

## STRATEGY TO IMPROVE THE WASTE MANAGEMENT COMPANY CASE STUDY: CV BINA USAHA MANDIRI

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**Keywords:**

waste management,  
business strategy,  
differentiation.

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**Abstract**

Solid waste management (SWM) poses a significant environmental issue in Indonesia, with increasing waste generation and limited infrastructure leading to environmental contamination. The government's initiatives and waste management companies aim to address this issue by encouraging public participation. However, many community-based initiatives face challenges in sustainability and development. This study focuses on analyzing the business model of CV Bina Usaha Mandiri (BUM), a waste management company in Central Java, to provide a development plan for effective waste management services. This study was conducted using a qualitative approach to understand the challenges faced by the business owner, then explore how to improve their performance and provide ideas. The data was analyzed qualitatively by adopting an inductive approach with the purpose of developing conclusions from the collected data. External and internal environments were analyzed, then SWOT analysis was used to assess BUM's competitiveness in order to develop a business strategy. Based on the SWOT matrix, some strategies are selected to be proposed for BUM performance improvement concerning the collection volume and their business management. The study recommends the adoption of a focus differentiation strategy for BUM. Leveraging its solid presence in Central Java and Yogyakarta, BUM's strength in providing unique services for handling low-value materials positions it to gain a competitive advantage.

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### INTRODUCTION

Solid waste management (SWM) is one of the biggest environmental challenges in Indonesia. The Leuwigajah landfill landslide in 2005 became the starting point for the government and public concern, which led to Law No. 18 of 2008 about Waste. Since then, SWM problems become public attention and driven environmental movement to reduce waste in landfills (Aprilia, 2021). Based on data from the Ministry of Environment and Forestry (MOEF), in 2022, Indonesia generates 68.5 million tons of waste dominated by food, plastic, and paper waste which 64 percent of the waste had

been successfully managed. The amount of waste generation increases along the population growth every year. However, due to limited access to waste collection services and infrastructure (Mukhit & Syafrudin, 2018), there is still unmanaged waste resulting to the waste leakage and environmental contamination. In addition, the National Plastic Action Partnership (NPAP) found that more than 70% of Reduce, Reuse, and Recycle Waste Management Facilities (known as TPS3R) and 40% of Integrated Waste Management Facilities (TPST) are not operated or mismanaged.

Indeed, infrastructure is a key factor to enhance waste management. But a successful waste management infrastructure relies on public participation, so awareness is also important (Brodjonegoro, 2023). In an effort to improve waste management, according to Aprilia (2021), the central government can't work alone because of limited resources so they encourage participation from various parties, e.g., local governments, businesses/ private sector, community, etc. One of the government initiatives to reduce waste is the waste bank *-bank sampah-*, a program that adopts a banking system where people will deposit (or collect) recyclables from home in return for rewards (in the form of savings).

More than that, in the last few years, community movements and waste management companies have emerged to solve the waste problem. Where, the community educates and drives people about waste reduction and segregation from the source as well as waste processing (e.g., composting & upcycling) and disposal (e.g., waste bank, scavenger, many more). The waste management company offering scheduled waste collection services, including app-based (on demand) waste collection and trading, from households, offices, and businesses for recycling, most of them also offer a report, on how much waste is successfully recycled and diverted from landfills.

In this context, the existence of waste banks and waste management companies should be appreciated. Yet, another issue is, how these community-based initiatives and waste management businesses can survive or/and develop to create a positive outcome in society. It was reported that more than half of the waste banks that were recorded in Solo were not actively operating due to a lack of awareness of waste segregation from the source (Mutiah, 2022). In another case in Bekasi, the waste bank had not been running optimally due to the managerial system (Satibi & Sugiono, 2021). Like other businesses, the most common reasons waste management initiative fails because insufficient capital or funding, inadequate manpower, and management, lack of

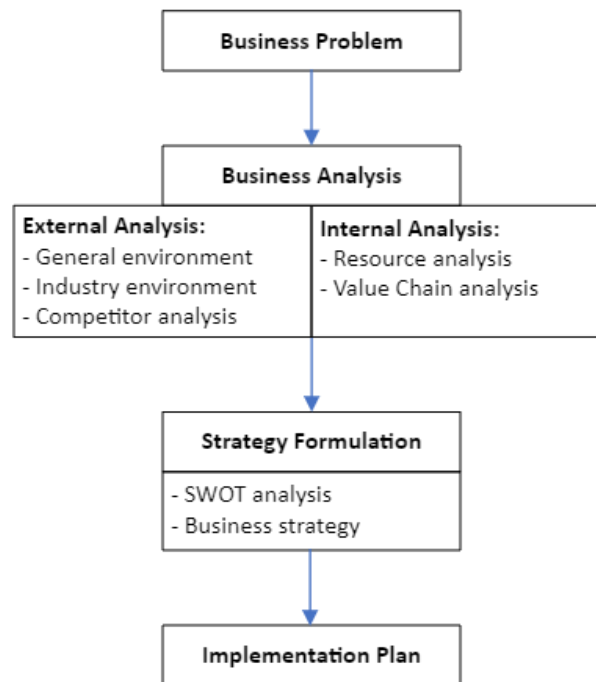
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infrastructure, faulty business model, and so on.

There are a lot of best practices in the waste management industry. Albeit the waste management industry has a lot of opportunities and good intentions to support waste management practices, it is essential to understand basic business management in order to operate sustainably. Entrepreneur strives to develop and innovate in their business strategy to be more efficient and competitive. This paper will analyse the business model of CV Bina Usaha Mandiri (BUM). In the beginning, they were engaged in newspaper handicrafts. Later, they are focusing their business on waste trading and collection, also community engagement. Other than that, they also engage in waste processing. However, with so many activities carried out by CV BUM, it cannot guarantee a good income if it is not supported by effectiveness in business management. This study aims to provide a development plan for CV BUM to effectively execute waste management services in Central Java.

## **RESEARCH METHODS**

The data was analysed qualitatively adopting inductive approach with the purpose of developing conclusions from the collected data (Thomas, 2006). This approach allows for a more flexible and open-ended exploration of the research topic, encouraging a deeper understanding of the subject matter based on empirical evidence. The data also processed using some tools to assess internal and external factor that influence the business.

Conceptual framework is a tool to facilitate the understanding of variables that are involved in the study and identifying the inter-relationships between components to organize the ideas and clarify the concepts (Luft, Jeong, Idsardi, & Gardner, 2022). Several key terms in strategic management are internal strengths and weakness, external opportunities and threats, competitive advantage, long-term objectives, and a few others (David, 2011).



**Figure 1.** Conceptual framework

## RESULTS AND DISCUSSION

### SWOT Analysis

Strength-Weakness-Opportunity-Threat (SWOT) analysis was used to assess BUM competitiveness in order to develop a business strategy. The analysis was conducted based on the strength and weakness of the internal management of BUM, also external factors that can influence BUM business.

### Strength

The value of goods is varied depends on the type of material. In waste management businesses, the type of materials that have high value are metals, plastic bottles, old corrugated cartons (cardboard), and many more. While low value materials are sometimes scattered in the environment as well as dumped in the landfills, and pollute the ecosystem. Many businesses collect high value materials to get more profit, but BUM is the other way around. They collect low value material solely to support waste reduction. They innovate to develop products from low value material into high value goods.

To increase material supply in their warehouse, they conduct socializations to the communities and build relationships. They also provide assistances to manage waste from the source, so they can get cleaner material. Due to continuous engagement and

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support from the local government, they can expand their connection to improve awareness as well as increase the material supply because their network will indirectly promote BUM business to others.

### **Weakness**

After several years of running the business, BUM' owner admits that she doesn't have strong funds to develop its business. They have an aspiration to have a supporting equipment in processing some materials they manage. But due to limited capital, they can't realize it. So, they rely on grants or sponsor or support from external party to develop their business. In addition, they don't record their expenses and income accordingly. Therefore, they can't identify exactly how their business is performing. BUM apply cross subsidies to all types of materials they collect. The profits they get from the selling of high value materials are used to offset the losses from managing low value materials. They realize their financial management is not propriety when the business is sluggish, and they can't pay the fixed expenses. Other than financial aspect, BUM also has limited human resources to running its operations, which means that one person can be managing multiple tasks. Even the owner itself can run various activities, from client relation, socialization, material collection or trading, production, and administration.

### **Opportunity**

Government has set a target in waste reduction and handling, so they encourage the producer and society to actively participate in waste management. Other than activating community initiatives to segregate recyclables, government urge the producer to collect back their packaging waste. In addition, government is making efforts in improving material recovery facility (MRF) to reduce the waste that be transported to the landfill. Some materials are considered of low value, such as sachets, Styrofoam, and so on. These types of materials are rarely collected so they are often found in the landfills and sometimes scattered in the environment. BUM accept low-value materials that most business don't. In addition, there are recycling facilities that use low value materials, but not many industries can manage or process these materials as of now and the demand is still small. So, BUM can get the materials easily. Since low value material become one of the issues to the environmental pollution problems, producers is looking for the solutions so that it can be collected for recycling or be diverted to any process other than landfill.

**Threat**

Although BUM has a solution to process low value material, especially for sachet, the market for recycled products is not yet developed. Apart from the limited machine owned by BUM, the demand for the products is still low and the products quality need to be improved according to the industry standard. Moreover, supports from the government still limited to endorsement or promotion and coordination with the community and material recovery facility. While the challenges related to the high transportation and operational cost, can't be supported by all local government. In addition, the competition is getting tougher because there are new startups or businesses that offering waste management services or waste trading. So, they compete to offer innovative services at competitive costs in order to secure the supply of material.

**Table 1. SWOT Analysis**

<b>Strength (S)</b>	S1: BUM able to manage and process low value material, especially sachet. S2: Continuous socialization and constantly provide assistances and services to the community. S3: Good networking.
<b>Weakness (W)</b>	W1: Financial (capital) limitation. W2: Poor financial management. W3: Limited human resources.
<b>Opportunity (O)</b>	O1: The Government's target to reduce waste in landfills and improve waste management. O2: Not many industries that able to process low value materials. O3: Producers are trying to address the problem of low value material that pollutes the environment.
<b>Threat (T)</b>	T1: Undeveloped market for recycled product from low value materials. T2: Low support from the local government towards recycling. T3: An increased number of businesses which offering waste management services.

SWOT matrix is used as a tool to identify areas for improvement and create action plans to BUM. The matrix is developed by using SWOT analysis to assess further the relationship between internal and external factors and formulation the action plan for the next step.

**Table 2. SWOT Matrix**

	<b>Strength</b> S1. Able to process low value material. S2. Actively conduct socializations and assistances. S3. Good networking.	<b>Weakness</b> W1. Limited capital. W2. Limited human resources. W3. No financial record.
<b>Opportunity</b> O1: The government's target to reduce waste in landfills and improve waste management. O2: Not many industries that able to process low value materials. O3: Producers are trying to address the problem of low value material that pollutes the environment.	S1O2: Product development & innovation. <i>S2O1: Engage and synergy with local government in promoting 3R to improve waste management.</i> <i>S3O1: Expand or widen the collaboration with local government in another cities.</i> <b>S3O3: Become a partner for producers to manage low value material.</b>	<b>W1O3: Develop business plan to get funding for material collection and management.</b> W2O1: Engage government to get support on operation. W3O3: Get a support from producers to develop appropriate financial accounting to really understand the profitability.
<b>Threat</b> T1: Undeveloped market for recycled product from low value materials. T2: Low support from the local government towards recycling. T3: An increased number of businesses which offering waste management services.	S1T1: Innovation in processing and product development. <b>S2T3: Collaboration with other businesses in awareness and material sourcing.</b> S3T2: Influence local government to allocate the budget for waste management practice.	<b>W1T3: Conduct benchmark study with other players and collaboration in waste handling.</b> W2T2: Synergy with local government to allocate some resources to support BUM operation. W3T1: Create the market with low-cost production but high value product.

### Proposed Strategy

Based on the external and internal environmental, along with the company's core competencies in the low-value materials handling, the proposed business strategy for BUM is focus differentiation strategy.

### Focus differentiation strategy.

This strategy is essential for determining how to distinguish itself within a specific segment of the market. By focusing on differentiation, BUM aims to offer unique and tailored waste management solutions, particularly specializing in the efficient handling

of low-value materials. This strategy involves:

1. Narrow market segment

BUM need to strategically narrow its focus to specific market segments where there is a significant demand for waste management solutions, especially those involving the handling of low-value materials. Based on Statistik Lingkungan Hidup report, Central Java waste generation is the highest among other provinces in 2022. BUM can concentrate their market on Central Java with the expansion to Yogyakarta province by empowering waste collector's network there. This targeted approach allows BUM to concentrate resources and efforts on meeting the unique needs of this specific segment.

2. Service differentiation

BUM can differentiate its services by offering unique and tailored solutions, especially designed to handle low-value materials efficiently. This includes implementing collection services, innovative recycling processes, and providing waste management training to its clients. The goal is to stand out in the market by delivering services that go beyond conventional waste management practices, thus creating a distinct value proposition.

Based on the SWOT matrix, some strategies is selected to be proposed for BUM in order to improve their performance concerning the collection volume and their business management. The key success factors of the overall strategies prepared for BUM are knowledge sharing, multi-stakeholders collaboration, and promotion.

1. Conduct benchmark study with other players and collaboration in waste handling.

This is a minimum and short-term strategy that BUM can do. There are some businesses that are developing and well-managed thus become the best practice in waste management sector. So, it is important for BUM to learn from others about the key success factors in doing business in waste management sector. In addition, they can also hire a professional to help the to improve their management.

Other than knowledge sharing, they can also share their best practices to build relationships and explore the possibility of collaboration. Because BUM is known as an organization that is willing to manage the low value materials, then not many formal businesses for waste management in Central Java, and they quite understand the waste management conditions in Central Java. So, they can build partnerships to



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trading the low value materials and if the partner doesn't have a collection network in Central Java, they can support for waste handling.

2. Collaboration with other businesses in awareness and material sourcing.

Because every business has its own role and responsibility, collaboration sometimes needed across sectors to address waste problem. For instance, a producer wants to explore waste management services in Central Java. As the company not familiar with the recycling value chain in Central Jawa, then they have an option to be partnered with BUM to build the ecosystem start from the public awareness, organize material collection from the communities, conduct material sourcing from the informal sector, and ensuring the materials is delivered to the recycling industries.

Through this collaboration, not only BUM can expand the network and get more materials, but they also get the funds. This financial support can be used for their operational activity in the fields, e.g., network engagement, promotion provide incentives to the collection network, even for their infrastructure and facility improvement.

3. Develop business case to get external funding for material collection and management.

BUM can offer its services to be a partner for governments, producers, and so on for handling the waste. By developing business plan, they can get funds to finance their business operational. But before that, they have to really understand the needs of their potential clients and the market conditions so they can offer a suitable program with appropriate budget proposal.

Furthermore, in the process of developing proposal for clients, they have to be careful in setting the target. The client would be happy if they can achieve more with competitive price, but what if the result is not good as expected. The client would doubt their capability and ability in carrying out the program.

Other than the strategies as previously mentioned, BUM can also consider the below strategies in order to amplify the outcome.

1. Engage and synergy with local government in promoting 3R to improve waste management.

A comprehensive approach is needed starting from behaviour change in the community to manage the waste from the source, provide segregated waste collection facility and transportation, technological support for recycling industry, etc. Since the government had set the target for waste reduction and handling, BUM can leverage this opportunity to synergy with the local government to conduct socialization in community.

By promoting 3R, waste sorting, and segregated collection, not only BUM can support the local government to improve municipal waste management but also, they can get more cleaner materials. And it would be even better if the local government could provide more support to BUM in the scope of their operational assistances.

2. Expand or widen the collaboration with local government in another cities.

Because the policy of each city/regency might be different, they can also do engagement with other cities to create behavioral changes in communities and manage the waste. In other words, they can widen the network and get more materials from other regions.

But there will be challenges if they want to expand in other area which is costs. As the costs would be increased, they really need to develop schemes that can support efficiency and effectiveness in their operational.

## **CONCLUSIONS AND SUGGESTIONS**

Based on interview and analysis, the main problem faced by CV BUM is lack of robust strategy in its business, so that they couldn't achieve the predetermined target and not perform really well. Although the owner has experienced in running businesses, but still must be equipped by the basic knowledge of business management, especially on analysing market conditions, developing a business plan with realistic targets, project dan data management, reporting, manpower training, as well as financial management. For BUM improvement, the author suggests adopting focus differentiation strategy with some strategies are developed to enhance their business performance. BUM's solid presence in Central Java and Yogyakarta, coupled with its strength in providing unique services for handling low-value materials, positions it to leverage a competitive advantage.

The key factors for the BUM to develop its business are knowledge sharing,

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stakeholders' engagement, as well as marketing & communications. Then, the author is proposed activity plan to BUM which are benchmarking with other players to see potential collaboration in waste handling, collaborating with other businesses to increase awareness and material sourcing, also creating proper business plan to get external support funds. In addition, they can engage local government to support them in improving municipal waste management.

For the future study, when conducting the interview, it is important to arrange the schedule properly if the interviewee is the owner because sometimes the owner is busy and involve directly in the operations. Moreover, interviewer need to adjust the choice of word that are easy to understand to the interviewee in order to really make sure that the feedback is properly provided based on the scope of the questions.

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