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## **ANALYSIS OF SUPPLY CHAIN RESILIENCE IN MSMES IN BANYUMAS DURING AND AFTER THE PANDEMIC COVID-19**

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### **ABSTRACT**

This research aims to analyze the learning process by MSMEs in Banyumas during the COVID-19 pandemic, which entered Indonesia in early March 2020, as well as develop strategies to support supply chain resilience. This research uses a case study design with a qualitative descriptive approach. Data collection was carried out through interviews and observations. The interview results were transcribed and analyzed using an analysis template through the coding obtained. The research results show that each MSME has its way of studying the business situation to maintain the supply chain during the COVID-19 pandemic. Some informants collaborated with online service applications because of government regulations regarding distance restrictions in public places, business environments, and facility changes. Limited external activities force business actors to make supply chain processes effective. Changes in the supply chain process impact supply adjustments, affecting the storage system according to the flow of raw materials in and out. The availability of raw materials and the level of customer demand influence production activities. MSME players are carrying out a learning process to survive during the COVID-19 pandemic by prioritizing profits. MSME players implement several strategies to maintain the supply chain during the learning process. These strategies can be developed based on the results of learning by MSME actors. Strategy development is carried out through credit restructuring, competing through promotions, collaboration between MSME players, product innovation based on learning experiences, improving support services, reducing company operational costs, and focusing on market targets.

**Keywords:** *Supply Chain Resilience, Covid-19, MSMEs, Learning*

## INTRODUCTION

The COVID-19 pandemic has significantly impacted various economic sectors worldwide, particularly Micro, Small, and Medium Enterprises (MSMEs). Many MSMEs in Banyumas, especially those operating in the tourism, culinary, and local craft sectors, have suffered substantial declines in income due to drastic reductions in market demand and consumer purchasing power (Sari et al., 2023). The temporary or permanent closure of brick-and-mortar businesses and difficulties in accessing financial resources and operational support have further exacerbated their challenges. Consequently, many MSME owners are experiencing significant economic and psychological distress, with some facing the imminent risk of bankruptcy and loss of livelihood (Hidayati et al., 2022). Addressing these challenges and supporting MSMEs in their recovery efforts is essential for strengthening the local economy and ensuring sustainable economic resilience.

One of the primary challenges faced by MSMEs during the pandemic is supply chain resilience. The pandemic has created unprecedented disruptions in the availability of raw materials, access to markets, and shifts in consumer behavior (Fitriyani et al., 2020). MSMEs that rely on supplies from outside the region or abroad encounter greater difficulties in maintaining smooth operations (Mustafa & Athoillah, 2021). Delays in production and distribution processes, coupled with increased operational costs, have further strained their financial stability (Kurniawan & Anggraeni, 2020). To navigate these challenges, MSMEs must develop robust supply chain resilience strategies, such as diversifying suppliers, sourcing locally, or insourcing key production components. In this context, supply chain resilience becomes critical, as it determines an enterprise's ability to withstand disruptions and maintain core operations during crises (Permana & Andana, 2021).

In addition to supply chain resilience, the ability to learn and adapt is a crucial factor influencing MSMEs' survival during the pandemic. MSMEs that effectively gather insights from their experiences, seek innovative solutions, and continuously improve their business processes gain a competitive advantage (Yasa et al., 2022). This learning process can take place internally—through reflecting on successes and failures—or externally, by adopting best practices from industry leaders and leveraging support networks such as business associations. A continuous learning mindset enables MSMEs to adapt to market shifts and seize opportunities that arise amidst crises (Aisyah et al., 2022).

Given these challenges, this study aims to examine how MSMEs in Banyumas manage their supply chains during the COVID-19 pandemic, with a particular focus on supply chain resilience. Furthermore, this research seeks to explore the learning capabilities of MSMEs in responding to the pandemic and identify the key factors that influence their ability to adapt. By gaining a deeper understanding of these dynamics, this study can provide valuable insights for MSMEs in Banyumas and other regions facing similar challenges. Additionally, the findings can offer practical recommendations for enhancing business resilience and continuity in the future.

## RESEARCH METHODS

The analysis begins by conducting interviews with owners of several MSME sectors in Banyumas to identify what lessons have been learned and, in the future, can be used to increase business activities during the COVID-19 pandemic. The interview results were then transcribed and interpreted using several elements explained in code form for each business sector and category.

The research was carried out to find out how MSMEs in Banyumas faced the COVID-19 pandemic from the beginning of March 2020, especially by studying what has been learned so that in the future, in the New Normal phase, business actors will still be able to carry out their business activities and can even increase their business. Next, the researchers developed strategies that could be carried out and practiced by MSME actors after learning lessons in supporting supply chain resilience.

It is known that the number of respondents collected was 27, but 7 respondents' data did not match the criteria, so their data could not be processed. So, the number of respondents that can be processed is 20. Data from interview results can be categorized into four industrial sectors: Food and Beverage, Convection, Retail, and Services.

The data taken from the interviews contained two elements, namely, the knowledge management element and the element of building social capital. Elements of Knowledge Management (Post Disruption) include Practices in adaptability, namely Training, Post Disruption, Cost/Benefit Knowledge, Learning Organization, Risk and Seeing Opportunities, Increasing Innovation and Continuity Management, Trust and Inter-Organizational Relationships, and Increasing collective capabilities. Meanwhile, the Elements of Building Social Capital have two practices: Trust and Relationships between Organizations and Increasing collective capabilities (Ali et al., 2017).

## RESULTS AND DISCUSSION

Below is a list of data from 20 respondents in several business sectors who have experienced a decline in turnover due to the pandemic and have closed their businesses, which is continued in several tables below as follows:

**Table 1.** Impact of the Covid-19 Situation on Food and Beverage Businesses

Business Characteristics	Business Name	Number of Employees Reduced	Estimated Decline in Turnover	Total Closures Due to Covid-19 (months)	Close-Open				
					March	April	May	June	July
<i>Food and Beverage (8)</i>	BPK	3	50%	0					
	NGG	0	30%	2					
	WBS	0	40%	0					
	MD	0	70%	1					
	KK	1	50%	1					
	JR	5	60%	1					
	KM	0	25%	1					
	BA	11	60%	2					
<b>Rata-rata</b>		<b>2,5</b>	<b>48%</b>	<b>1</b>					

Source: Interview Data (2020)

Based on Table 1 above, you can see the impact of COVID-19 on companies operating in the food and beverage business sector in Banyumas. The average number of companies that reduced the number of employees was 10. The average decline in turnover reached 68%, and business outlet closures lasted an average of up to 2 months.

**Table 2.** Impact of the Covid-19 Situation on Convection Businesses

Business Characteristics	Business Name	Number of Employees Reduced	Estimated Decline in Turnover	Total Closures Due to Covid-19 (months)	Close-Open				
					March	April	Mei	Juni	Juli
Konveksi (4)	ABE	3	50%	0					
	KE	0	100%	9					
	HP	5	65%	7					
	TWF	0	75%	0					
<b>Rata-rata</b>		<b>2</b>	<b>72,5%</b>	<b>4</b>					

Source: Interview Data (2020)

Table 2 above shows the impact of COVID-19 on companies operating in the convection business sector in Banyumas. In this sector, there are no companies that reduce the number of employees, so the average decline in turnover reaches 42%, and businesses experience closures for an average of one month.

**Table 3.** Impact of the Covid-19 Situation on Retail Businesses

Business Characteristics	Business Name	Number of Employees Reduced	Estimated Decline in Turnover	Total Closures Due to Covid-19 (months)	Close-Open				
					March	April	Mei	Juni	Juli
Retail (3)	TCJ	0	50%	0					
	KBA	0	50%	3					
	LM	0	50%	0					
<b>Rata-rata</b>		<b>0</b>	<b>50%</b>	<b>1</b>					

Source: Interview Data (2020)

Based on Table 3 above, you can see the impact of the COVID-19 situation on companies operating in the retail business sector in Banyumas. In this sector, no companies have reduced the number of employees, and the average decline in turnover has reached 50%. Business outlets have closed for an average of one month.

**Table 4.** Impact of the Covid-19 Situation on Hotels and Lodgings

Business Characteristics	Business Name	Number of Employees Reduced	Estimated Decline in Turnover	Total Closures Due to Covid-19 (months)	Close-Open				
					March	April	Mei	Juni	Juli
Hotels and Lodgings (5)	HJH	5	50%	0					
	HWN	70	90%	0					
	HQB	60	95%	0					
	HB	0	80%	0					
	HS	0	100%	2					
<b>Rata-rata</b>		<b>27</b>	<b>96%</b>	<b>0,4</b>					

Source: Interview Data (2020)

Table 4 above explains the impact of the COVID-19 situation, which has hit companies operating in the Hotel and Craft Lodging business sector in Banyumas. The average number of companies that reduced the number of employees reached more than 1. The average decline in turnover reached 96%, and business outlet closures occurred for more than one and a half months.

According to the tables above, each sector has minimal differences in studying disruptions, especially in outlet closures or temporary business suspensions during the COVID-19 pandemic. Every sector experiences difficulties learning to survive in business activities, although almost all can survive. However, the two sectors have not experienced significant disruption since the start of the pandemic. These two sectors can look for opportunities to make a profit. These two sectors are Convection and Retail.

The convection sector can make a profit because, during the pandemic, all hospitals needed a lot of PPE (Personal Protective Equipment). Taking advantage of this moment will ensure that the informant's business will continue to survive, even though there are a few difficulties in finding raw materials such as cloth.

The Retail sector also experiences the same thing. When the pandemic first started, many people experienced panic buying. In order to meet their daily needs, many people stock up on food in large quantities. Most retail sector informants benefit because goods can be sold more quickly. However, several informants needed help selling goods after that because customers who usually bought a lot already had enough stock to meet their needs.

#### 1. Elements of Knowledge Management (Post Disruption)

Post-disruption knowledge management is essential in improving the ability to learn from business disruption events, especially in supply chains. A strong supply chain helps businesses learn from disruption experiences through various efforts such as education, training (Rice Jr & Caniato, 2003), post-disruption feedback, and cost/benefit analysis (Blackhurst et al., 2011). The researchers also looked at opportunities beyond risks and encouraged innovation in sustainable management planning (Seville et al., 2015). Research on this element aims to increase learning capacity following business disruptions so that

companies can develop more effective solutions to handle and overcome future disruptions, which is fundamental to achieving supply chain resilience (Ponomarov & Holcomb, 2009).

a. Knowledge Management Capabilities in Training Practice

In supporting supply chain learning regarding the COVID-19 pandemic, efficient post-disruption knowledge management is needed. This efficiency can come from the smooth training process regarding IMR (adaptation of new habits), which is implemented in the industrial environment by government regulations (Decree of the Minister of Health (KMK) Number HK.01.07/MENKES/413/2020). The COVID-19 pandemic situation that is still being felt today will force companies to continue implementing health protocols in the company environment.

Training regarding company protocols, namely the 3M (Mencuci Tangan, Menjaga Jarak, Memakai Masker) Movement, applies to the environment at all levels involved in the company. This movement can come from internal or external companies, for example, from the local government conducting outreach regarding health protocols for companies, as stated by one of the informants below:

*"kita ada peraturan pemerintah mas, kita mengikuti himbauan untuk pelatihan protokol covid, kita mempelajari itu soalnya kan sebenarnya ini kan gak jelas ya peraturannya itu. (BBK)"*

*"We have government regulations, sir, we follow the call for training on Covid protocols, we study them because actually these regulations are not clear, right? (BBK)"*

A business can still carry out its supply chain activities, even in a pandemic situation, by continuing to implement the health protocol training that has been obtained. Several Banyumas MSMEs have made this adjustment.

b. Knowledge Management Capabilities in Practice (Feedback) Post Disruption

Lessons learned from the COVID-19 pandemic, which has entered a new normal era for several MSMEs in Banyumas. Apart from implementing health protocols and IMR in the company environment, there is a need for mutual understanding between business actors, distributors, customers, the community around the company, and other parties involved in the company's supply chain activities. The business actor conveyed this in a statement:

*"satu-satunya cara dengan online. Menggencarkan promo cash on delivery se-Purwokerto di group yang ada di Facebook. Dinilai lebih efektif juga untuk pemasaran seperti ini daripada konsumen berkunjung ke toko. (AOA)"*

*"The only way is online. Intensifying cash on delivery promos throughout Purwokerto in groups on Facebook. It is also considered more effective for this kind of marketing than consumers visiting shops. (AOA)"*

According to a statement from one of the sources, communication between business actors and elements of society around the company is needed to establish cooperation and understanding in doing business in this pandemic situation so that

businesses can continue to run in accordance with the rules and procedures recommended by the government.

c. Knowledge Management Capabilities in Cost/Benefit Knowledge Practice

The Covid-19 pandemic requires companies to learn how to maintain company supply chain activities in managing the company's costs, which suffer losses as a result of being affected by the Covid-19 pandemic situation because they cannot carry out their business activities smoothly; some companies use existing reserve funds to temporarily cover expenses, or operational expenses because the income does not match the company's income, as stated by one informant, namely:

*"Untuk itu kami sudah mempersiapkan dana cadangan, yang memang fungsinya adalah untuk menghadapi situasi yang yang tidak dapat diprediksi seperti covid-19 ini Mas, jadi untuk beban-beban pada masa covid kemarin kami menggunakan sisa cadangan yang sudah dipersiapkan dari dulu. (KEI)"*

*"For this reason, we have prepared reserve funds, the function of which is to deal with unpredictable situations such as Covid-19, sir, so for the burdens during the previous Covid period, we used the remaining reserves that had been prepared long ago. (KEI)"*

Apart from using existing reserve funds to cover the company's operational expenses, several other companies are considering reducing their production and operational costs to save expenses.

d. Knowledge Management Capabilities in Learning Organizational Practice

Emphasizing to customers and distributors the importance of ensuring worker safety from the COVID-19 outbreak is a very significant step in the context of preserving MSME operations, as in the opinion of the HP company as follows:

*"yang kami lakukan kemarin waktu covid hanya meyakinkan pihak yang lain saja sih Mas, meyakinkan mereka kalau karyawan kami terbebas dari covid-19, karena saya rasa cara ini lah yang cara terbaik supaya bisnisnya tetap dapat berjalan (HP)"*

*"What we did yesterday during Covid was just to convince other parties, sir, to convince them that our employees were free from Covid-19, because I think this is the best way to keep their business running (HP)"*

MSMEs that experienced a decline in income during the AKB period learned to see business opportunities in improving company performance by implementing promotions or discounts on the sale of a product and then making several products with innovations, and this is considered the most effective strategy because it will attract consumers to be interested. regarding the products produced, especially consumers who are already loyal to the company, such as the strategy of one of the informants, namely:

*"Tapi mungkin kayak ada promo harga dan sebagainya. Soalnya kalau aku lihat eeee semakin kesini alhamdulillah bisa dikatakan aman. Lumayan aman lah. Gak terlalu turun banget. Kalau untuk ini mungkin lebih ke social media sih. (KM)"*

*"But maybe there are price promotions and so on. Because if I see eeee getting here, thank God it can be said to be safe. It's pretty safe. Not too down. For this, maybe it's more about social media. (KM)"*

e. Knowledge Management Capabilities in Risk Practices and Seeing Opportunities

There are various risks to the supply chain continuity for MSMEs affected by the pandemic. There are company products that cannot be marketed typically because consumers are limited in accessing and making transactions with the company, this will hamper the situation or circumstances in the supply chain flow. One example is a statement from a research informant as follows:

*"Faktor penghambatnya, kalo faktor penghambatnya itu hanya satu mas, psikologisnya kostumer, itu yang terjadi saat ini karena memang kostumer, kita enggak bisa menyalahi kostumer juga, kostumer itu kan psikologisnya kena karena memang media kan besar banget kan itu. Makanya kita belajar memahami customer. (BA)"*.

*"The inhibiting factor, if there is only one inhibiting factor, is the psychology of the customer, that is what is happening now because it is the customer, we cannot blame the customer either, the customer is psychologically affected because the media is really big, right? That's why we learn to understand customers. (BA)"*.

As stated by the source above, who is still afraid to carry out activities because there is still a feeling of anxiety if exposed to the COVID-19 virus, which is very susceptible to contagion, companies should try to convince consumers, distributors and company work partners that their MSMEs are safe and consistently implement health protocol in accordance with government recommendations, and this is indicated by company communication with work partners and elements of the surrounding community.

Another impact of the COVID-19 pandemic has been felt by business people in Banyumas, especially MSMEs, namely distributors or consumers who have collaborated with MSMEs and have also felt the impact of the COVID-19 pandemic. To survive in running a business during the AKB period, business actors have plans that are developed continuously. The results of interviews with resource persons regarding sustainable planning are as follows:

*"kami kemarin langsung membatasi produk mas, karena takut jumlah produk yang kami produksi ini tidak sesuai ekspektasi seperti sebelum covid-19, jadi kami hanya main aman Maskami berusaha mandiri lah mas" (ABE).*

*"Yesterday, we immediately limited our products, bro, because we were afraid that the number of products we produced would not meet expectations like before Covid-19, so we just played it safe. We are trying to be independent, bro" (ABE).*

According to ABE informant, they felt the need to be more careful in developing and introducing new products. This can be caused by changes in consumer behavior and stricter market demands due to the pandemic. These limitations may be an



attempt to minimize the risk of not meeting customer expectations and maintain the business's reputation. However, this strategy can also represent an essential adaptation to changing market conditions and consumer preferences for MSMEs.

f. Knowledge Management Capabilities in Practice Improve Innovation and Continuity Management

Facing AKB, which the regional and central government has recommended, business actors, especially MSMEs in Banyumas, are required to be more creative in making innovations, provide anticipation and responses to survive in reducing the number of losses due to disruptions from the current COVID-19 pandemic.

MSMEs need innovation to attract the market or consumers. Innovation, primarily based on consumer desires, is one of the marketing strategies that can boost sales of products and services offered by MSMEs. Anticipation of future disruptions and the response of MSME actors in restoring supply chain continuity is also carried out so that they are always responsive to future disruptions. Informants from one of the MSMEs in the service sector have the following opinion:

*"Inovasi mengenai, ehmmm staff planning staff ehmmmm manning ya atau staff ehmmm untuk alokasi staff. Kita harus bisa berinovasi bahwa staff itu harus bisa multitasking, jadi katakanlah saya di sales kebetulan anak restoran lagi sibuk. Saya tetep harus bisa mengambil piringnya, ini adalah suatu inovasi dan dari sisi SDM. (HB)"*.

*"Innovation regarding, ehmmm, staff planning, staff, ehmmm, manning, or staff, ehmmm, for staff allocation. We have to be able to innovate, staff have to be able to multitask, so let's say I happen to be in sales when the restaurant staff are busy. I still have to be able to pick up the plate, this is an innovation from the HR side. (HB)"*.

Reforms in company management are carried out to reduce operational costs and maximize the performance of company employees. This will increase the skills of future employees and allow the company to minimize unnecessary expenses.

2. Elements of Building Social Capital

Social capital can be formed and emerge in the post-disruption period due to inter-organizational relationships (Johnson et al., 2013) and relational competence (Wieland & Wallenburg, 2013), *Relational competence* is defined as business actors' ability to establish relationships with consumers or clients and their environment (Peterson, 1994). Such practices can be taken further by building trust and leveraging co-creation processes (Seville et al., 2015).

a. Ability to Build Social Capital in Trust Practices and Inter-Organizational Relationships

As the Covid-19 pandemic continues, MSME players are at the forefront of adapting and complying with government policies, notably AKB. Leveraging the experiences of business actors, one effective approach to engage and reassure the market, consumers, and distributors is through proactive information sharing via

social media, billboards, or newsletters strategically placed in front of restaurants or offices.

This is considered to be an effective strategy because, in this AKB situation, some people are still afraid to leave the house to shop or buy products from MSMEs because they are vulnerable to contracting the COVID-19 virus. Communication carried out by MSME actors to business partners will be beneficial for information on whether the shop, restaurant, company, or MSME will remain open during the AKB period, whether there are changes to operating hours or not, and other information. As is the opinion from our interviews with MSME business managers operating in the convection sector in the Banyumas area, namely:

*“untuk menarik kembali, kita ada pengumuman lewat Instagram dan kami juga melakukan rebranding dengan menghapus beberapa postingan ig, supaya tampilannya lebih menarik mas (HP)”*

*“To recall, we have an announcement via Instagram and we are also rebranding by deleting several IG posts, so that the IG appearance is more attractive, bro (HP)”*

Given the unprecedented challenges posed by the Covid-19 pandemic, business actors, especially in the MSME sector, have recognized the necessity of maintaining control over operational expenses. This has led to some actors, in agreement with a second party, suspending existing partnerships, such as with distributors, to prevent financial deficits or overburdening.

On the other hand, with this never-ending pandemic, business actors must maintain their business by re-establishing relationships with distributors that have temporarily stopped and making new agreements or policies; this can be a solution so that the business continues to run. Moreover, it reduces operational expenses. As one of the informants said in an interview with us, namely:

*“kalau daei kami tetap menguatkan komunikasi mbak, soalnya kalau di kami komunikasi dengan distributor sangat penting, karena mereka sih yang ngecek-ngecek kelengkapan barangnya sebelum dipajang (AOA)”*

*“At home, we continue to strengthen communication, sis, because for us, communication with distributors is very important, because they are the ones who check the completeness of the goods before they are displayed (AOA).”*

b. Ability to Build Social Capital in Practice Increases Collective Capabilities

Every MSME must be able to adapt and apply learning from experience in pandemic situations by the AKB. In Banyumas, several MSMEs continue to run their businesses by implementing government recommendations and prioritizing health protocols.

By building strong relationships with partners, such as distributors and consumers, MSMEs can enhance their capabilities to adapt to the new business era and the pandemic situation. This approach, when done right, not only prioritizes values that

benefit MSMEs but also ensures the stability of the supply chain, providing a sense of security. One of the MSMEs we interviewed shared this perspective:

*"Kalau Kerjasama formal sih tidak yaa mas, tapi saya punya banyak teman yang juga punya koneksi seperti saya, nah disitu kami biasanya sharing beberapa hal kayak inovasi-inovasi baru gitu, biasanya yang paling sering disharing itu seperti online shop nya mas (ABE)"*

*"There's no formal collaboration, bro, but I have a lot of friends who also have connections like me, so there we usually share several things like new innovations, usually the things we share most often are things like the online shop, bro (ABE)"*

This capability is needed in the future to maximize the business activities of MSMEs. New collaboration within the business sector will help revive business activities during the pandemic. In addition, reactive capabilities are needed after the supply chain is established in business actors to understand what has happened and improve future performance based on experience.

### 3. Learning Strategies that Can Be Used in Facing the COVID-19 Pandemic

Every business has its own target market, and during this pandemic, it is better to specify that target market. In this way, sales can increase and consumer confidence can increase, at least to cover the company's operational costs and reduce large promotional costs outside the market. Apart from that, focusing on the target market during the pandemic can increase brand awareness and highlight the advantages of products or services as added value to a business.

An example of the application of this strategy can be seen in the service sector (hotels). Based on researchers' interviews with several business actors in the service (hotel) sector in Banyumas, no one has changed their target market towards workers who are WFH (Work from Home). Instead of selling rooms to tourists, they can change their strategy to renting rooms to people who want to work from the hotel. With a more focused target market, it is hoped that it can encourage demand again from customers so that the supply chain process can run again.

#### a. Reducing Company Operational Costs

The Covid-19 pandemic demands efficiency in the use of company operations. This operational efficiency is intended to cut expenses that are deemed less necessary and less relevant in running a business during the pandemic. This step can be taken by managing human resources within the company, regulating operational hours, and reducing operational costs that are not directly related to the company's improvement in dealing with the pandemic.

Human resource management is very important in this situation because it is related to managing business operating hours. This management can be done by reducing the number of workers according to the company's needs, which can be based on reducing operational hours or production capacity. In the convection sector,

for example, companies can utilize existing workforce for other more urgent functions, maximizing the skills possessed by these employees.

Another strategy that can be developed to make operations more efficient is to reduce paper use. For example, the use of paper for purchase receipts can be replaced with digital systems such as email or SMS. Apart from that, business actors can negotiate with suppliers to reduce raw material prices. If there has been cooperation for a long time, this negotiation could be an important consideration in pandemic conditions. In the retail sector, reducing production costs can also be done by adjusting the capital used for the number of products produced.

b. Improve Support Services

SMEs must improve support services to maintain supply chains and business during the Covid-19 pandemic. One way is to take advantage of trending online applications. Some business actors have not implemented an online system, even though now there are many delivery services available through platforms such as Gojek or Grab. In the food and beverage sector, this is very relevant because many consumers prefer to order food online.

Apart from that, utilizing electronic payments (E-Money) can reduce personal contact considering the risks posed by the Covid-19 pandemic. Even though many business actors already use payments via credit or debit cards, digital payment systems such as digital wallets are still rarely used. The retail sector can greatly benefit from implementing this digital payment system because it speeds up the transaction process and reduces the risk of virus transmission.

Implementing health safety protocols in business services or product supply chain processes is also important to increase consumer confidence in the readiness of business actors to face the pandemic. As has been implemented by several business actors, spraying disinfectant liquid for arriving packages and leaving it for a moment before opening can become a standard SOP. This can also be applied in the convection and hotel sectors to increase consumer confidence.

c. Compete and Do Promotions

In the Covid-19 pandemic situation, price reduction strategies through promotions can be considered. This strategy must take into account people's purchasing power as well as the availability and demand for products and services. Especially for products and services that are primary needs, it is important to maintain market price stability even though demand or consumption decreases. In the retail sector, this price reduction could help attract more consumers.

Some businesses have adopted price reductions to attract consumers. Researchers believe that this approach can be applied by other business actors so that their business remains sustainable. For example, in the food and beverage sector, price reductions can be done by reducing the volume of products sold. In the service sector such as hotels, a strategy to reduce room prices can be done by reducing

facilities such as toiletries. This strategy has proven effective in several inns and hotels in Banyumas.

d. Product Innovation Based on Learning Experiences

Product innovation needs to be done by looking at market needs, modifying existing products or creating new products based on experience during the Covid-19 pandemic. This innovation can be carried out in the product manufacturing process and packaging to attract consumers. Product diversification is also important to produce new products that suit pandemic needs. In the convection sector, for example, product innovation could be in the form of making PPE clothing for medical personnel.

The food and beverage sector can innovate by creating packaged food and drinks with new flavors and packaging designs. Other business actors can follow this step with the healthy food theme, which supports health campaigns during the pandemic. Some business actors who dare to take this opportunity can achieve greater profits. For the hotel sector, innovation could be in the form of improving family pool rental services or providing discounts on ballroom rentals for weddings or meetings.

e. Collaboration between MSME Actors

Collaboration or partnerships between MSME players can be an effective strategy to overcome the decline in income during the pandemic. This collaboration can be carried out in various aspects such as supply, production processes, and sales. For example, in the distribution of raw materials, business actors can work together to save operational costs by supplying raw materials collectively. In the food and beverage sector, this collaboration can help ensure the supply of ingredients remains stable.

In the convection sector, business actors can collaborate by sharing projects. For example, to meet the demand for PPE, several convections can share the workload and resources. Business actors can also collaborate with business actors in different sectors for product innovation and marketing.

Results are the main part of scientific articles, containing: final results without data analysis process, hypothesis testing results. Results can be presented with tables or graphs, to clarify the results verbally. Discussion is the most important part of the entire contents of scientific articles. The objectives of the discussion are: answering research problems, interpreting findings, integrating findings from research into existing sets of knowledge and composing new theories or modifying existing theories.

## CONCLUSION

Based on the analysis of interview transcripts with informants, most of the informants succeeded in carrying out the learning process but in different ways. Lessons learned in overcoming disruptions caused by the Covid-19 pandemic in MSMEs are strongly supported by increased demand. The learning process is also based on the ability or readiness of each informant. This can be done well if informants carry out strategies that suit their abilities.

There are several strategies carried out by informants to help the learning process in managing their business, namely credit restructuring, competitive promotions, collaboration between MSME actors, product innovation based on learning experiences, improving support services, reducing company operational costs and focusing on market targets.

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