptions which potentially need to replace an existing model with a fundamentally different model. Business model innovation indicators referring to the research by Foss and Maebi (2016) include income, production processes, and markets.

Data Collection Technique

This research used offline and online questionnaires via Google form in collecting data.

Instrument Testing

The instrument testing used in this study includes two tests, i.e. reliability and validity test. It took 20 respondents to test the reliability and validity.

Data Analysis Technique

The data analysis technique used multiple linear regression analysis. This analysis is used to examine the effect of knowledge capability focus, knowledge capability activities and organizational risk taking on SME business model innovation. It used *t test* to test the proposed hypotheses. The regression model used in this study can be formulated with the following equation:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Note:

Y : Business Model Innovation
 X_1 : Knowledge Capability Focus

- X_2 : Knowledge Capability Activities
 X_3 : Organizational Risk Taking
 $\beta_1, \beta_2, \beta_3$: Regression Coefficient
 e : Error

4. Result and Discussion

Result

The result of the instrument testing shows that the test passed the reliability and validity test, where the scores of reliability test of all variables were respectively above 0.7. Meanwhile, the result of the validity test indicated that the statements or questions in the questionnaire were all valid. Furthermore, the result of the multiple linear regression test can be seen in Table 1.

Table 1. The Result of Multiple Linear Regression Test

No	Variable	t-account	Significance Value Regression Test's Result	P	Conclusion
1	Knowledge capability focus	1.367	0.175		Knowledge capability focus has positive but insignificant effect on SMEs business model innovation
2	Knowledge capability activities	1.262	0.210		Knowledge capability activities have positive but insignificant effect on SMEs business model innovation
3	Organizational risk taking	3.768	0.000		Organizational risk taking has significant positive effect on SMEs business model innovation

Source: Processed Data, 2021

The results of the multiple linear regression statistical test show that the knowledge capability focus and knowledge capability activities have a positive but insignificant effect on the innovation of the SME business model. Meanwhile, organizational risk taking has a significant positive effect on SME business model innovation.

The Regression Equation can be formulated as follows:

$$Y = 1,991 + 0.180 X_1 + 0.170 X_2 + 0.165 X_3 + 0,769$$

The equation has the meanings as the followings:

- 1) If the variable of knowledge capability focus is increased by one unit, it will affect the increase of SME business model innovation by 0.180.
- 2) If the variable of knowledge capability activities is increased by one unit, it will affect the increase of SME business model innovation by 0.170.
- 3) If the variable of organizational risk taking is increased by one unit, it will affect the increase of SME business model innovation by 0.165.

Based on the results of the determination test, the Adjusted R square has a value of 0.164. It means that the factors examined in this study including knowledge capability focus, knowledge capability activities and organizational risk taking have an influence on the innovation of the SME business model by 16.4%, while the remaining of 83.6% is influenced by other factors outside the model studied. In other words, the results of the study statistically showed less good results because it was below 50%.

Discussion

The discussion of each of the factors that influence the innovation of the SME business model is as the followings:

1) The effect of knowledge capability focus on SME business model innovation

The research results show that knowledge capability focus has a positive but insignificant effect on business model innovation. This means that if entrepreneurs' or Micro, Small and Medium Enterprises' (MSMEs') knowledge capability focus is increased, it will have an effect on increasing business model innovation although the effect is small. The results of this research belong to insignificant results because it is, in terms of the size of the business, belonging to small category showing that MSMEs or entrepreneurs do not focus on utilizing existing knowledge and codifying it. As a result, they cannot use the strategy of using codification and exploitation that focuses on codifying the knowledge to support new product development, to improve existing products, and to serve existing clients to achieve higher process effectiveness. Besides, the activities also cost a lot of time and money. With a business capacity in the form of MSME, it is difficult for entrepreneurs to develop a knowledge capability focus based on intuitive use, structured innovation, and intuitive innovation.

2) The effect of knowledge capability activities on SME business model innovation

The results of the study indicate that knowledge capability activities have insignificant positive effect on business model innovation. It means that if the entrepreneurs' or SMEs' knowledge capability focus is increased, it will have an effect on increasing business model innovation even though it is small effect. Even though *Batik Lasem* SME is still a small business category, however, it has the ability in the knowledge activities to develop strong dynamic strategic planning capabilities, and reconfigure organizational strategy preparation (Teece, 2014). Thus, it can allocate and effectively reallocate resources to the most appropriate strategy at the right point and at the right time. For the reason, SME is able to distribute information, the value of learning and memory as a heterogeneous and dynamic source of knowledge between companies as supported by the opinion of Hughes and Morgan (2007).

3) The effect of organizational risk taking on SME business model innovation

The results show that organizational risk taking has a significant positive effect on the innovation of the SME business model. This means that if the entrepreneurs or SMEs dare to take risks, it will have an effect on increasing the innovation of the SME business model. Consequently, they take a high level of risk taking in the innovation of the SME business model. The preferences of organizational risk-taking can influence the way the organization manages and appreciates the knowledge. Companies with a high tolerance for risk-taking of knowledge management can encourage their organizational creativity and innovation (Doebgen et al., 2019). This is in accordance with the opinion of Cameron and Quinn, 2011) stating that a high tolerance for risk taking will encourage the knowledge management behaviour that makes the organizations proactive. Organizations with a high risk-taking tolerance can also build their knowledge management capabilities that enable them to identify new trends and technological developments, evaluate opportunities, and encourage entrepreneurial behaviour.

5. Conclusions

Based on the results of research, it can be concluded as follows:

1. Knowledge capability focus has an insignificant positive effect on SME business model innovation.
2. Knowledge capability activities have an insignificant positive effect on SME business model innovation.
3. Organizational risk taking has a significant positive effect on SME business model innovation.

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References

- Bagnoli, C., Marco. 2012. The impact of knowledge management and strategy configuration coherence on SME performance. *The Impact of Knowledge Management*. DOI 10.1007/s10997-012-9211-z. 9 March 2012.
- Cameron, K. S., & Quinn, R. E. 2011. *Diagnosing and changing organizational culture: Based on the competing values framework*. John Wiley & Sons.
- Doepgen, M.H., Thomas. C, Sascha. K, dan Cheng-Feng C. 2019. Knowledge management capabilities and organizational risk-taking for business model innovation in SMEs. *Journal of Business Research*. Received 16 March 2019; Received in revised form 1 December 2019; Accepted 2 December 2019.
- Foss, N. J., & Saebi, T. 2016. Fifteen Years of Research on Business Model Innovation: How Far Have We Come, and Where Should We Go?. *Journal of Management* Vol. XX No. X, Month XXXX 1–28.
- Gambardella, A., & McGahan, A. M. 2010. Business-model innovation: General purpose technologies and their implications for industry structure. *Long Range Planning*, 43: 262-271.
- Hughes, P. and Morgan, R.E. 2007. A resource-advantage perspective of product–market strategy performance and strategic capital in high technology firms. *Industrial Marketing Management*. Vol. 36 No. 4, pp. 503-517.
- Hughes. P dan Hodgkinson. I. 2020. Knowledge Management Activities and Strategic Planning Capability Development. *European Business Review*. Accepted 10 October 2019.
- Khanagha, S., Volberda, H., & Oshri, I. 2014. Business model renewal and ambidexterity: Structural alteration and strategy formation process during transition to a Cloud business model. *R&D Management*, 44: 322-340.
- Smith, K. G., Collins, C. J., dan Clark, K. D. 2005. Existing knowledge, knowledge creation capability, and the rate of new product introduction in high-technology firms. *Academy of Management Journal*, 48(2), 346–357.
- Teece, D.J. 2014. The foundations of enterprise performance: dynamic and ordinary capabilities in an (economic) theory of firms. *Academy of Management Perspectives*. Vol. 28 No. 4, pp. 328-352.