

## **A Lesson Learned: How SMEs Build Dynamic Capability during Covid-19 Pandemic**

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### **Abstract**

The COVID-19 pandemic has had a significant impact on SME business sustainability. Some SMEs are no longer operating because the pandemic has triggered a number of business risks for them. In order to survive, SMEs are required to develop elements of dynamic capabilities for their own businesses. This research aims to explore in-depth how SMEs build the microelements of their dynamic capabilities during the COVID-19 pandemic. The authors used the case study method as research design by selecting 4 SMEs that represent the industrial center village in Wedi and Bayat Districts, Klaten Regency. In order to analyze, the authors in this research used the triangulation technique, and data collection is done by making visits to companies, observations, and interviews with a number of key informants who understand the development of the craft industry in Klaten Regency. This research focused on identifying critical elements that proved to be effective to support their business through the pandemic by implementing the abilities of sensing, seizing, and transforming. Sensing ability is the ability to target new market segments and new business opportunities. Seizing ability is the ability to produce new products that customers really need. Meanwhile, the ability to transforming is the most powerful capability carried out so far by SMEs by managing more agile businesses with innovative marketing practices.

**Keywords:** *Dynamic Capability, Micro Elements, Sensing, Seizing, Transforming*



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### **INTRODUCTION**

In the last decade, the issue of dynamic capabilities has attracted the attention of many researchers. Giniunien and Jurksiene (2015) explain that research motivation is triggered by the emergence of practitioner awareness towards the development of dynamic capabilities in order to create competitiveness in an increasingly competitive era. This is also confirmed by a number of empirical studies that have proven the impact of dynamic capabilities on innovation and company competitiveness (Giniunien and Jurksiene, 2015; Day and Schoemaker, 2016; Peteraf and Leih, 2016. Teece, Pisano, and Shuen (1997) define dynamic capabilities as an explanatory tool to analyze the company's ability to build a competitive advantage in situations of uncertainty and change. On the other hand, some researchers provide contradictory empirical evidence; the research results do not provide strong evidence that dynamic capability is proven to have a positive and significant effect on performance companies (Hitt et al., 2001; Helfat et al., 2007). Drnevich and Kriauciunas (2011) also confirm the contradictory results, that the inability of dynamic capabilities in building competitiveness is triggered by the company's failure to identify the dynamic capabilities of the company. When the concept of dynamic capabilities and their correlation to these other variables are measure empirically, various difficulties arise, so that the main

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purpose of this research is to identify the microelements of dynamic capabilities developed by SMEs in Indonesia, especially in Wedi and Bayat Districts, Klaten Regency. This research aims to emphasize the contextual meaning for a depth understanding of the efforts of SMEs in developing capabilities dynamic during the COVID-19 pandemic situation, which is full of uncertainty. This research ignores the emergence of the diversity of dynamic capability concepts that have been proposed by previous researchers. Referring to the opinion of Teece (2007), the academic agreement's definition of dynamic capability concept includes the following criteria: (1) assumes that each firm operates within the context of a dynamic environment; (2) every company has potential resources that can be developed as strategic resources; (3) dynamic capability is defined as a process capable of integrating, combining, constructing, modifying and redesigning the existing resources. The following characteristics will be used as a reference for authors in this research while exhuming some information to several SMEs ' key sources.

## **LITERATURE REVIEW**

### **Dynamic Capability**

According to Mintzberg, Lampell, Quinn, and Ghoshal (2003), dynamic capability is a reaction to the weakness of the resource-based view and action-based, which is no longer relevant to the context of an economic-based knowledge and innovation. But in fact, the topic of dynamic capabilities is still in great demand, although it is not generally recognized what is meant by dynamic capabilities. Therefore, the development of research on this concept has grown very broadly with various perspectives. However, a number of researchers have taken more citations to these two papers, Teece et al. (1997) and Eisenhardt and Martin (2000). Those two papers define that the concept of strategic capability as a process of the specific strategy. For this reason, according to authors, model-based-testing studies lack practical implications because every company will face a number of opportunities and also different challenges so that the strategic formulation process becomes very different between one company to another or from one industry to another. Guttel and Konlechner (2009) also define the concept of dynamic capability as strategic and operational processes. The strategic process will help companies to seize new opportunities in a dynamic environment (Teece, 2007), and the strategic process is also an operational process because responding to new opportunities requires a process of reconfiguration of internal and external competencies so that it can be able to build an operational competitiveness routine (Rider, 2012).

Dynamic capabilities are a critical foundation to build an excellent competition, especially in rapidly changing technology nowadays (Teece, 2007). Dynamic capabilities framework illustrates how companies are able to develop dynamic capabilities that outperform other competitors because some companies own a number of intangible assets. Teece (2007) explains the dynamic capability development process as a long-term process in which current performance achievements cannot be separated from past performance successes, and current performance will be used to predict future performance. Helpat and Peteraf (2003) also emphasize the importance of developing dynamic capabilities, which need to be implemented to create product excellence, such as finding ways for products to be liked by customers, maintained for continuous improvement according to customer wishes, and able to create a different product impression from other competitors.

### **Micro-Variables of Dynamic Capability**

According to Priyono, Nursyamsiah, and Darmawan (2018), the development process dynamic capabilities depend on the organizational learning process because knowledge and organizational skills will be attached and accumulated into capabilities. Levinthal, March, and Levinthal (2008) stated that the

learning process generally would produce specific knowledge, depends on each context of the organization. Therefore this specific knowledge will build unique capabilities also. So if the concept of dynamic capability is associated with the learning process, then this concept will be interpreted as a way to incorporate the dynamics of capabilities into the process of the internal company. Franco and Haase (2009) also explain that the organization's learning process has a positive influence on company performance.

### **Sensing Ability (Sense)**

Environmental sensing capability is needed to understand opportunities in market development. Companies also need to understand the challenges, for example, understanding environmental regulations in the industry and observing trends or demand patterns that are always changing. Sensing and seizing have connotative meanings with exploration and exploitation. At the sensing stage, the focus will be an in-depth exploration of what is happening in the environment. This stage is only an early exploration, and the use of resources at this stage has not been maximized as in the seizing stage (Gupta, Smith and Shalley, 2006).

### **Seizing Ability (Seize)**

Every company should expand its business, so it can seize new opportunities for its own businesses. Companies need to integrate all resources such as internal and external resources to create new values and adopt change technology as a new way to innovate. As explained by Gupta et al. (2006), this seizing stage generally uses the maximum resources, unlike the sensing stage, planning in every action needs to be as detailed as possible (O'Reilly dan Thusman, 2007). The main focus at this stage is more on the financial resources that need to be adapted to market requirements.

### **Transforming Ability (Reconfigure)**

According to Helfat and Rauubitschek (2000), reconfiguration is an organizational art that combines various fields of knowledge to create new products or technology. While Eisenhardt and Martin (2000) stated that, in general, companies are in the process of reconfiguring resources: imitating, transferring, and combining the existing resources with knowledge-based. So it can be concluded that the dimension of reconfiguration or transformation is a way to manage the changes that occur by making efforts of adjustment in resource strategy.

## **RESEARCH METHOD**

### **Research Design**

This study used an inductive and exploratory approach. The research method used is case study research which aims to describe a phenomenon on the observed object. In order to understand the context in-depth, there are no definite rules about how many cases need to be observed. A number of methodological experts provide recommendations for different sample sizes. For example, Yin (2009) suggests the number of cases that are considered to be observed is 30, while Eisenhardt (1989) defines between 4 to 10 cases is considered sufficient. In this study, the targets of SMEs which will be observed are 4 SMEs. The reasons for choosing 4 SMEs in this research are these four industrial center villages not affected by Covid-19, the 4 SMEs are SMEs that produce batik products, the craft industry, fashion, and processed foods.

### Data Collecting Technique

This study uses several data collection techniques, such as company visits, interviews, and document analysis. In the interview technique, the researchers prepare a questionnaire or a list of open-ended questions to be given to respondents. The respondent is the person who directly manages business operations and or SME owners who understand strategic decisions company. To increase the reliability of the data obtained, the researchers use triangulation techniques that combine and validate data interviews with company documents or data from direct field observations.

### Data Analyzing Technique

The data obtained will be presented systematically to describe how craft industry SMEs are able to survive in a pandemic situation. Description About the behavior of SMEs in building dynamic capabilities using the framework theoretical dynamic capability development process referred to microelements dynamic capabilities developed by Teece(2007). The stages of analysis in qualitative research conducted by researchers are pattern matching, explanation building, time-series analysis, logic model, and cross-case synthesis (Yin, 2009).

## FINDINGS AND DISCUSSION

### SME Description

The SMEs in this research took place in the Wedi and Klaten sub-districts, Klaten Regency. Based on the observation results, several business centers in the two sub-districts were able to survive, despite the COVID-19 pandemic situation. Business activities in several industrial centers are still seen and visible, with their best selling-product; batik products, craft industry (pottery), processed food, eel chips, and clothing convection business. Each industry is selected based on companies that are able to survive the pandemic because they put innovation on their product. Table 1 describes the sample characteristics of 4 SME businesses. SMEs A and B are SMEs that produce handicraft products that have high artistic value because the process is determined by the level of innovative skill SME human resources. Production capacity is limited to a small capacity size for each product item, adjusting to customer orders and the number of items produced so that the resources ordered to suppliers are also limited. In contrast to SMEs C and D, their production processes are carried out continuously by limiting the production of their various product. When SMEs put innovations on the product, they generally require support for new equipment or technology so that fixed costs tend to be higher.

Table 1. Description of SMEs as sample cases

No	Category	SME A	SME B	SME C	SME D
1.	Types of products	Batik	Craft Industry (Pottery)	Processed food	Clothing Convection Business
2.	Product life cycle	Long-term	Long-term	Short-term	Long-term
3.	Product Type	Innovative	Innovative	functional products	functional products
4.	Production capacity	Hand made	Small Batch	Large Batch	Large Batch
5.	Production process type	job shop	production line and job shop	production line	production line and job shop

6.	Cost Structure	innovation is dominated by cost variable	innovation is dominated by cost variable	innovation is dominated by cost permanent	innovation is dominated by cost permanent
7.	Lot Size	small- lot size	small- lot size	large- lot size	large- lot size

### Microelements of dynamic capabilities in SMEs

The stages of analysis in this study refer to the framework described by Teece(2007). The stages include: (1) an analytical system framework to understand market and technology opportunities (sensing elements); (2) framework for the understanding of developing new business models to seize the market (seizing elements or seizure); alignment or reconfiguration process framework (element transforming or reconfiguring). This diagram will help to understand the contextual meaning in each case that is being observed, with a more systematic flow then the researcher will get an overview of the practice of developing dynamic capabilities in the scope of SMEs.

Figure 1 presents an analytical framework, and it guides researchers to confirm how SMEs develop sensing capabilities in capturing new opportunities and technologies so that SMEs can remain to exist through the pandemic situation. Although the resulting product of SMEs A and B is not a functional product or daily necessities, however, the pandemic generates new demand such as accompaniments to support a healthy lifestyle and encouraging health behavior change, such as masks, hand wash utensils, and essential garden tools which become the new opportunities, and SMEs must develop innovations towards their production capabilities. SME A usually only produces bags, wallets, prayer mats, but then they innovate their products to make such a batik cloth mask which has never been made before. While SME B only focuses on producing products that are in high demand by the market, such as hand wash utensils and essential garden tools. The use of innovative applications comes from eggshell waste, snail shell waste, and glass waste that are being used to produce various types of flower vases. There are no problems with the suppliers, both SMEs A and B.

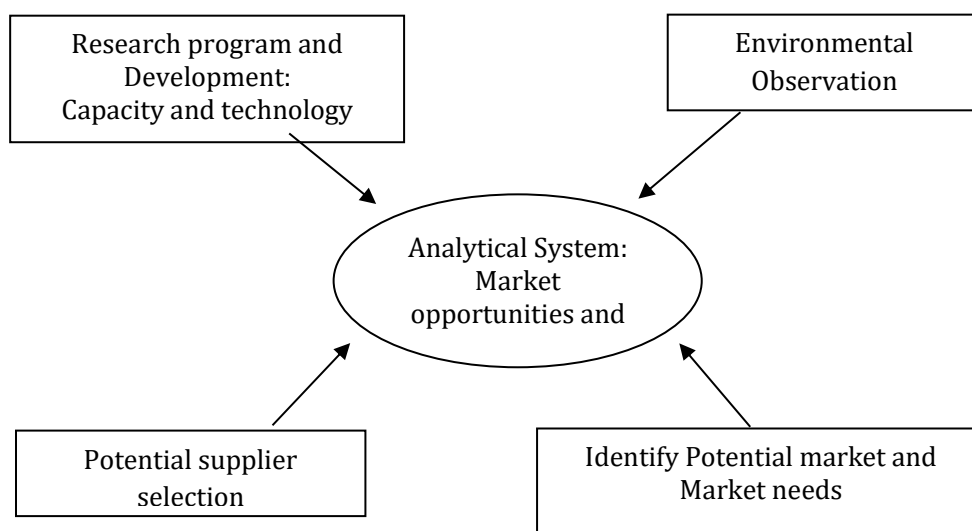


Figure 1. Analytical framework (as a sensing element)

SME C produces processed food such as eel chips; this product demand has actually increased during a pandemic because either it can be snacks and a side dish at meals. The pandemic pushes consumers to choose practical processed foods so that the opportunity for market of this product demand becomes high. SME C produces its chips with more innovative flavors so that they can last longer and improve product shelf life. The development of this product requires new equipment and different plastic packaging materials. There are no obstacles in selecting the supplier of plastic packaging material. Meanwhile, SME D is a clothing convection company that produces school uniforms and official formal attire. The school learning system during pandemic has an impact on the decrease in demand for school uniforms, but SME D is able to capture opportunities on the PPE supply chain. At the beginning of the pandemic, SME D was still constrained by the supply of raw materials for producing PPE clothing or masks, but currently, the production capacity of PPE is able to make SME D survive during the pandemic situation.

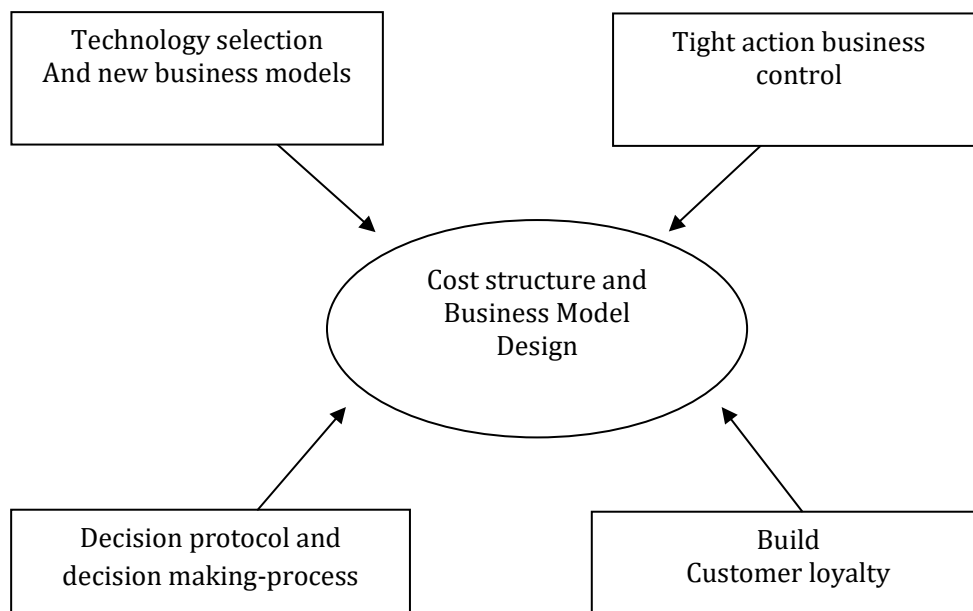


Figure 2. Framework for market competition/innovation decision-making practice

Figure 2 presents a framework of how SMEs must process decision-making to seize new target markets. By doing the interview with SMEs, opportunities to seize new market segments are carried out with marketing innovations. During this pandemic, SMEs are encouraged to use online marketing media. Online sales efforts are made to build customer loyalty. The small number of consumers who make direct purchases have encouraged SMEs to intensify their marketing strategy through social media such as Facebook and Whatsapp. The social media-based business model is obtained by SMEs through activities organized by the Department of Industry and Trade and also conducted by other SMEs in Klaten Regency. Some SMEs also sell their products through e-marketplaces such as Shopee and Bukalapak.

Figure 3 describes the third microelements of the framework for dynamic capability, reconfigure. Teece (2007) defines reconfiguration as an attempt to combine the SME's optimal wealth benefits, both tangible and intangible assets. The majority of SMEs in Wedi and Bayat sub-districts, Klaten Regency, are members of the entrepreneurs association. The Pendopo batik community is a place for batik craftsmen to coordinate marketing methods and managing the supply chain of raw materials for the production

process; collective or integrated production. Meetings are held regularly to collaborating promotional activities and or participating in events organized by the government or non-governmental organizations. Meetings between SMEs are important activities to do, in such a way that between SMEs members could share some government regulatory information and also the latest update of market's need. Dess, Lumpkin, and Eisner (2010) explain that the business community encourages better knowledge of business management, then it can affect the performance of SMEs, especially in the field of innovation. So being active in the SMEs association or community can be concluded as an effective strategy for SMEs to seize potential market segments. The ability to transform new business models can be adopted from other SMEs ' fellow members of the association. Teece (2007) emphasizes that innovation for the development of new business models needs to be supported by decomposability capability, as a result of this, SMEs are able to coordinate and integrate new business processes with business partners or competitors.

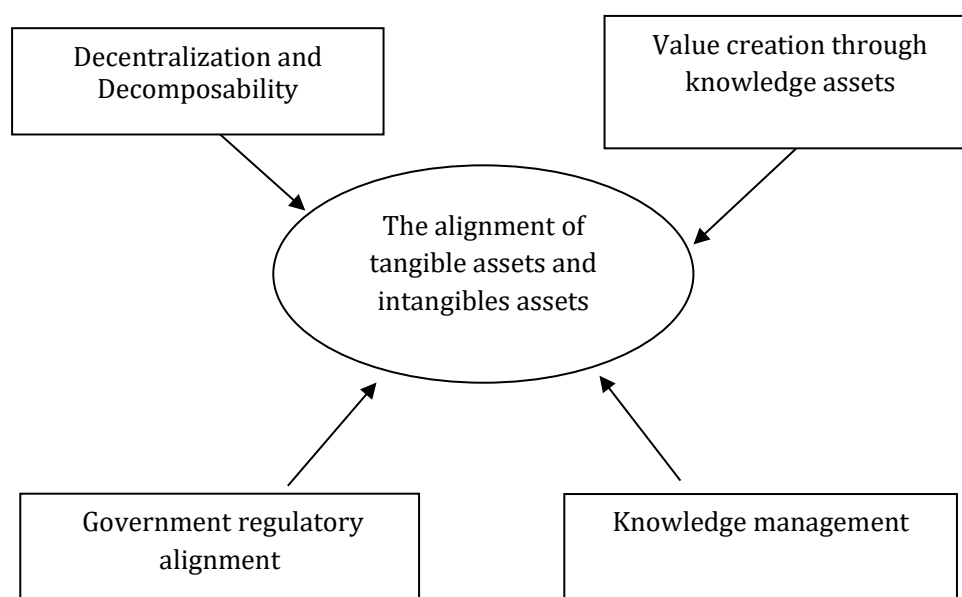


Figure 3. Alignment process framework of new business model

## CONCLUSION

Based on the results of observations and interviews with the 4 SMEs above, it was concluded that the 4 SMEs had performed three key elements of dynamic capability; sensing ability, seizing ability, and transforming ability (reconfigure). The success in developing dynamic capability due to capacity support of government promoting a cluster-based economy, the potential in each village needs to be strengthened continuously in order to create a high-quality product. Coaching through business associations or business communities has also played an important role for SMEs in being able to develop their dynamic capabilities successfully. As a result, 4 SMEs mentioned by the researchers above exist and are not affected by the Covid-19 pandemic. Dynamic capabilities can be taught as a company's ability to respond to a rapid environmental change and able to use existing resources by reconfiguring new business processes and integrates all resources in new ways.

This research is expected to enrich and give additional references for further research which focuses on dynamic capabilities, learning orientation, and innovation performance. The results of this

study concluded that the success of 4 SMEs in targeting new potential market segments is largely determined by their ability to manage knowledge resources.

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