

# Small and Medium Enterprises in the Early Stage of Pandemic: Challenges and Opportunities

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**Abstract:** Covid 19 is seen as a thread for business and has an enormous aftermath globally. This study highlights the impact of Covid -19 to the small and medium-sized enterprises, specifically during the early stage of the pandemic in 2020. The research occupies survey method to collect 2013 small businesses scattered in 14 districts in the City of Yogyakarta. The aim is to depict the state of small and medium enterprises during the pandemic and provide solution in order to create more resilience business. The result shows that 37,47% of the samples are forced to do some efficiency by cutting off some of their workers. The ability to produce is decreased up to 50%, as a result, their income is affected. However, in some types of industry, the sales and rate of productions are increased as the impact of Covid -19. In this study, some challenges are found to be faced by all respondents such as difficulties to market their products, decrease in demand, and the most classic problem is financial aspects. The research proposes some steps that can be taken into account by the owner of the business to increase their performance during the pandemic.

## 1 INTRODUCTION

COVID-19 has caused major impact, not only in the health sector but also severely impact the global economy, including micro, small, and medium enterprises (SME). In addition, The Government of Indonesia declared a large-scale social restriction on activities in public places, access to the schools, tourism places, and workspaces as well as the limitation of opening hour for the non-essential sectors. Further, some non-essential sectors besides financial sector, health, and food suppliers are forced to shut their business down for some periodic of time. This condition puts the business players in to the unbeneficial position which force them to limit their economic activity and gain loss.

Before the outbreaks of COVID-19, Indonesia was having such a good development of SME. This condition was supported by the enormous number of small businesses based on creativity, called creative economic concept. This concept is suitable for Indonesia's characteristics where all products are created based on ideas of uniqueness. This program is fully supported by The Ministry of Tourism and Creative Economy based on the strategic planning 2020-2024. It's stated that the aim is to support and

strengthen the SMEs by having more than 700 units of start-ups in tourism and creative economy sectors. This number is expected to grow by 3500 units per 2024. This contributes to the economic resilience of Indonesia (Kementerian Pariwisata dan Ekonomi Kreatif, 2020).

However not that many research is done for SME as the main object to be studied even though micro-enterprises play a critical role in the Indonesia economy by supplying 99.8% of the country employment (Maksum et al., 2020). But, SMEs are fragile, this sectors known as the most affected group since they have limited resources to survive once crisis hit (ASEAN, 2020) . Thus, this study will examine the current condition of small businesses during the early stage of COVID-19 and perform SWOT analysis to help segment the opportunities and threats which appear along the pandemic.

The remaining of the paper is structured as follows. First, research method is elaborated in order to give a brief explanation on how the study was conducted. The propose is to get the correct stage and keep the study on the right pace. In this part, some limitations are identified such as the field of research, the area chosen, and the type of SMEs. Second, the findings are highlighted and discussed. The condition of SMEs during the early stage of COVID-19 will be

described along with challenges and opportunities. Lastly, SWOT analysis will be performed in the end of paper in response to be resilience during the pandemic, especially for small-business owners.

## 2 RESEARCH METHODS

A survey research design was occupied in this study, with more than 2000 small and medium enterprises were collected. This study is limited by scope as only micro, small, and medium enterprises scattered in 14 districts in the city of Yogyakarta were studied. The survey was conducted during the early stage of Covid-19 pandemic in Indonesia.

The survey was designed and developed in cooperation with The Industry and Trade Office in Yogyakarta. A pilot survey was delivered to a small sample of respondent to test the research tools including the questions and survey structure. Open-ended questions were used in order to collect as much data and information needed related to the situation occurred in the internal business of each industry during the strike of pandemic.

During the observation and data collecting process, interviews were also conducted in order to deepen the information from the respondent. Interviews and observations were used to enrich the quality of data and perform triangulation to avoid any bias. The survey followed four stages: observation, respondent profiling by identifying the location of small and medium enterprises in the city of Yogyakarta, data collection, and analysis. The first round of survey was conducted in March 2020. Some adjustments in question lists were made in April and May to meet the outbreak of Covid-19 in Indonesia. The second wave of the survey was occurred in June to November 2020.

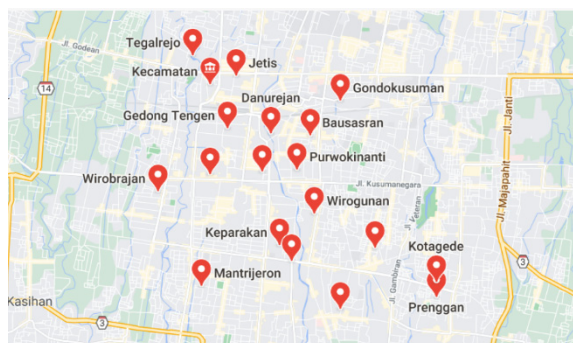


Figure 1: Location identified in this study.

A total of 2013 valid surveys sample were collected from 14 districts, the top five districts with

the greatest number of SMES are indicated in Table 1 and 2 along with the top five types of industries identified from the survey.

Table 1: Location of industry identified in this study.

Districts	Number of SMES
Kotagede	294
Ngampilan	282
Tegalrejo	280
Jetis	243
Mantrijeron	177

Table 2: Type of industry identified in this study.

Type of Industry	Number of SMES
Food and processed food	1512
Clothing and apparel	151
Craft and jewelry	57
Leather based craft	35
Batik industry	33

There are several indicators measured in the survey sheet, such as number of employees (Monitor, 2020) before and during the pandemic, labor wages before and during pandemic, production capacity, demand, and income of the business before and during pandemic. Those indicators are determined based on the preliminary study and result from the observation stage. Those indicators are seen as representative to describe the condition of the business in general. The result of each indicator is presented in Table 3.

## 3 RESULT AND DISCUSSION

Result attained from this study depicts the situation faced by SMEs during the early stage of pandemic. There are six indicators used in this study, namely number of employees, labor wage, number of workers laid off, production capacity, demand, and income. Result can be seen in Table 3.

The small-scale business has a smaller number of employees with maximum of 30 workers and minimum of a worker. This typical SMEs are common in the household scale industry which owner is the worker itself (Maksum et al., 2020). In average before the pandemic, each business requires two

workers, however during pandemic most of them are not hiring other workers than themselves. According to the data, 3259 employees are work normally to produce goods, however during pandemic the number is decreased to 2029 employees, it creates a percentage of 37.74% decreased in quantity as impact of COVID-19. On average, the businesses globally reported having reduced their worker by 39%, some are closed and caused 47% employment down (Bartik et al., 2020; Centre et al., 2020).

Table 3: Results.

Indicators	Result
Number of Employee	- 37.74%
Labor Wages	Not Significant
Number of Employee laid off (by gender)	Not Significant
Production Capacity	- 49.26%
Demand	Decreasing
Income	Decreasing as impact of production rate

In terms of gender, there is no significant differences between number of man labor fired compared to woman workers. In addition, there is no significant changes for labor wages before and during pandemic. This condition indicates that from the perspective of small-business owner, cutting off their worker(s) is seen as better and faster solution to balance their financial position and being resilience.

Other impact of pandemic COVID-19 for SMEs is the capability to produce product. In total, before COVID-19 outbreaks, these small-business are able to produce 636,225 items per unit amount. However, during the first stage of pandemic the number is reduced by almost half of it (49.26%). Lack of demand is one of the factors that cause loss for small business. They are unable to run their production system and cause low utilization of production capacity (Dai et al., n.d.). This condition creates domino effect to the business, it begins with demand reduction, low production rate, and finally business owner unable to get proper income to run and continue the business. As a result, it hurts the financial aspect of the small-business. However, not all business is facing the same loss, some even win the game against pandemic (Perger et al., 2020).

### 3.1 The Potential Winners and Losers

According to the data analysis, it is known that there are some winners and losers from COVID-19 as well as small-business which has no significant impact due to the widespread of the SARS-COV2 as seen in Table 4.

Table 4: The Winners and Losers.

Type of Industry	Category
Food and processed food (food for souvenirs, dine in, and home scale food business)	Losers
Clothing and apparel, craft and jewelry industry	Not significantly impacted
Metal goods, textile, herbal/traditional medicine, craft industry, batik, leather-based craft, food and processed food (with access to a delivery services)	Winners

Industries which produce food and processed food are divided into two cluster, the winners and the losers. SMEs that produced food for souvenirs (such as Bakpia-traditional cake from Yogyakarta) severely impact due to tourism regulations, as well as food and beverages industry with focus on dine in (Gunasegaran et al., 2020). They deal with the regulations and difficulties to market their products. However, some food businesses are win the market by having access to the delivery services. This phenomenon is also supported by the high demand towards delivery services used by consumer, especially on food and groceries (Kartono & Tjahjadi, 2021). The pandemic situation pushes business owner to adopt innovative and proactive behavior. This methods is believed allow SMEs overcome the crisis and hopefully improve their performance (García-Vidal et al., 2020).

The potential winners in this study are metal goods, textile, handcraft industry, and food industry which adapting to the new market behaviors. The non-versatile products are not in a risk to survive during pandemic, since it has long life shelf time and can be kept longer in a finish goods inventory. In addition, there is a new champion in this competition, namely herbal or traditional medicine. This type of industry is able to rise and gain more benefit from the pandemic. In Indonesia, the usage of herbal and traditional medicine is seen as alternative solution in order to maintain health and immunity (Hartanti et al., 2020; Nugraha et al., 2020). Some belief that this type

of remedies is safer compare to chemical drugs. Further, based on some researches, traditional medicine known as *jamu* has a potential role to deal with COVID-19 (Hartanti et al., 2020; Hidayat et al., 2020; Huang et al., 2020; Khadka et al., 2021; Nugraha et al., 2020).

According to the observations and the result gathered during the interview, at the early stage of COVID-19 in Indonesia, some types of industry in Yogyakarta are remained stable, such as clothing and apparel, craft, and jewelry industry. These types of products are not significantly affected by the outbreaks, however some handcraft products used as souvenirs may have different result in the future since it is very dependent to tourism activity.

### 3.2 Major Challenges

This section examined major challenges faced by SMEs during the early stage of pandemic from March to November 2020. One of the main factors that hinder small-business to survive during the pandemic is lack of demand. The outbreaks hurt the financial sector in Indonesia, including the people's purchasing power is decreased. This will affect the buying behaviour and create new pattern of buying. People will tend to produce their own needs or prioritize their expenses to the more essential one. The business owners also find it difficult to market their products. Large-scale social restriction unable the small-business people to sell their commodity unless they are being more adaptive and flexible. Occupying technology, social media, digital platform, and marketplaces will be a good idea for them to adapt and keep survive during the pandemic. However, most of the SMEs in this study were categorized into home scale industry where technology and digitalization are another big homework for them. Thus, marketing strategy during the disruption is another major challenge for them.

Almost all business owners in this study admit that it is difficult to continue their production since they have no sufficient capital. Even so, the government of Indonesia has provided financial assistance for all small-business owners in the early stages of the pandemic. The government distributed Rp 2.4 trillion (US\$162.9 million) for up to 1 million small businesses across the country (Rahman, 2020). Unable to access information related to training for small-business owner is another issue need to be taken care of. At the beginning of COVID-19 widespread, all countries around the globe were not prepare enough to face the outbreak. They are focused on handling the health and avoid loss as well as

performed risk management related to the early impact of COVID-19 to the society. However, information and access to the small-business to be more resilience during the pandemic were not ready to be shared and was in the stage of discussion. The first regulation was the disbursement of financial help for the SMEs in August 2020, 5 months after the first case of COVID-19 occurred in Indonesia. It took almost half year for the small-business owners to get access for help from the government. At the beginning, the purpose of financial assistance was to help as many small businesses as possible which struggles to survive the pandemic, so that micro businesses will able to resume and improve their businesses. Other than that, with social distancing policies in place, most of information is usually available via digital platform or websites, this is an additional obstacle for small business actors

### 3.2 In Response to Pandemic

SWOT analysis is chosen to analyse the strengths, weaknesses, opportunities, and threats from the SMEs during the first strike of pandemic. This framework will help SMEs to identify their current gap, minimize risks and gain possibility to take advantages and improving their business performances. SWOT also works as tool to create prevention and control strategy (Wang & Wang, 2020). Each aspect as seen in Table 5 was generated during the interviews and observations.

Table 5: SWOT Analysis Matrix.

Strengths	Weaknesses
SMEs are characterized by their unique and original products	Lack of ingenuity (technology and digitalization)
Locally sourced resources	Limited access to social media
Less complex business structure and model	
Clusters are available based on the type of industry	
Opportunities	Threats
COVID-19 changing consumer behavior	Market decline
E-commerce, social media, and marketplaces	High unemployment rates
Delivery services platform	New competitors with more advance technology and ability to market their product
The governments financial assistance	Large-scale social restrictions

The strengths and weaknesses are attained from internal business. Strengths are described as value and what factors the business does particularly well. In response to the pandemic, SMEs should establish their priority based on the SWOT analysis. SMEs can focus on their strengths and opportunity as priority. Then, tackle threats and minimize the weaknesses.

By its nature, SMEs are characterized as business that produce unique and original product. It usually sources their raw materials locally. Further, these small businesses also have simple organizational structure and business model. These three characteristics are important and need to be main focus of SMEs to improve their performance. In Yogyakarta specifically, each region or area usually has their own industry clusters or groups based on the local potential, such as Bakpia groups in Ngampilan, batik industry group, and silver crafter group in Kotagede. This kind of group helps SMEs to grow by having easy and transparent access to information for their business development. Normally government announce any training or important notices through the group's coordinator in each area or region.

To enhance the business performance, SMEs are urgent to improve their weaknesses. Nowadays, being adaptive and flexible are the main power to be resilience during the pandemic. The purpose is to gain ability to be more prepare, respond and agile to gradual changes and other disturbances. According to current situation, most SMEs are struggle applying technology and digital things in to their business. Once this problem can be solved, they will gain new value in their business. It creates a competitive advantage and grows the market bigger. In addition, implementing emerging technologies and innovation has significant role to improve company's performance (Gregurec et al., 2021).

From the external factor point of view, lists of opportunity and threats have been made. The potential opportunities are attained externally, for instance from government, technology and innovation, and customer behaviour. Opportunities are also important and need to be overlooked and transformed into business strengths. One opportunity needs to be considered is the changing of customer behaviour. Due to social distancing regulations, people tend to buying their needs online through e-commerce, marketplaces, or other delivery platforms available in the market. This new behaviour enlarges the chance to small-business owner market their commodities online and reach bigger market. The delivery services also benefit a lot for small-business owner. The ability to reach customer in no time and the availability at any time help SMEs to market their

products. Once this combination can be mastered by business owner, then the business will remain sustain and become potential winners even in difficult times. Listed factors from strengths and opportunities can be used by small-business owner to overcome the threats identified. Mastering technology and innovation through the business, have unique and accessible raw materials, understanding the customer behaviour are some good points to eliminate threats and change them into opportunity.

## 4 CONCLUSIONS

The aim of the study is to examine how SMEs are surviving during the early stage of pandemic in Yogyakarta. The impact of COVID-19 disruption brought SMEs into a difficult phase. Cutting employee, lack of demand, and low production utilization are some effects mentioned by the owner during the interview. However not all business is facing loss, some are remained stable and even become potential winner. One major challenge needs to be address is the lack of technology and innovation in the business. To help SMEs survive the next phase of pandemic, the study proposes SWOT analysis to highlight the strengths, weaknesses, opportunities, and threats due to COVID-19 outbreaks. By understanding their own situation, the SMEs owners are able to prepare their business and being adaptive towards any major changes and disruptions. As a result, the unemployment rates can be reduced and their business is able to survive and being resilience.

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