Designing a Green Business Model with a Design Thinking and Business Model Canvas: Case Study of SMEs in Bandung

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Abstract – SMEs are one of the economic sectors most affected by the COVID-19 pandemic in Indonesia. Large-scale social restrictions to stop the spread of the pandemic have resulted in reduced income for SMEs. SMEs are trying to survive during the pandemic by utilizing online sales, but this has resulted in using a lot of plastic wrap, which is not environmentally friendly. This study aims to design a green business model with a Design Thinking approach and the Business Model Canvas. The findings in this study obtained several alternative suggestions, namely using alternative environmentally friendly packaging, working with the Garbage Bank for waste management, and turning coffee grounds into coffee scrub ingredients.

Keywords – Business Model Canvas, COVID-19, Design Thinking, Small Medium Enterprise, Green Business Model

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1 Introduction

The COVID-19 pandemic that has occurred throughout the world has had an impact on many sectors of life, one of which is the economic sector. Indonesia cannot be separated from the threat of an economic crisis that occurs as a prolonged impact of the pandemic. Implementing Large-Scale Social Restrictions (PSBB) to break the chain of transmission of COVID-19 in Indonesia has resulted in hampered economic activities. It has significantly impacted various business sectors in Indonesia, including Small and Medium Enterprises (SMEs). According to Badan Pusat Statistik Indonesia (2020), SMEs are a reasonably high contributor to the gross domestic product, with a proportion of 19.87%. SMEs have a sizable impact on a country's economy on a national scale. However, the pandemic had many adverse effects on some industrial sectors. The food and beverage industry were one of the SME sectors that was most shaken during the COVID-19 pandemic.

Badan Pusat Statistik Indonesia (2020) showed that food and beverage SMEs were severely affected during the pandemic, with more than 80% following. Pelupessy, Sulastri, Sinaga & Kapoor (2020) concluded the same thing from a field study, namely that 79% of SMEs experienced a decline in sales due to the pandemic. SME owners must be able to adapt to the limited mobility of the community due to the pandemic. Therefore, the trend of selling online is starting to increase. The increasing trend of selling online has created new problems. Based on Anggrijono's research (2021), the use of plastic in online buying and selling activities has also increased during the pandemic. It happens because business owners want to ensure the product is safe, clean and virus-free. This behaviour makes business owners wrap food and beverage in excessive plastic. The use of plastic for hygienic purposes raises new problems related to plastic waste in society (Nurhayati, 2020).

Social distancing policies have significantly affected the business activities of the food and beverage sector. People's consumption patterns shift from conventional purchases by eating at places/restaurants to buying and selling online by eating or drinking from home. Pelupessy et al. (2020) concluded that there was a decrease in restaurant opening hours to 8-10 hours per day, and most SMEs only serve takeaway orders because of dine-in restrictions. Food and beverage SMEs that have yet to switch to digital business have experienced declining turnover; many have even had to stop their business. The necessity of staying at home during a pandemic has brought about the phenomenon of people cooking at home more often or ordering home delivery services. This phenomenon harms the environment due to the increase in household waste that occurred during the pandemic in the form of food and packaging waste. People who cook at home usually buy food in large quantities, which eventually rots into the garbage because they are not processed. Home delivery services generally use single-use packaging, which has increased plastic, paper or cardboard waste during the pandemic.

Packaging waste that appears must be dealt with as soon as possible. This problem can be overcome by designing environmentally friendly packaging that is good for the SME Food and Beverage industry. Interventions are carried out using a creative approach from Design Thinking. This approach is expected to provide creative, innovative and practical solutions so SMEs can implement them. Brown's research (2008) concluded that Design Thinking is a suitable method for solving problems and can produce innovative solutions. Aranha, Correa & Mouallem (2021) concluded that integration between entrepreneurship, business models and design thinking can create innovative solutions for SMEs in Brazil. Integrating these approaches can create value creation that is right on target. Danil (2021) has also researched using a design thinking approach in a case study of franchise learning in Indonesia. The six stages of design thinking have proven appropriate for producing innovative and creative solutions. The advantages of this approach are, for example, being able to design a structured and planned business, crucial in making business decisions, suitable and appropriate for startup businesses looking for creative and innovative ideas and reducing business failures. The ideation and prototyping stages can make business actors produce more creative and innovative ideas.

The business model canvas is an approach that can be used to analyze an existing business using a template canvas (Osterwalder & Pigneur, 2011). Putri, Larasati and Putra's research (2022) used the Business Model Canvas method to analyze problems and provide the right business solutions for MSMEs in Padang. The findings conclude that the main problems faced by SMEs are needing cash flow records, not utilizing business digitalization and still needing capital to run a business after being hit by the COVID-19 pandemic. Febrilia, Rizan and Saidani (2022) implemented the Business Model Canvas to help MSMEs in East Jakarta. BMC effectively provides solutions related to the concept of business strategy not only for startup players but for existing business players.

This study aims to analyze the problem of environmentally friendly packaging for SMEs in the context of a pandemic and produce suitable green business model designs for SMEs in Bandung. The study focused on beverage MSMEs in Bandung. This research combines the design thinking method with a six-stage process in identifying problems and providing creative solutions. In addition, the research output is a green business model using Business Model Canvas that can help SMEs survive during and after the pandemic.

2 Methodology

This research used a framework incorporating design thinking into creating solutions to green business issues (Liu & Mannhardt, 2019; Schmiedgen et al., 2015). Understanding and observing, defining the point of view, ideating, Prototyping, Testing, and Reflecting are the stages of the design thinking technique employed in this study (see Table 1). After the final step of design thinking, we developed a green business model using *Business Model Canvas* (Henriksen et al., 2015; Herawati, Lindriati, & Suryaningrat (2019). The activities of four beverage SMEs in Bandung, Indonesia, were observed for this

study. There are five beverage SMEs in Bandung. The split of five administrative cities in Bandung was used to determine SME respondents. Bandung was represented by five food SMEs: West Bandung, East Bandung, South Bandung, North Bandung, and Central Bandung. According to their business domicile, each SME respondent is deemed to represent each administrative city.

Table 1: Design Thinking Phases

No.	Phases	Description	Data Collections Techniques
1	Under- stand	Develop an empathic grasp of the issue attempting to resolve.	Explorative Interview
2	Observe	Defining the issue and prob- lem statement from a human- centered perspective is nec- essary.	Online and Offline Observation
3	Define Point of View	Consider the issue from various angles and create creative answers to your problem.	How might me question
4	Ideate	Determine the best action for each issue raised throughout the first three stages.	Brainstorming, 2x2 Matrix
5	Prototype	The main objective is to comprehend the product and its users as thoroughly as possible.	Interview from User Experience High fidelity prototype
6	Testing	At this stage an existing prototype will be carried out to evaluate and get feedback	Testing sheet (google form), Feedback capture grid

One-way business owners can lessen environmental harm is to adopt an environmentally sustainable business strategy. Designing environmentally sustainable business models is crucial so that commercial owners may help solve environmental issues. An approach based on design thinking can be used for this.

3 Result and Discussion

3.1 Understand

The beginning stage of design thinking is the understanding process, trying to know the problem from the consumer and owner of the Beverage SMEs. Identify the problem using the exploratory interview method, which can deeply understand customers' perspectives. The target users are SMEs who sell coffee and non-coffee drinks in the Bandung city area. The exploratory interview

method can explore needs deeply. There are three parts to the interview section, the first is the Introduction, followed by getting to know the whole story, and the last is the conclusion. All questions addressed to SMEs are openended to avoid short yes or no answers. The nature of the question can explore unspoken needs or wants. In the Introduction, the questions addressed to SMEs are about the types of beverages sold in SME stalls, their experience, and the obstacles faced by these SMEs during the pandemic. In the second part, we need to know about the changes experienced during the COVID-19 pandemic, primarily related to consumer interactions and willingness to implement environmentally friendly business operations. In the last part, the questions asked are the expectations or messages of the interviewed SMEs regarding green operations for small businesses. The SME's exploratory interview results are then mapped into the Persona/User Profile (see Figure 1).

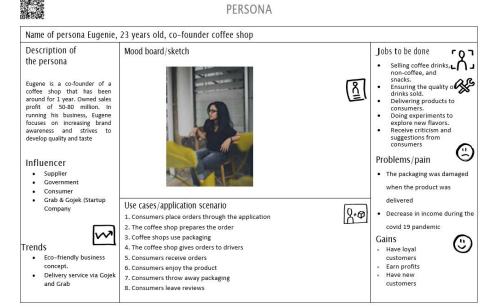


Figure 1. User profile

3.2 Observe

Offline observation aims to inspect the store Beverage SMEs directly. The interview was conducted following the exploratory interview question guide at the understanding stage. Another goal is to determine how SME owners carry out activities and how they present products, such as the type of packaging used. Meanwhile, online observations were made by purchasing products through delivery applications such as Grab-Food, Go-Food, and Shopee-Food. Online observations were only made to 4 SMEs because one of the SMEs, namely Rucker Park, cannot be ordered through the application.

The following are the results of offline observations on Beverage SMEs:

1. Colada Coffee

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There are differences when conducting online and offline observations. When working offline, SMEs are informed that they no longer provide straws to consumers. However, when making offline purchases, we find that SMEs still use plastic packaging and do not provide straws. SMEs provide toothpicks as a substitute for the function of straws to open beverage packaging. However, there are differences in practice when researchers conduct online observations. When researchers asked to use straws, SMEs gave plastic straws.

Jaskoffie

There are differences when conducting offline and online observations. When making offline observations, SMEs inform that they provide paper bags when consumers make takeaway or online purchases through the application. SMEs also had time to confirm that they would provide paper bags if available. When SMEs run out of paper bags, they use plastic bags. When the researchers conducted offline observations by purchasing takeaway products, the researchers received plastic cup packaging, plastic straws, and paper bags. Meanwhile, researchers received plastic cup packaging, straws, and plastic bags when making online purchases.

Koffie Braga

There is no difference between observations made online and offline. When conducting offline observations, SME owners said they have yet to be too focused on implementing an environmentally friendly business model. Owners try to apply that concept by providing discounts for consumers who make purchases using bicycles. This concept can help reduce environmental problems, especially air pollution. The packaging received when making online and offline purchases are the same. Researchers received plastic bags, plastic cups, and plastic straws.

4. UP'S. Coffee and Restaurant

There is no difference between observations made online and offline. When conducting offline observations, friendly information SME owners focus on implementing environmental business concepts. The packaging received by researchers when making online and offline purchases were similar. The packages received are plastic cups, plastic straws, and plastic bags.

Define point of view

The process of defining the problem from the perspective of the SME owner is using the interview method. A total of 11 questions will be categorized into three segments: too broad, just right, and too narrow. One of the How Might We questions in the just right section will be selected for the ideate stage (see Figure 2).

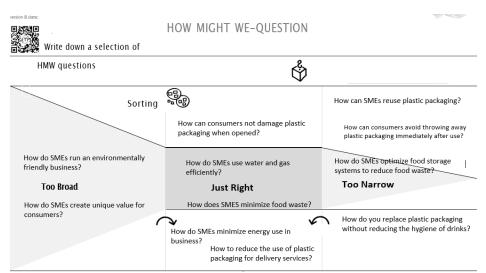


Figure 2. How Might We Question

3.3. Ideate

The ideate stage develops using three tools; the first is brainstorming for the creative process of generating ideas. The 2x2 Matrix categorizes thoughts that arise according to their impact and feasibility on SMEs. The last one is dot voting, a different selection process for ideas considered the most impactful and valuable for SMEs. The Brainstorming process involved five participants using a Storm board. There are two parameters used in the 2x2 Matrix in categorizing ideas. The parameter on the Matrix's x-axis is SMEs' ease of implementation, measured as low or high. This low or high measurement is determined by considering the costs required by SMEs and the cooperative relationships needed to realize the ideas that arise. The second parameter used on the y-axis is the impact of reducing the use of plastic packaging, which is also measured as low and high. An idea's low or high impact is made by considering whether the thoughts that arise can directly affect the use of plastic packaging. After categorization, they were followed by Dot Voting to select ideas for prototyping. This voting process will only be carried out on some ideas but on some segments in the 2x2 Matrix. The arguments for the Dot Voting process came from the parts "Impact of reducing the use of plastic packaging - High" - "Ease of implementation of SMEs - High" and "Impact of reducing the use of plastic packaging - High" - "Ease of implementation of SMEs – Low (see Figure 3).

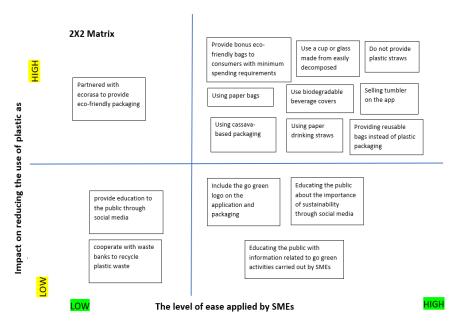


Figure 3. Matrix 2x2

3.4. Prototype

Based on interviews conducted with SME owners, they have cost considerations to implement an environmentally friendly business model. In addition, most SMEs use plastic packaging that is difficult to decompose. The picture below is a cup packaging with biodegradable oxo or oxium material (see Figure 4). Oxium is a plastic material that is more easily decomposed than other types of plastic. In addition, this type of plastic has also passed the SNI Ecolabel 1 7118.7:2016 test and the Ecolabel Type 2 Self-Declaration for Ecoplas and Oxium. When viewed in terms of price, the type of oxium packaging has a lower price than the packaging used by SMEs. Therefore, by using oxium plastic packaging, SME owners can spend less on environmentally friendly packaging.



Figure 4. Biodegradable Cup Packaging

The form of packaging proposed is also different from the form of packaging that SME owners usually use. The packaging in Figure 5 can be pulled up, so SME owners do not need to provide packages of various sizes. When consumers want to buy a small size, the neck of the packaging does not need to be pulled up. Vice versa, when consumers want to buy products in large sizes, SMEs can pull the neck of the packaging. This scenario can help SMEs to save costs incurred to provide packaging. Like the plastic cup proposed, the packaging lid is made of oxium. There is also the Oxium logo on the lid of the package so that consumers can find the ingredients on the packaging cover. The logo's appearance will look like the image above on the left. As for the shape of the packaging cover itself, it has a straw lid that can make it easier for consumers to consume the product. Even with the straw lid, it is possible not to use a straw. The proposed straw is a straw with oxium material because oxium is an environmentally friendly material and more easily decomposed. In addition, the price is similar compared to plastic straws that SME owners usually use.



Figure 5. Handbag spun bond

SMEs can sell cloth bags through applications such as Grabfood, GoFood, and Shopee Food (see Figure 5). The bag is made of sponge cloth, and inside is an elastic rubber that functions as a drink holder. In addition, on the side view of the bag, there is an adhesive tape that serves so that when the bag is not in use, it can be stored neatly.

3.5. Testing

The testing stage is carried out by verifying one of the researched SMEs and several consumers from students/students who often order coffee and non-coffee drinks online. The verification is done by showing photos of the prototypes that have been made. After displaying it, the researcher asked about the availability of the SME owners to carry out the proposed business process if it was realized. The price of the business operation is carried out by searching for the cost of the proposed packaging online through e-commerce. After making the prototype and the suggested packaging price displayed to all

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respondents, feedback by the SME is carried out through the Google Form platform. Questions posed to SMEs will ask for opinions on any proposed ideas in the prototype. The following are the testing results conducted on Beverage SMEs and consumers:

- 1. All respondents give a five rating of the proposal to offer a goodie bag to drivers. The next question will ask for responses to the application provider's standardization of environmentally friendly packaging.
- Three SME owners give a rating of five, one person gives a rating of four, and the remaining one gives a value of three to the proposed replacement of packaging.

3.6. Designing Green Business using Business Model Canvas (BMC)

This research aims to create a green business model for SMEs by using the Business Model Canvas (BMC) approach. BMC is a business strategy that can be used by business units by mapping their strengths, recognizing market segmentation and existing revenue sources (Ostewalder & Pigneur, 2011). BMC has also been used in a few studies to help SMEs in Padang, West Java and East Jakarta (Febrilia et al 2022; Putri et al., 2022)

3.6.1. Customer Segments

The segments targeted by beverage SMEs in the city of Bandung are students and workers, especially those who like coffee and live where these SMEs are located. The consumer segment targeted by beverage SMEs is not only young people with the status of school children, students, and workers, especially those who like to consume coffee. However, implementing a green business model has expanded the target consumer segment. It is because implementing this business model makes SMEs must innovate to care for the environment. Therefore, a new consumer segment's target is people with high environmental awareness.

3.6.2. Value Propositions

The products offered by SMEs owners have a distinctive taste. SME owners also try to maintain product quality until it reaches consumers. SMEs in Bandung choose to use packaging made from plastic and plastic bags. Some beverage SMEs in Bandung are trying to reduce the use of plastic in various ways, including not providing plastic straws, not providing ordering services through applications such as Grab and Gojek, and using paper bags made from used paper. SME owners also direct employees to provide friendly service to consumers. Applying a green business model encourages Beverage SMEs to carry out eco-innovation, which means that the innovations aim to reduce the negative environmental impact. Green business is done by making products or providing services that minimize environmental damage, including the technology used to reduce environmental risks and minimize pollution. The eco-innovation that has been carried out has contributed to reducing environmental problems.

3.6.3. Customer Relations

SMEs owners in Bandung build relationships with consumers using several media, including social media such as Instagram and WhatsApp, interact directly, and collaborate with Grab and Gojek. Beverage SME owners present information related to attractive offers, such as discounts, menus, product photos, photos of the atmosphere at the venue, as well as information about operating hours through Instagram social media. Meanwhile, WhatsApp media is used as consumer media to place orders. SME owners also maintain relationships with consumers by interacting directly. This interaction is carried out by providing friendly service to consumers, as well as inviting consumers to communicate. In addition, to provide convenience to consumers, SME owners work with marketplaces and delivery services, such as Grab and Gojek.

Applying a green business model helps SMEs expand their market, where SMEs have a new consumer segment. These namely people have a high awareness of environmental care. In addition, by implementing a new business model, it is undoubtedly crucial for SME owners to introduce product or service innovations and their significance in environmental preservation. Building communication with the community can be the alternative to engage customers to care about the environment, for example, Instagram and Facebook. The content displayed on social media shows how the products offered can preserve the environment. In addition, the content displayed can also show how consumers contribute to preserving the environment by purchasing products. Another solution is displaying the type of packaging used by SMEs. SMEs need to educate consumers regarding the type of packaging used. Through this, consumers can find out how contributions are made in reducing environmental problems, one of which is done by using green packaging.

Content that can be displayed to educate consumers is posting information about environmental problems around them. SME owners can display issues of environmental pollution that occur in the surrounding environment on social media. After presenting environmental pollution issues, SME owners can also display what kind of contribution SMEs have made in reducing existing environmental problems. Through this, consumers can know that SMEs highly value caring for the environment. In addition, SME owners can also educate the public by displaying food grades on the packaging. It helps consumers to know what type of packaging is used, as well as whether the packaging used is environmentally friendly or not (see Figure 6).



Figure 6. The appearance of Food Grade on the Packaging

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3.6.4. Channels

Beverage SME owners in Bandung introduce products using Instagram social media. This media is considered to help SMEs introduce their products. In addition, Instagram is a social media that many people currently use. In Indonesia alone, Instagram users reach 85 million people. Beverage SMEs in Bandung City collaborate with delivery service providers through applications such as Grab and Gojek. This application is able to make it easier for consumers to place orders online. Social media can help beverage SMEs in Bandung reach consumers. Social media that can be used are Instagram, Twitter, Tiktok or Facebook. Through the application, consumer outreach can be done by working with delivery service providers. In addition, new customers can be found who are users of the delivery service application by providing a delivery service via the SME application.

3.6.5. Key Activities

Products sold by beverage SMEs in Bandung are made when consumers place an order. It ensures consumers can enjoy products in new condition and have good quality. In addition, Beverage SMEs in Bandung experimented first by making a menu to create a distinctive taste. SME owners also make Standard Operating Procedures for making products to ensure that the flavours created in each product are consistent so that the flavours created are not different. In addition, SME owners also use coffee grounds obtained from operational activities. The coffee grounds obtained are processed into various products, including scrubs, fertilizers for plants, and cigarette odour relievers, where the coffee grounds are stored in an ashtray. In line with the value proposition that is owned, the application of an environmentally friendly business model must be implemented by carrying out activities that focus on reducing existing environmental problems (see Figure 7), which include:

a. Reduce

- Give discounts to consumers who come by bicycle, which aims to reduce air pollution, which can harm human health.
- Save water by collecting dirty plates/glasses and then washing them
- Make electricity savings by making electricity usage rules, such as turning on the lights at 5 PM.
- SMEs can encourage consumers to reduce the use of plastic by providing discounts or smoothies made from materials still suitable for use when consumers come using Tumblr.
- Another action is creating content on social media that invites consumers to save electricity, water and plastic.

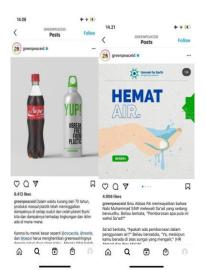


Figure 7. Examples of Content That Invites Consumers to Care About the Environment (Source: Instagram @greenpeace)

b. Recycling activities are carried out in collaboration with the Waste Bank, such as separating plastic, paper and can waste. Then the waste is delivered to the Garbage Bank, which the Garbage Bank will later recycle.

c. Reuse

SMEs can reuse some coffee leftovers. For example, processing coffee grounds into scrubs and as a mixture for bath soap. The SMEs can do this processing and sell it as an additional source of income. Another action plan is to process coffee grounds into plant fertilizer. Coffee grounds can enrich soil nutrients and help plant growth. Another plan is separating fruits or vegetables that look bad. Examples include bananas that only rot on the top, apples that only rot on the bottom, and other fruit that look bad. After separating it, the SME can process the parts that can still be used by removing the rotten parts. Then the SMEs can process it into smoothies or fruit ice to reduce food waste.

d. Replace

SMEs can replace plastic bags made from Polyethylene Terephthalate or PET to use bags made from cassava and potatoes. Bags made from cassava and potatoes are relatively safe to use. If this cassava bag is thrown into the ground, it naturally turns into compost. The price of cassava or ecoplas plastic bags, when compared to plastic bags made from PE and HDPE, is higher. The price difference for ecoplas made from cassava and other ingredients reaches IDR 9,000.00 to IDR 12,000.00. The price of ecoplas is higher than the plastic bags commonly used by beverage SMEs in Bandung. Therefore, product prices will also experience a slight increase due to increased costs incurred to provide ecoplas.

In addition, the Ministry of Environment and Forestry of the Republic of Indonesia has endorsed the SNI Ecolabel Type 1 7188.7:2016 standard and

the Self-Declared Type 2 Ecolabel for the use of Ecoplast and Oxium. Based on the interviews with several consumers, most said they were okay with paying more to use environmentally green packaging. It is because consumers have concerns about environmental problems that occur around the environment. Therefore, with increased product prices due to using ecoplas, consumers will not object. SMEs owners can replace plastic cups made from Polyethylene Terephthalate using plastic cups made from Oxo Biodegradable or oxium (see Figure 8 and Figure 9). Oxium plastic is a type of plastic that is environmentally friendly because it is easily decomposed and considered safe for use as beverage packaging. In addition, this type of plastic has also passed the SNI Ecolabel 1 7118.7:2016 test and the Self-Declared Type 2 Ecolabel for Ecoplast and Oxium.



Figure 8. Price of oxo-biodegradable plastic packaging Source: Tokopedia



Figure 9. Price of PET Plastic Packaging Source: Shopee

From a price standpoint, this type of oxium packaging has a lower price than PET packaging. The listed price for the oxium plastic packaging is IDR 968,000.00/2000 pcs if calculated as a unit, then the price per pcs is IDR 484. Therefore, using oxium plastic packaging, SMEs can use environmentally friendly packaging without paying more.

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Product Manufacturing Process

In making products using fresh raw materials, for example, on the healthy juice menu, SME owners use fruits and vegetables that are free of pesticides and are still fresh. Beverage SMEs must store raw materials properly. For example, fruits and vegetables can be stored in the refrigerator to maintain good quality. In addition, Beverage SMEs can replace coconut sugar with palm sugar. It is because palm sugar is healthier than head sugar.



Figure 10. Price of Palm Sugar Source: Shopee Marketplace



Figure 11. The Price of Coconut Sugar Source: Shopee Marketplace

Figure 10 and Figure 11 show that palm sugar has a price difference of IDR 3,000 compared to the price of coconut sugar. The price difference between the two is insignificant, so that SMEs can use palm sugar. SME owners must use several tools so that the product manufacturing process is not contaminated when serving the product. Therefore, employees/baristas must wear aprons, gloves, and masks, complete with clean and well-maintained equipment. For female baristas, especially those with long hair, it is mandatory to tie their hair to avoid their hair falling into the product.

3.6.6. Key Resources

Employees are one resource that has an essential role in operational activities because employees interact directly with consumers. Beverage SMEs have criteria, one of which is having a good attitude. This criterion is mandatory because employees will interact directly with consumers. The behavior of employees is very influential with the behavior of consumers who come to the place. If employees provide lousy service, consumers may feel annoyed and not want to purchase again. Vice versa, when consumers who come are

served well, they will feel respected and are likely to return to make purchases. In addition, SME owners also have assets to support operational activities, including buildings, tables and chairs, equipment such as coffee machines, and other equipment. The application of an environmentally friendly business model certainly requires environmentally friendly materials. Selection of the type of packaging is essential for SMEs. The type of packaging used must maintain product quality and can be recycled. The type of packaging used by SMEs is Oxo Biodegradable. This type of packaging has passed the SNI Ecolabel 1 7118.7:2016 test and Self-declared Type 2 Ecolabel. In addition, this type of packaging is also easily decomposed and can be recycled. In addition, Oxo Biodegradable or Oxium is safe for use as packaging.

3.6.7. Key Partnerships

SME owners run their businesses by collaborating with several parties. These parties include raw material suppliers, such as coffee farmers, powder suppliers, packaging suppliers, and equipment suppliers, such as tissue. In addition, beverage SMEs in Bandung also collaborate with delivery service providers, such as Gojek and Grab. There are beverage SME owners in the city of Bandung who collaborates with the Garbage Bank to recycle plastic waste, beverage SME owners who collaborate with print and photocopy sites to obtain used paper as material for making paper bags made from paper, and beverage SME owners in Bandung is working with the salon to process coffee grounds obtained from operational activities.

The application of an environmentally friendly business model will certainly run well if it is supported by several parties, including the Garbage Bank, which can help SMEs recycle waste so that SMEs do not need to recycle themselves. In addition, suppliers who provide environmentally friendly plastic packaging also play an important role in implementing this business model. Packaging that can be obtained easily is of course, beneficial for SMEs to provide environmentally friendly packaging. SMEs also work with suppliers of environmentally friendly bags, tumblers, silicone straws, oxium straws, lids, and packaging cups made from oxium.

3.6.8. Revenue Streams

Beverage SME owners in Bandung City earn income from several sources, including dine-in sales, online sales, and sales through delivery services. The income earned by Beverage SMEs comes from several sources, including dine-in sales, products and merchandise via applications, such as Grab and Gojek, and sales of scrub products and coffee soap mixers.

3.6.9. Cost Structure

SME owners incur various costs, including employee salaries, costs of procuring raw materials, renting premises, and procuring packaging. The costs incurred for implementing an environmentally friendly business concept are certainly more significant than conventional business models due to the difference in value between conventional and environmentally friendly businesses. Applying an environmentally friendly business model causes SME

players to experience an increase in expenses, such as replacing packaging materials and providing employee or barista equipment. Figure 12 shows how the SME business processes are environmentally friendly using the Business Model Canvas.

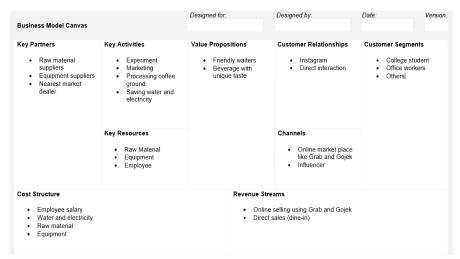


Figure 12. Business Model Canvas Beverage SMEs

4. Conclusion

The proposed business model mapped for SMEs using BMC is a business model that can help SMEs transition to the Green Business Model Canvas from the ongoing conventional BMC. This transition is obtained by fulfilling the Green Business Model Canvas indicators that have been described. As for Beverage SMEs, applying environmentally friendly business models to Beverage SMEs in Bandung is carried out in different ways, such as recycling in collaboration with the Garbage Bank. This collaboration is carried out by separating plastic waste and giving it to the Waste Bank for recycling. Other activities are carried out by processing coffee grounds into scrubs. In addition, some salons ask for coffee grounds to be processed into scrubs. Processing of coffee grounds is not only that. Coffee grounds can also be used as fertilizer for plants and as a cigarette odour remover by placing it in an ashtray.

In addition, SME owners can also present products using healthy, fresh and good quality raw materials, such as fresh fruits, palm sugar which is considered healthier than coconut sugar, and tea bags made of silk, so they are safer for consumption. Marketing activities are carried out to reduce air pollution. This activity is carried out by giving discounts to consumers who come by bicycle. In addition, marketing activities are also carried out by not giving consumers plastic straws so that when they want to use plastic, they will be directed to buy stainless straws at the checkout. SME owners also informed that the activities were trying to reduce environmental problems by inviting consumers not to use plastic straws. Some beverage SMEs also promote green marketing by inviting consumers not to use plastic bags. As a substitute

for plastic bags, SME owners make environmentally friendly paper bags using waste paper.

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