Mushroom Cultivation Business Development Strategy with BMC Model During Pandemic Covid 19

Retno Endah Supeni¹, Bayu Wijayantini²*

Universitas Muhammadiyah Jember, Jl. Karimata 49, Jember, Indonesia
E-mail: bayu@unmuhjember.ac.id*, retnoendahsupeni@unmuhjember.ac.id

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Abstract
The COVID-19 pandemic has greatly affected various aspects of people’s lives. However, despite all the adversity, several businesses are still able to survive and are expected to continue growing during the crisis. Village-Owned Enterprises (BUMDes) are considered important elements that can play a significant role in awakening and stimulating a sluggish economy in the midst of a pandemic. BUMDes and the mushroom cultivation business unit face several obstacles in marketing, human resources, and increasingly high competition. The type of research used is descriptive with a qualitative approach. This study aims to determine the business development strategy used by the BUMDes Pontang Mushroom Cultivation Business to achieve a new model for business development by using the design of the nine elements of the Business Model Canvas (BMC), which include customer segment, value proposition, channel, customer relationship, revenue stream, key resources, key activities, key partnerships, and cost structure. The results of the SWOT analysis conducted by BMC show that BUMDes could carry out an aggressive strategy. In addition, it also produces a new BMC Design as an improvement alternative choice strategy for customer segments, channels, revenue streams, and customer relationships that can be used for business development, especially during this COVID-19 pandemic.

Keywords: Business Mode Canvas I, Mushroom Cultivation, Business Development Strategy, Pandemic Covid.

INTRODUCTION
Covid-19 is still a big problem for people around the world, including Indonesia because of its uncontrolled transmission. The COVID-19 pandemic has greatly affected various aspects of people’s lives. However, despite all the adversity, there are several businesses that persist and are expected to continue to grow during the crisis. Village-Owned Enterprises (BUMDes) are considered to be one of the important elements that can play a role in awakening and stimulating a sluggish economy in the midst of a pandemic. Definition of BUMDes According to (Nurhayati, 2018) : "BUMDes are village business institutions managed by the community and village government in an effort to strengthen the village economy and build community social cohesion which is formed based on the needs and potential of the village". One of the Village-Owned Enterprises (BUMDes) which was established with the aim of supporting or strengthening the village economy is the Village-Owned Enterprises (BUMDes). The Pontang BUMDes with its Mushroom cultivation business unit, which was established in 1999, is
expected to be able to develop its potential, in order to revive the economy during the pandemic. In achieving its goals, a strategy is needed during this pandemic period to implement the goals to be achieved as an effort to achieve a competitive advantage position over its competitors in serving target customers. In implementing a business strategy, it is necessary to evaluate the strategy that has been implemented through an evaluation of the current business model in order to identify any problems that need attention. One of the business models that can be used to evaluate the current business model is the Business Model Canvas (BMC) (David, 2004). “Business model” has found its way into the vocabulary of just about everyone who must manage or work in businesses with an Internet content, from venture capitalists to CEOs (Afuah et al., 2000).

Canvas Model can turn complex business concepts into simple ones that are displayed on a single canvas containing a business plan with nine key elements that are well integrated in it, including strategic analysis internally and externally. BMC is a tool that provides a clear view of what the company needs to achieve and focuses on the strategic elements that matter most and will have the greatest impact to the business according (Ibrahim et al., 2015). According to (Fauziah, 2020) by expanding customer segments and utilizing media social media as a promotional media tool will be obtained to produce a new Business Model which is used as an alternative strategy used to future business development. BMC analysis techniques can maximally increase the production, sales and marketing of Karawang batik patterns according to (Sukmasari et al., 2021).

The mushroom cultivation business potential is indeed very promising at this time, because the market demand is so large, this is influenced by the changing trend of people's consumption patterns in the era of the covid-19 pandemic. Mushrooms are now placed as one of the popular alternative foods (Abay, n.d.)(https://www.swadayaonline.com/). Seeing the huge opportunity for mushroom cultivation, Pontang BUMDes has the potential to become a mushroom supplier. Based on the observations made by researchers on the management of the Pontang Village-Owned Enterprises (BUMDes), it was found that their business units have not been able to develop optimally and have not been able to run business models effectively, this is indicated by the undeveloped marketing to its full potential. This can be seen from the lack of information in the surrounding community that the Pontang BUMDes has a mushroom cultivation business unit, as a result the majority of buyers of Pontang BUMDes mushrooms are from the surrounding community such as mlijo (mobile vegetable traders) who come from the Pontang village community itself so that the profit generated is even also small.

In fact, if marketed properly, this mushroom cultivation business can become a branding image for Pontang Village, besides that it can be an alternative source of community income. The manager also said that there are still few qualified human resources, so the mushroom business unit that has been running since 2018 has not experienced significant development. Even though there is a great opportunity for the Pontang Ambulu BUMDes to become a supplier of mushrooms in traditional markets, supermarkets or shops in Ambulu District in particular and the opportunity to market mushrooms outside the city and even abroad is still great. In addition to experiencing problems in marketing and human resources to manage the mushroom business unit, competition with fellow mushroom cultivators is also getting higher because new competitors are starting to emerge. This is in line with the Jember Regency Government's program, BUMDes is a driving force for the community's economy in Jember Regency, East Java. Through BUMDes, the work programs of the Jember Regency Government can be synergized and become the forefront of the community's economic revival. BUMDes
development is a form of strengthening village economic institutions, as well as a tool for empowering the local economy. BUMDes must have a "product knowledge" program that can be sold, which will be supported by the Regency Government through an electronic catalog (Https://radarjember.jawapos.com/, n.d.). This study aims to find out what business development strategy is used by the BUMDes Pontang mushroom cultivation business using the BMC approach and to develop a new business model as a form of business development.

THEORETICAL FRAMEWORK

Business Model Canvas (BMC) is is a tool in management strategy to translate concepts, consumers, infrastructure and company finances in the form of visual elements. It also a method of thinking that describes how an organization captures, designs, and delivers value. BMC is a concept that can become a common language that allows to describe and manipulate business models to create new strategic policy alternatives. The Business Model Canvas (BMC) helps the companies in creating their business models based on nine building blocks. BMC is a tool that provides a clear view of what the company needs to achieve and focuses on the strategic elements that matter most and will have the greatest impact to the business. (Sorri et al., 2019).

(Osterwalder & Pigneur, 2010) describes a simple framework for presenting the important components contained in a business model. The nine components elements which are divided into two parts, namely the right component (creative side) and left component (logic side) which resembles the human brain. If it is associated with brain function, these two parts have each different role. On the right canvas there are Value Propositions, Customer Segments, Channels, Customer Relationships, and Revenue Streams related to value. While on the left canvas there are Cost Structures, Key Partnerships, Key Resources, and Key Activities related to efficiency (Joyce & Paquin, 2016). The nine basic building blocks used for the depiction of the business model canvas can be seen in figure 1.

![Business Model Canvas](source.png)

**Figure 1. Business Model Canvas**

Source : (Osterwalder & Pigneur, 2010)
BMC creates a common reference and language that can be shared and get feedback on each business model. Therefore, it is easy to interpret and use. It is a straight-forward reference that can be used by the internal team members and also by the external advisors, inventors, and partners. BMC for each company is different and is influenced by business area, the business scope and type of business. In this study, we chose to focus on the BMC to develop a new business model as a form of business development. Hence, we provide several recommendations to extend the boundaries of thought, to generate new options, and, ultimately, to create value for company (Carter, 2020).

According to (Chrautwald & Nielsen, 2018) BMC helps alleviate the informational and communication challenges between entrepreneurs and business. Entrepreneurs who market their business cases to investors obtain better feedback and a higher chance of funding using the business model canvas. Implications of this paper also relate to the preparation of the entrepreneurs and that matchmakers between entrepreneurs and investors can use the business model canvas to facilitate such processes.

The Business Model Canvas must be mapped maximally from each element in order to increase production, marketing and sales. Carry out the strategy by producing 9 elements of the model block consisting of: Customer segment, Value Proposition, Channel, Revenue Stream, Customer Relationship, Key Resource, Key Activity, Key Partnership and Cost Structure that can improve service quality, competence of human resources and support the achievement of a more measurable long-term business (Sukmasari et al., 2021).

RESEARCH METHODS

The type of research used is descriptive with a qualitative approach. Qualitative data are personal documents, field notes, the words and actions of respondents, and supporting documents. Thus, the results of this research method will reveal the actual situation according to the results obtained in the study by measuring its quality. The location of this research is in the Village Owned Enterprise (BUMDES) of Pontang Village, Ambulu District, Jember Regency. The variables that will be analyzed in this study are the nine elements of the Canvas Model: customer segments, value proposition, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. To achieve the research objective, the population of the study is all regular customers of the BUMDes Pontang Ambulu mushroom cultivation business from January to November 2021.

This study uses a descriptive approach, which basically describes the content of an object of research with the type of case study research, while the strategy formulation uses the BMC approach and SWOT analysis. Data and information collection techniques are carried out through: (1) Direct interviews and systematically with internal and external parties from BUMDes; (2) observation by direct observation at the research location and business activities of the research object; (3) questionnaires by giving a number of written questions to respondents; (4) literature study by reviewing company data and literature studies; (5) FGD with a management team led by the director.

RESULTS AND DISCUSSION

Results of interviews and focus group discussions (FGD) with several internal and external customers and key partners, Evaluation from the Business Model Canvas in this study seen from 9 element that mapped using the BMC approach. Furthermore, each element is assessed in detail with a SWOT analysis. After the results of the SWOT analysis are obtained, then
develop alternative strategies. The next stage is a discussion with the BUMDes Pontang to determine the development strategy that will be implemented by the BUMDes. Processing and presentation from current mapping Canvas model is described in Table 2.

**Table 2. Current Canvas Model of BUMDes Mushroom Cultivation Business**

<table>
<thead>
<tr>
<th>Key Partnerships</th>
<th>Key Activities</th>
<th>Value Propositions</th>
<th>Customer Relationships</th>
<th>Customer Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Solution</td>
<td>4. Solution</td>
<td>4. How to plant baglog is easy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Consumers receive assistance in caring for baglog</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key Resources**

1. Materials and tools
2. Production site
3. Human Resources
4. Working capital

**Channels**

1. Promotion via
2. WhatsApp and Facebook
3. Direct sales at the production site

**Cost Structure**

1. Operating costs Employee salaries

**Revenue Streams**

1. Mushroom sales Baglog sales
2. Fee for filling training

Source: BUMDes Pontang

As shown in Table 2, the current positions of the nine elements in the BMC approach are:

**Customer Segments**

The marketing of the BUMDes mushroom cultivation business involves several actors, namely the people of Pontang, Watukebo, Karangtemplek, and the surrounding areas. Routinely, every day, the mushrooms that have been harvested are distributed to the local mob in Pontang Village. During the harvest season, the BUMDes Pesat Ambulu mushroom cultivation business also distributes mushrooms to cafes.

**Value Propositions**

The BUMDes mushroom cultivation business currently offers several value propositions for consumers, including: good service, such as receiving consultations from consumers who are running a mushroom cultivation business or who will run a mushroom cultivation business; the price of mushrooms sold is relatively affordable at Rp. 10,000/kg compared to mushrooms sold in the market at a price of Rp. 12,000/kg; easy access to locations; an easy way of planting baglog; and consumers who are just starting a mushroom cultivation business will get assistance in caring for baglog.
Channels

Channels in communicating the value proposition to customers using social media, such as WhatsApp and individual Facebook pages, and conducting direct sales at the BUMDes mushroom cultivation production site.

Customer Relationships

The relationship that is built with customers is one of personal assistance, where customers communicate directly with the manager of the BUMDes mushroom cultivation business through hospitality and direct visits. A direct visit was carried out when carrying out baglog care assistance; that's when good communication began to build. If the customer is willing, they can be invited to the mushroom production site so they can see firsthand the mushroom growing process.

Revenue Streams

BUMDes mushroom cultivation business income comes from the sale of mushrooms and baglog. In addition, the BUMDes mushroom cultivation business also gets other income from filling mushroom cultivation training events.

Key Resources

BUMDes mushroom cultivation business resources are divided into physical resources, human resources, and financial resources. Physical resources include materials, tools, and production sites. Human resources consist of labor, while financial resources consist of owned business capital. In carrying out the production process, there is no specific division among members; all work is done together.

Key Activities

In carrying out the BUMDes mushroom cultivation business, there are several activities carried out, namely carrying out the process of planting mushrooms and making baglogs; maintaining production sites so that humidity is maintained; and providing services or distributing mushrooms and baglogs to consumers. In addition, the production of mushrooms from the BUMDes mushroom cultivation business is also an alternative food solution for the community.

Key Partnerships

In developing the mushroom cultivation business, BUMDes cannot be separated from the role of various partners who drive the business model. Currently, the BUMDes mushroom cultivation business is partnering with competitors, mushroom seed suppliers, and the Ministry of Villages.

Cost Structure

The BUMDes mushroom cultivation business and its business model cannot be separated from the costs incurred when operating the business model. The cost structure is very dependent on the management of the main resources (key resources), the main activities owned by the organization (key activities), and the partnerships that are built to facilitate the running business model (key partnerships). The cost structure of BUMDes mushroom cultivation business activities includes labor costs per production, operational costs consisting
of electricity, transportation, raw material costs, and other costs (distribution costs, unexpected costs, etc.).

Processing and presentation of data consist of nine aspects. The data analysis in this study was carried out through a series of analyses that began with the identification of the business model that was being carried out in the mushroom cultivation business unit of BUMDes Pontang Ambulu. Then they were mapped using the BMC approach, which consists of nine aspects: customer segments, value proposition, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. Furthermore, each element is assessed in detail with a SWOT analysis. After the results of the SWOT analysis are obtained, develop alternative strategies. The next stage is a discussion with the BUMDes Pontang to determine the development strategy that will be implemented by the BUMDes.

After arranging several alternative strategies during data analysis, to determine the alternative strategy to be chosen, a discussion was held with the BUMDes mushroom cultivation business. Then it is inserted into the following canvas model. Processing and presentation using the Improving Mapping Canvas model are described in Table 3.

**Table 3. The New Canvas Model for improving BUMDes Mushroom Cultivation Business**

<table>
<thead>
<tr>
<th>Key Partnerships</th>
<th>Key Activities</th>
<th>Value Propositions</th>
<th>Customer Relationships</th>
<th>Customer Segments</th>
</tr>
</thead>
</table>

| Key Resources | | |
|---------------|---------------|-----------------

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Value Propositions</th>
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<th>Channels</th>
<th>Customer Segments</th>
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</thead>
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<table>
<thead>
<tr>
<th>Cost Structure</th>
<th>Revenue Streams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Operating costs Employee salaries</td>
<td>1. Mushroom sales Baglog sales 2. Fee for filling training 3. Mushroom processed products</td>
</tr>
</tbody>
</table>

*Source: BUMDes Pontang*

In table 3, changes occur in the 4 BMC columns, namely customer segments, channels, customer relationships, and revenue streams obtained from the SWOT matrix. Where the selected customer segments are in the market development strategy (S-O), channels are found in the market penetration strategy (S-O), customer relationships are found in the market penetration strategy (W-O), and revenue streams are found in the diversification strategy (S-O). Based on discussions with the BUMDes mushroom cultivation business, several alternative strategies were selected which were then outlined in the BMC. An alternative strategy that can be applied to the BUMDes mushroom cultivation business is an aggressive
strategy (growth oriented strategy) which includes the latest BMC owned by the current BUMDes mushroom cultivation business, which can be used as a guideline in running the business.

The following is the description of 4 Business Development Strategies based on the BMC are: (1) Customer segments, through market development strategy (S-O). BUMDes can benefit by selling in the mass market or niche market customer segments. In this case the mushroom cultivation business does both, in the mass market targeting the people of Pontang and its surroundings, while in the niche market targeting the local miljo in Pontang Village and cafes if the harvest is large. In reaching its target market, the BUMDes mushroom cultivation business conducts direct sales, namely people who buy mushrooms make transactions directly at the production site. That way the interaction between consumers and the BUMDes mushroom cultivation business can take place. Meanwhile, the strategy used in expanding the customer segment is still through word of mouth for each buyer. Usually buyers voluntarily recommend mushrooms to people around them. The market development strategy can be done by adding customer segments in the niche market, namely selling to food stalls, supermarkets and mushroom snack sellers because they have the potential to become regular customers. Of course, to expand this customer segment, cooperation is needed, that's why BUMDes must communicate with the next target market so that what is expected can be realized. In its implementation, BUMDes can take advantage of its technology and values. This is in line with previous research conducted by (Fauziah, 2020) in developing a meatball milling business which also resulted in a new strategy in the customer segments, namely expanding customer segments and utilizing social media as a promotional media tool. This shows that expanding customer segments is important as a way to develop a business; 2) Channels, through market penetration strategy (S-O). BUMDes can be done through direct and indirect selling. Currently, BUMDes mushroom cultivation business has done both. It's just that in direct selling and indirect selling is not maximized, in direct selling sales are made through the manager’s personal social media accounts or individuals without a special company account so that it cannot be done sustainably. Whereas in indirect, the BUMDes mushroom cultivation business cannot carry out intense follow-up due to the limited time of consumers. An alternative strategy is to reach consumers through delivery services by utilizing technological developments as a form of development from the previous strategy. Through this strategy, the BUMDes Pesat Ambulu mushroom cultivation business can establish more intense communication. The existence of a delivery service facilitates the distribution and buying and selling process, and can be a means to get closer to consumers and establish special partnerships in the field of information technology (IT) for selling products online (Prasetyo et al., 2018); (3) Revenue streams, through a diversification strategy (S-O). Revenue streams with respect to the source of income earned. At the beginning of its establishment, the BUMDes mushroom cultivation business only had income through the sale of mushrooms. But seeing other opportunities, finally the mushroom cultivation business BUMDes Pesat Ambulu decided to sell baglog through a pre-order system in both small and large quantities and became a resource person in filling out training on mushroom cultivation. So currently the BUMDes mushroom cultivation business has 3 sources of income, namely from mushroom sales, baglogs, and fees when filling out training. For this reason, an alternative strategy is needed so that Bumdes has additional sources of income. Among them is the diversification of mushrooms into processed products with high selling value. This strategy can be applied because processed mushrooms can be sold at any time regardless of the season. According to
In the BMC Model, to develop the business, other sources of income are added; (4) Customer relationships, through a market penetration strategy (W-O). BUMDes cooperates with third parties for the development of joint promotion programs. In this case, establishing relationships with consumers in personal assistance where customers communicate directly with the manager of the BUMDes mushroom cultivation business through hospitality and direct visits. However, in the current Pandemic conditions, this needs to be adjusted, one alternative is to create WhatsApp and Facebook groups, Instagram with consumers. By creating a whatsapp or facebook group with consumers, mushroom cultivation businesses can easily communicate or exchange information with consumers. The more consumers know more about the products of the BUMDes mushroom cultivation business and from an emotional point of view it is well established, the greater the chance for consumers to become loyal regular customers. If you require subheadings to make the manuscript flow better please capitalize the subheading by each word. You can write down the explanation here. It relevan with (Soselisa et al., 2017) that Membership program is the main tool in building customer relationships. And (Sukmasari et al., 2021) that says Build good relationships with resellers who help and contribute to product sales, promote new products to resellers so that consumers who buy through resellers are more familiar with Karawang batik products.

CONCLUSION

The results of the analysis using the Canvas Model identified several alternative strategies for developing BUMDes mushroom cultivation business, namely: customer segments by expanding customer segments through sales to food stalls, supermarkets, and mushroom snack sellers; channels through delivery services by utilizing technological developments; revenue streams by diversification mushrooms are processed with high selling value; and customer relationships through the creation of WhatsApp and Facebook groups as a forum for disseminating information and establishing closeness with consumers as well. Establishing special partnerships in the field of information technology (IT) for online product sales especially during this COVID-19 pandemic, where it is imperative to keep your distance and avoid crowds, online marketing and delivery systems are very appropriate. So we can conclude that the new Design Model Canvas with SWOT analysis techniques can maximally increase the production, sales, and marketing of BUMDes mushroom cultivation businesses, and BUMDes are considered to be one of the important elements that can play the role of arousing and stimulating a sluggish economy in the midst of a pandemic.

REFERENCES


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12, Issue 2). http://journal.ipb.ac.id/index.php/jurnalmpi/
