



Impact of Integrating MSMEs Business Models in Kebumen Regency During the Covid-19 Pandemic

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Abstract: *Micro, Small, and Medium Enterprises play an essential role in economic growth in Indonesia but have many obstacles in carrying out business processes. Capital, limited information, raw materials, access to investors, and sales systems are the main problems for MSMEs in Kebumen Regency. The COVID-19 pandemic has reduced the supply of raw materials due to policies implemented by the government to overcome the spread of COVID-19; besides that, MSMEs are faced with sales problems. At the beginning of the pandemic, many MSMEs experienced a very sharp decline in turnover, but MSMEs have the flexibility to survive in these conditions. This research aims to integrate a business model in the form of Supply Chain Management (SCM) to help develop business in MSMEs. The methods used include a qualitative approach using interviews before using and after using the business model. The results of the implementation of business model integration have obstacles, including aspects of education owned by MSME actors (40%), poor product quality (10%), investor access (30%), and capital (20%).*

Keywords: Business models; COVID-19; Kebumen; MSMEs; SCM

1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) are the drivers of economic growth in developing countries (Storey 1994), besides that MSMEs can also create millions of jobs that can play a role in reducing unemployment and besides that MSMEs, can also create millions of jobs that can play a role in reducing unemployment and poverty (Colin Macgregor 2018; Hassan et al., 2014). In Indonesia, MSMEs have a contribution of 60.3% of the total Gross Domestic Product (GDP). In Indonesia, MSMEs contribute 60.3% of the total Gross Domestic Product (GDP). In addition, MSMEs can absorb 97% of the entire workforce and 99% of the total employment. In 2018, the number of MSMEs was recorded at 64.2 million units based on data from the Central Statistics Agency. One of the characteristics of MSMEs in Indonesia is lower productivity than the Big Business sector (Tambunan 2011). The COVID-19 pandemic became a test of government policy in maintaining domestic economic stability. The design of a strategic plan in the format of a Government Work Plan (RKP) with the theme “Economic Recovery and Structural Reform” focuses on handling the COVID-19 pandemic disaster. The priority of the eight National Priorities (NP) in the RKP is strengthening economic resilience for quality and equitable growth. One of the elaborations of this first PN is of priority programs to increase value-added, employment, investment in the real sector, and industrialization.

are affected by the COVID-19 pandemic, apart from capital problems, MSMEs are also experiencing difficulties in product marketing and the availability of raw materials to support the production process. A total of 1,785 cooperatives and 163,713 micro, small, and medium enterprises are affected by the coronavirus (Covid-19) pandemic. Most cooperatives affected by Covid-19 are engaged in daily necessities, while the most affected MSME sector is food and beverages. Most companies need help understanding digitalization's opportunities and consequences and how to transform (Bharadwaj et al. 2013) because they are generally under-resourced (Zach et al., 2014).

Utilization of Information Technology (IT) towards digitalization is very important Amaral & Peças (2021); this is to provide convenience for MSMEs business actors Stich et al. (2020), although doubts still haunt some MSMEs to use technology in their business (Ramayah et al., 2016). Utilization of artificial intelligence has been widely used in parts of the world, where it is the technology of the future (Ulrich & Frank, 2021). According to the McKinsey Global Survey, Artificial Intelligence adoption is rapidly occurring across global businesses (Bettoni et al., 2021). Artificial Intelligence can help in business development from small-medium enterprises to large organizations (Kumar & Kalse, 2021). A recent study showed that adopting e-commerce can help the economic growth rate of MSMEs by opening up market segments that have not been utilized (Hånell et al., 2020).

Facing these problems, changing the business model is the main factor for the sustainability of MSMEs. Using the right business model, namely integrating MSME actors, consumers, capital owners, raw material suppliers, and even collectors without space and time limits is the right solution to overcome the problems faced by MSMEs. For increasing digitalization and supply chains Brozzi et al. (2020), especially during the COVID-19 pandemic. It is necessary to integrate online network data with offline network data (Yoon et al., 2021). Meanwhile, this research will discuss the business model that will be used by MSMEs in Kebumen Regency to overcome the problems that occur during COVID-19 and after the pandemic.

2. Literature Review

2.1. Supply Chain Management

According to Nabila et al. (2022) the goal of Supply Chain Management is to maximize customer value and gain competitive advantage in the market. The processes in Supply Chain Management include planning, purchasing or procurement, production, management, shipping, return. **Planning:** The planning process involves forecasting consumer demand, buyer planning, production planning, and labor preparation to transportation. **Purchasing or Procurement:** The purchasing or procurement process involves several stages, namely submission of purchases, assessment of submissions, approval of purchases, and ordering to suppliers. The admin is responsible for checking and recording what needs to be purchased and then submitting it to the purchasing manager. **Production:** The production process is the process of all raw materials being processed into finished products; this process involves not only humans but also machines. **Management:** The processing process after the goods have been produced, then the goods are stored in the warehouse. Warehouse management

consists of the process of entering (inbound) and removing (outbound) goods, picking and packing, cross-docking, and stock-taking. Every incoming and outgoing item must always be recorded. Stock-taking must also be carried out regularly so that there is no difference between the actual physical amount of goods and the amount of goods recorded in the books. All of these time-consuming warehouse activities can be automated with the help of warehouse management software. **Shipping:** After the delivery process is taken from the warehouse and packaged, the next step is to send it to the customer. Couriers and transportation must be prepared in advance so that the goods can be sent immediately. **Return:** The order return process usually occurs when a customer submits a return due to damage, error, or delay. This process involves several activities such as product condition inspection, return authorization, product replacement, and delivery scheduling, refunds.

2.2. Micro, Small and Medium Enterprises (MSMEs)

According to the Law of the Republic of Indonesia Number 20 of 2008 concerning Micro, Small and Medium Enterprises explains that in Chapter I Article 1 (Indonesia, 2008), it explains that:

- a. Micro Enterprises are productive businesses owned by individuals and / or individual business entities that meet the criteria for Micro Enterprises as regulated in this Law.
- b. Small Businesses are productive economic businesses that stand alone, carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or are part of either directly or indirectly from Medium Enterprises or Large Enterprises that meet the criteria for Small Businesses as referred to in this Law.
- c. Medium Enterprises are productive economic businesses that stand alone, which are carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or are part of either directly or indirectly with Small Enterprises or Large Enterprises with a total net worth or annual sales as stipulated in this Law.
- d. Based on the above definition, the definition of MSMEs (Micro, Small and Medium Enterprises) is a productive economic business owned by individuals and or individual business entities that are not subsidiaries or branches of companies that are owned, controlled, or part of either directly or indirectly.

2.3. Supply Chain

The supply chain is the relationship or process flow of a good or service from the stage of supplying raw materials to the final product that reaches consumers. In the supply chain there is a relationship between goods or services, money, and information (Kania Nadhira et al., 2019). According to Zsidisin & Ritchie (2009) in his book, the supply chain has party factors that are directly involved and indirect parties in meeting customer demand. the supply chain does not only include manufacturers and suppliers, but also warehouses, retailers, and business flows, such as suppliers, manufacturers, distributors, retailers, and customers. the supply chain includes all functions. This may include new product development, marketing, operations, distribution, finance, and customer service.

2.4. Capital

Capital is the main problem faced by SMEs in Indonesia, this is due to limited access and ignorance of SMEs about where to seek capital loans. The government has made efforts in the long-term plan phase II from 2010-2014 to improve and advance SMEs by increasing access to capital and implementing policies by giving priority to SMEs (Jaswadi, Iqbal, and Sumiadji, 2015). One way to improve the performance of SMEs is to ensure alternative funding from investors and other financial institutions so that SMEs are easier to obtain capital from investors or financial institutions, while access to capital is one of the factors that affect the success of SMEs in Indonesia (Hamdani & Wirawan, 2012) Therefore, the government must have a database of SMEs in the region, and it is possible for the government to become a strategic partner for banks to channel their financing to SMEs (Huda, 2012). Capital support is needed for SMEs productivity, in this case SMEs are highly pressured by financing by demonstrating their ability to survive in utilizing innovation and revolution to deal with existing problems (Chin et al., 2012).

2.5. Raw Material

In the SMEs supply chain, raw materials are one of the main components, raw materials are used as materials for production activities for SMEs, so raw materials must be present in every SMEs supply chain. During the pandemic that has been going on since 2020, it has become a serious problem for SMEs. A comprehensive pandemic affects large companies from both the primary, secondary and tertiary sectors (Nicola et al, 2020). Many companies cannot produce because they are constrained by government policies so that they are constrained by raw materials (Lestantri et al. 2021). The difficulty of obtaining raw materials is one of the obstacles faced by Indonesian SMEs (Sama, 2011).

To overcome this problem, the Indonesian government uses business centers and clusters to foster SMEs. A business center is an activity that is centralized in a certain location, where there are SMEs that use the same raw materials or facilities, produce similar products, and have prospects to be developed as a cluster. However, the existence of such clusters leads to unfair competition by lowering prices. This condition will worsen the condition of SMEs, so the government makes clusters to build cooperation and increase bargaining power in several ways such as economies of scale in buying raw materials together, but with unhealthy competition, their bargaining power decreases (Hamdani & Wirawan, 2012).

3. Method

3.1. Data Collection

This research takes data on MSMEs in 2021 at the Cooperative and MSME Office of Kebumen Regency. MSMEs data in 2021 in the Kebumen Regency Region is 36,851 MSMEs spread across 26 sub-districts engaged in the food / beverage sector as many as 20,512 MSMEs, livestock, agriculture, mining, plantations, fisheries as many as 5,820 MSMEs, convection, apparel as many as 1,478 MSMEs, services as many as 6,559 MSMEs and crafts as many as 2482 MSMEs. This research uses a qualitative approach with primary

data sources obtained through a questionnaire that aims to describe the needs of Supply Chain Management that can be used by MSMEs in Kebumen Regency. The questionnaires distributed were 10,000 questionnaires to MSMEs players in 26 sub-districts randomly.

3.2. Variables

Measurement of this business model variable uses indicators of capital, raw materials, sales and other issues.

- a. Capital is a classic problem faced by SMEs in Indonesia, this is due to limited access and ignorance of SMEs on where to look for capital loans. However, the government has made efforts in the long-term plan phase II (2010-2014) to increase and promote SMEs by increasing access to capital and implementing policies by giving priority to SMEs (Jaswadi et al., 2015).
- b. Raw materials are used as materials for production activities for SMEs, so raw materials must be present in every SME supply chain. During the pandemic that has lasted since 2020, it has become a serious problem for SMEs. A comprehensive pandemic has an impact on large companies from the primary, secondary or tertiary sectors (Nicola et al., 2020). Many companies cannot reproduce because they are constrained by government policies so they are constrained by raw materials (Lestantri et al., 2021). The difficulty in obtaining raw materials is one of the obstacles faced by Indonesian SMEs, especially SMEs that are engaged in the craft sector. They have difficulty in obtaining raw materials for rattan. According to the Indonesian Rattan Furniture and Handicraft Association, 2011 was a difficult period for rattan furniture SMEs in Kalimantan because they had to refuse many orders due to the difficulty of obtaining rattan raw materials (Sama, 2011).

4. Result and Discussion

The questionnaires distributed were 10,000 questionnaires with a total of 9,821 questionnaires returned. Based on the questionnaire, the results of the priority scale of MSMEs constraints in carrying out their business processes, where these constraints are part of the supply chain system found in MSMEs. Capital is the main obstacle for MSMEs with a percentage of 36.56%, followed by raw materials 23.26%, sales of 25.98%, and other problems 14.20%. Based on the problems faced by MSMEs, interrelated components are obtained in the MSMEs supply chain management needs to deal with MSMEs problems. The supply chain component involves four entities, where the three entities are the main components in the supply chain contained in the pre-production to distribution process which includes raw materials, production, to sales. While the capital component is a complement to the supply chain modeling section to support the MSMEs supply chain process.

Figure 2 shows that each entity has its own role in MSMEs supply chain activities. Suppliers act as suppliers of raw materials for the production process for MSMEs, distributors play a role in distributing or selling goods produced by MSMEs, while investors provide additional capital to increase MSMEs productivity, where MSMEs must submit submissions to investors.

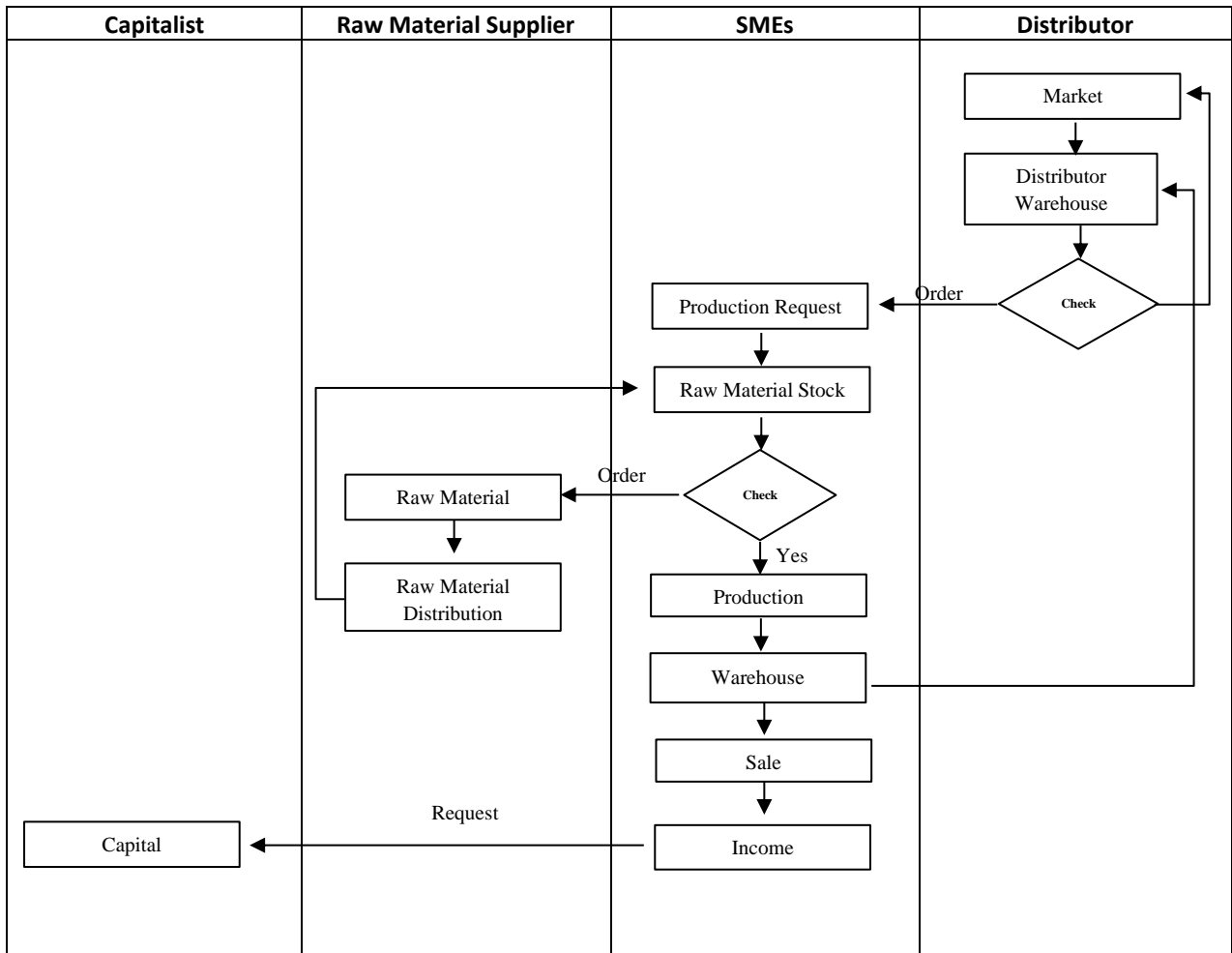


Figure 2. Process Diagram on Supply Chain Management Modeling for Each Entity

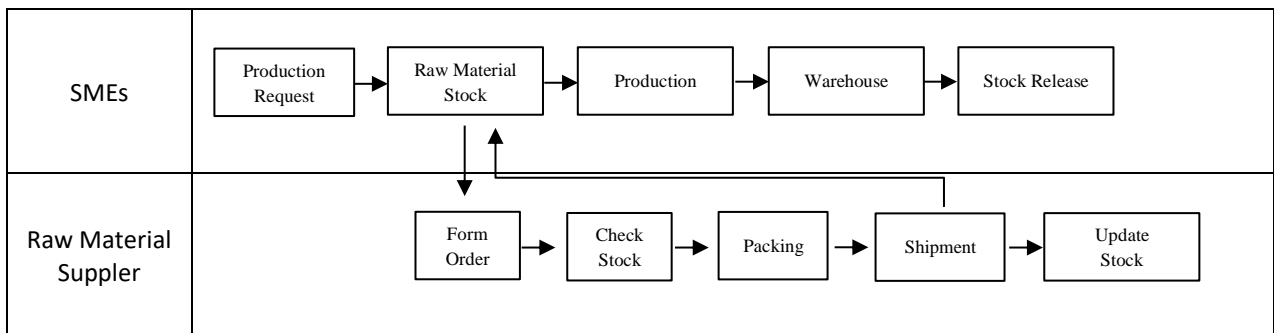


Figure 3. Supply Chain Management Design Model between SMEs and Raw Material Suppliers

3.1. Supply Chain Management Model Design for SMEs-Raw Material Suppliers

In a supply chain, suppliers of raw materials have an important role in the production process, suppliers provide the availability of raw materials to MSMEs during the production process. Make sure there is no excess or shortage of raw material stock. Figure 4 is a Supply Chain Management Design Model between MSMEs and Raw Material Suppliers. Figure 3 The SCM process for raw materials starts from the production request that comes from the request for production goods by the distributor. Before entering the production process, it is

necessary to check the stock of raw materials first. If the raw materials are available, the production process can continue. If the raw material stock is not available, MSMEs must place an order with the supplier by filling out an order form through the existing system. The supplier will check the availability of materials. If the materials are available, the supplier will do the packing, then send the materials to MSMEs and update the stock of materials. Furthermore, MSMEs can produce and put products into the warehouse, then issue them to distributors. This means that raw material stock has an important role in SCM.

3.2. Supply Chain Management Model Design for SMEs-Distributors

In the MSME supply chain, distributors play a role in selling products produced by MSMEs. However, it is possible that MSMEs will sell these products directly to consumers. Distributors in the supply chain for MSMEs can provide benefits in cost savings such as marketing costs and distribution costs. Figure 5 is a Supply Chain Management Model Design between MSMEs, Distributors, and Consumers.

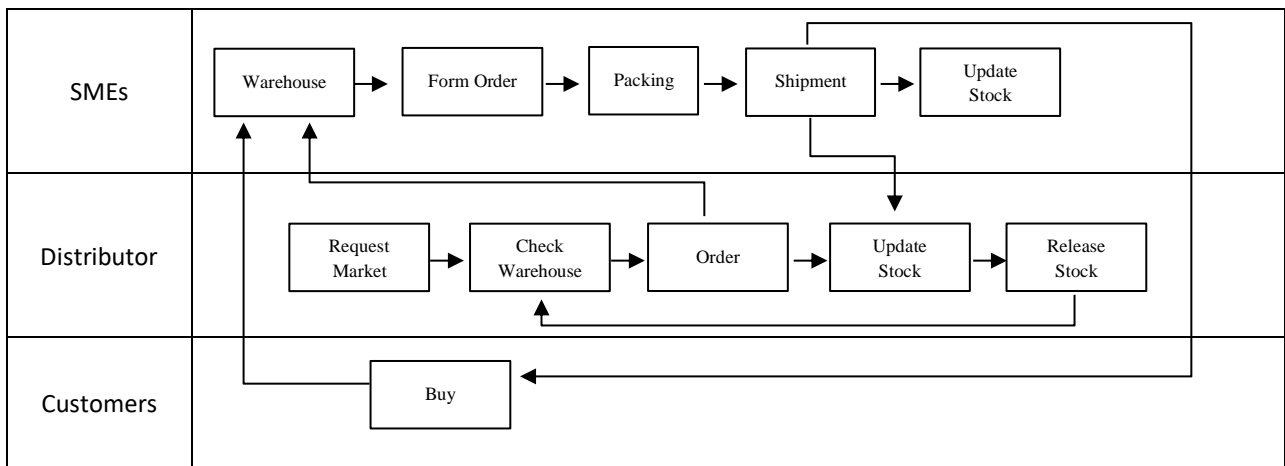


Figure 4. Supply Chain Management Design Model between SMEs, Distributors, and Consumers

In Figure 4 it can be explained that the distributor acts as its own market owner, the distributor's demand depends on the market demand which is the distributor's area. Based on market demand, the distributor will check the availability of goods. If the availability of goods has run out, the distributor will request orders to MSMEs by filling out the order form that is already available in the system. MSMEs will carry out packaging and shipping to distributors, then proceed to update the stock of goods owned by MSMEs. In this case, distributors have an important role in SCM because in addition to distributing products from MSMEs, they are also independent markets.

5. Conclusions & Limitation

MSMEs have an essential role in economic growth in developing countries such as Indonesia, so MSMEs must be able to create themselves and survive the pandemic and post-pandemic covid19. Most MSMEs in Kebumen Regency are unfamiliar with the business integration model using information technology, so the business model being run needs to be better managed. This study educates the importance of supply chain management for MSMEs in Kebumen Regency. It provides an overview of the supply chain management

system design for MSMEs so that it can be implemented into an integrated system that utilizes Information Technology.

The limitation of this research is that the MSMEs sample used is around 20% of the total number of MSMEs registered at the Kebumen Regency Cooperative and MSMEs Office. The questionnaire results from the implementation of the supply chain management system have obstacles, among others, from the aspect of education owned by MSMEs actors (40%), poor product quality (10%), investor access (30%), and capital (20%), it is hoped that further research can accumulate the shortcomings in this study, namely in terms of sampling and selection of MSMEs. To support the development of MSMEs, the recommendation that needs to be conveyed is that the government, through the Office of Cooperatives and MSMEs needs to invite regional universities to be involved in developing and assisting the use of integrated business models, improving product quality and human resources, bringing in investors so that MSMEs can create both during the pandemic and the upcoming crisis.

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