

# Education to Reduce Food Waste through *Bye Waste Social Business*

Verliana Elzagi, Edy Yulianto Putra, Anjela Rini Febiana, Estin Rose Eviyani, Fernanda Yeronica, Hellena Risvi, Melissa

Program Studi Manajemen, Universitas Internasional Batam  
 Jl. Gajah Mada, Baloi – Sei Ladi. Batam – 29426, Kepulauan Riau, Indonesia

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Corresponding author:  
 edy.yulianto@uib.edu

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## ABSTRACT

*The issue of food waste is very important as it affects various aspects of human life and the surrounding environment. Business ideas on food waste management are important to help people maintain cleanliness and environmental sustainability. Therefore, an e-booklet business idea with the title “Bye Waste” can be an effective solution for providing such business ideas. The “Bye Waste” e-booklet will contain information on how to manage food waste generated every day. In the e-booklet, it will explain the types of food waste, how to sort and process food waste, and how to use it as organic fertilizer. The “Bye Waste” e-booklet will be sold at an affordable price so that people can easily access it. In order to expand its reach, this e-booklet will be marketed through online platforms such as websites or social media.*

## SARI PATI

Isu limbah sampah makanan sangat penting karena masalah ini mempengaruhi berbagai aspek kehidupan manusia dan lingkungan sekitarnya. Ide bisnis tentang pengelolaan limbah sampah makanan merupakan hal penting untuk membantu masyarakat dalam menjaga kebersihan dan kelestarian lingkungan. Oleh karena itu, ide bisnis e-booklet dengan judul “Bye Waste” dapat menjadi solusi yang efektif dalam memberikan ide bisnis tersebut. E-booklet “Bye Waste” akan berisi informasi tentang cara mengatur limbah sampah makanan yang dihasilkan setiap hari. Dalam e-booklet tersebut, akan dijelaskan mengenai jenis-jenis limbah sampah makanan, cara memilah dan mengolah limbah sampah makanan, serta bagaimana menggunakannya sebagai pupuk organik. E-booklet “Bye Waste” akan dijual dengan harga yang terjangkau, sehingga masyarakat dengan mudah dapat mengaksesnya. Dalam rangka memperluas jangkauan, e-booklet ini akan dipasarkan melalui platform online seperti website atau media sosial.

## INTRODUCTION

Social entrepreneurship is an early process of finding answers and innovations as well as an important component of interventions aimed at achieving social goals. The goal of social entrepreneurship is to build and realize constructive social change and solve social problems by maintaining social values through adaptation and learning for the benefit of society (Ubaidillah et al., 2021). The movement on social entrepreneurship is a desire for the development of businesses that tend to be business-oriented towards businesses with a vision of social solidarity to increase concern for fellow humans (Andayani et al., 2021). Entrepreneurship development programs are also beneficial in terms of employment expansion and the absorption of additional employment both locally and nationally. The entrepreneurial process includes new product development as well as product innovation. To become a developed country, Indonesia needs at least 3% of its population to be entrepreneurs. This social entrepreneurship opportunity arises from the intersection of promising industries, social needs, and customer desires (Maula, 2021). Ultimately, it is to pursue a social mission, generate new endeavors with commercial operations that create both profits and non-profits, and raise awareness of how to contribute to meeting all social demands and solving social problems (Agustina, 2020).

Entrepreneurship development is carried out by training business actors (entrepreneurs) who are competent in terms of knowledge, skills, talents, and mindset, with the aim of gaining independence in running a business. This is considered critical, especially if the business is related to social activities and has a good influence on the environment (Diandra, 2019). Such is the case with the

problem of food waste, which has economic, social, and environmental impacts. Food is one of the basic needs needed by humans. However, not everyone values food as much as they should. There is still a lot of data that shows the high rate of food waste around the world, including in Indonesia. Based on a report from the United Nations Environment Programme (UNEP) entitled Food Waste Index 2021, Indonesia is listed as the country with the highest food waste production in Southeast Asia, with a total food waste of 20.93 million tons per year. Meanwhile, based on records from the Ministry of National Development Planning (Bappenas), food waste wasted in Indonesia from 2000 to 2019 reached 23–48 million tons per year. This figure is equivalent to 115–184 kg per capita per year.

So steps are needed for us to overcome this food waste problem. One way that can be done is by meal prepping, which is the activity of preparing food ingredients for a period of time (daily, weekly, or monthly). This can prevent a person from buying too many groceries because, by meal prepping, we will only buy products that will be fully used. Our main goal in creating the meal prep innovation is to make people aware of and change their food waste behavior. This meal-prepping innovation can help people prevent excessive food purchases, so we hope that this step can reduce the number of food wastes in the world, especially in Indonesia.

One of the benefits of meal prep innovation is being able to help people manage portions and food menus through a variety of available food menus. Through this food preparation step, the goal of reducing food waste behavior in the community can be achieved. Meal prepping can estimate the size of a person's food portion, thus reducing food waste or

leftovers. However, despite its benefits in helping to reduce food waste production, many people are still reluctant to do meal prep for various reasons, such as not having the time to decide what to cook. We see this as an opportunity that can be developed into a business idea that can certainly help people who have difficulty meal prepping as well as contribute to reducing food waste. This business idea will be developed through a social media campaign using the Instagram platform called “Bye Waste”. This campaign is carried out by sharing meal-prepping recipes as well as knowledge and interesting facts about food waste to increase public awareness of the impact of food waste.

Instagram, as one of the largest social media platforms in the world, is the reason we chose it as our campaign medium. Several current trends have also been successfully popularized by Instagram, one of which is informative content. We saw this as an opportunity to start our innovation by creating a social media campaign about food waste. Although there are already many Instagram accounts dedicated to sharing informative content, we have yet to find one that spreads campaigns related to food waste. This is one of our advantages and uniqueness compared to other informative content. The campaign will not only share informative content through Instagram, but we will also sell e-books about meal prepping and merchandise such as t-shirts, key chains, and others to support the program and reduce the level of food waste generated.

## **METHODS**

In implementing the “Bye Waste” business idea, the research method used is a descriptive method with a quantitative approach. The quantitative approach is an approach that

does not use numbers and aims to understand reality through an inductive thinking process. With this approach, the author participates directly in the phenomenon being analyzed. The author must also focus on the facts or events being studied (Adlini et al., 2022). The descriptive method is intended to create a systematic or detailed description that is factual and accurate. Meanwhile, the data used to conduct this analysis is primary data taken directly by the author without the intermediary of other parties. This primary data is in the form of interviews and surveys, with a total of 5 people who have been interviewed and 45 survey respondents. The questions asked are as follows:

1. Name
2. Age
3. Job
4. Do you have a habit of throwing away leftover ingredients in your daily life?
5. Do you know the impact of food waste on the environment?
6. Do you have a solution to overcome the bad habit of wasting food for yourself?
7. What do you think about people who often throw away food waste?
8. What causes you to throw away food or ingredients?
9. Do you think this e-booklet will be useful in reducing food waste?
10. Would you be interested in purchasing this e-booklet if it is already on the market?
11. Feedback and suggestions for Bye Waste



Gambar 1 Kuesioner Bye Waste



Gambar 2 Tampilan e-booklet



Gambar 3 Bye Waste Merch

## RESULTS AND DISCUSSION

### Market Condition and Potential

Having competitors that are still relatively nonexistent is a unique point of this business idea because it is one of the rare businesses in Indonesia. Here are the results of the SWOT analysis of our business plan:

1. Strength
  - supporting the government in reducing waste, especially organic waste.
  - Attractive visual design of e-booklets and Instagram feeds.
  - Users come from all over Indonesia, including people who care about social issues and those who don't have time to prepare meals.
2. Weakness
  - Competitiveness at the early start-up stage
  - Including the type of business that is still very rare and not too well known by the wider community
3. Opportunities
  - No competitors yet
  - Public curiosity about new services
  - Products or service that can be promoted by famous influencers
4. Threat
  - Minima business capital
  - Social media hacked by irresponsible people
  - Getting bad comments from readers

This meal prep plan idea has a good chance of success. The whole world is also competing to implement the SDGs program, especially the problem of food waste, which is one of the SDGs. The SDGs program requires people

to be more concerned about environmental sustainability. With this business, it can also help the community meet its target of reducing the waste produced. Another opportunity for success is not having competitors, which can be an opportunity for this business to survive in the market. It can be concluded that the potential of this business idea is very large. The uniqueness of this business idea is that there is very rarely a meal prep business in Indonesia that aims to reduce food waste in accordance with the indicator points in the SDGs. Another uniqueness is holding a campaign on Instagram regarding information about food waste, with the aim of helping people become more concerned about overcoming food waste problems. Market segmentation targets all Indonesian citizens with a target age of 15–40 years old who are active on social media, namely Instagram.

### MANAGERIAL IMPLICATION

There are no competitors for this business idea at the moment. Business ideas like the one we are planning are quite rare or have not been found in Indonesia. This business idea has a concept that aims to support the SDG program. Like selling meal prep e-booklet whose contents also discuss food waste problems. It is because of concepts like this that this business idea has not yet been found in Indonesia.

We also analyzed the potential for competitors to emerge who have the same concept as our team's business idea in the future. There are not many competitors because doing this business is quite difficult. Because it requires a lot of research, among others. It could be that the competitor does not have the same concept as the business idea we designed. It is possible that they also *campaign* on social media, but on different social media than

us, for example, on Tik-Tok. It could be that competitors also make the same *e-booklet* for sale, but the content does not include the concept of SDG's points. If this happens, then this business needs to be evaluated and updated in terms of innovation so that it is superior to its competitors. So, this business already has a plan to deal with future competitors.

### Questionnaire Results

Bye Waste conducted research by distributing questionnaires via *Google Forms* to get deeper information about its target consumers. From the results of distributing questionnaires, a total of 45 respondents were obtained. The respondent profile obtained will provide an overview of the analysis of what consumers need, input on the products offered, target consumers, and others.

#### a. Respondent Demographics

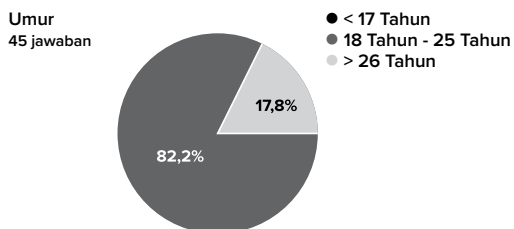


Image 1 Age of Respondents

Based on the picture above, it can be seen that the majority of respondents' ages are dominated by respondents aged 18–25 years, as many as 37 people (82.2%), and the remaining respondents aged over 26 years, as many as 8 people (17.8%).

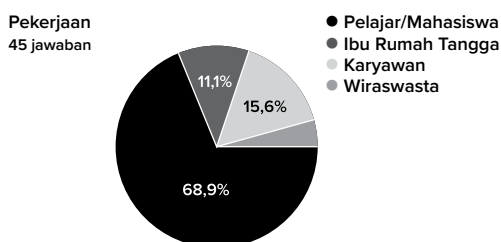


Image 2 Occupation of Respondents

Based on the picture above, it can be seen that respondents are divided into 4 groups of job types: students, housewives, employees, and entrepreneurs. The majority of respondents are students, with a percentage of 68.9%, or 31 respondents.

#### b. Respondents' responses regarding food and product waste *Bye waste*

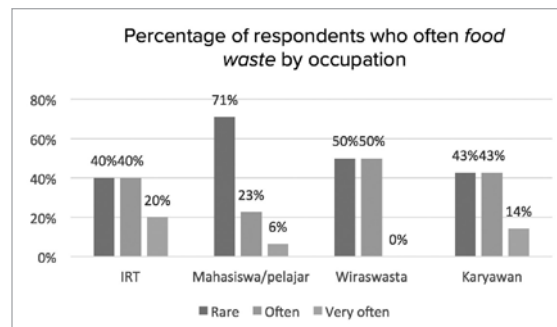


Image 3 Percentage of respondents in disposing of food waste

Based on the picture above, the majority of each group of job types has problems, often producing food waste. When compared to students, respondents who work have a higher percentage of difficulty controlling food waste.



Image 4 Percentage of respondents on the impact of food waste

Based on the figure above, 88.9% of respondents know the impact of food waste. This indicates that respondents are aware of the impact produced, and this can also

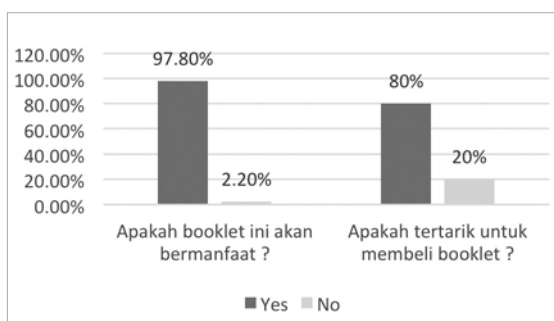


be a positive response to the Bye Waste business idea, which focuses on food waste. The remaining 11.1% of respondents did not know. This could be a target *campaign for Bye Waste's* business idea to increase awareness and knowledge of food waste issues among potential customers.



**Image 5 Percentage of solutions to food waste**

Based on the figure above, 62.2% of respondents have a solution to minimize the habit of throwing away food waste, and 37.8% of other respondents do not have a solution. It can be seen from the large percentage of respondents who do not have a solution to overcome the habit of throwing food waste away. This could be a good opportunity for a waste business idea.



**Image 6 Percentage related to product assessment**

Based on the picture above, after the respondents saw the form of the e-booklet product offered by Bye Waste, The majority of 97.80% of respondents stated that the Bye Waste e-booklet was useful, and overall, the respondents were interested in buying the Bye

Waste e-booklet. This shows that this business idea can be in demand and well received by potential customers.

**CONCLUSION**

Bye Waste’s social business idea has the main goal of reducing the environmental impact caused by the accumulation of food waste. Bye Waste carries the concept by providing an *e-booklet* that contains various *meal prep* options that are very easy to follow and has supporting features to help readers raise awareness of eliminating *food waste* behavior in everyday life.

The utilization of information technology in accessing e-books online is an effort to reduce the use of paper, which is not environmentally friendly. In addition to providing *e-books*, Bye Waste also conducts a social media campaign on Instagram with the theme “Buy Less, Bye Waste” to invite the wider community to become concerned about the environment and reduce the very high rate of food waste today with Bye Waste.

Based on the results of the questionnaire distributed through social media, it can be concluded that those who are students have a sense of awareness of the importance of protecting the environment by participating in the development of the Bye Waste business idea. However, other categories, such as housewives, often throw away their leftover food waste. And find it difficult to eliminate this. Almost all respondents are very aware of the adverse effects on the environment if they throw away food waste too often. After seeing a preview of the Bye Waste e-booklet, most of the respondents felt interested and had an interest in getting a lot of useful information to change the habit of throwing away food waste.

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