

Improving the Management of Diansati Waste Bank Through Digitalization of Marketing and Financial Management

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ABSTRACT

Surabaya is inseparable from environmental health problems. The threat of disease due to the lack of environmental sanitation is a problem that always arises in everyday life. The concept of zero waste as a lifestyle aims to minimize the amount of waste produced every day, one of which is through reduce, recycle and reuse. Proper waste management will provide its own value to the community from both economic and social aspects. This community service activity uses an active participation approach with the Diansati Waste Bank social community. Bank Sampah Diansati has been using a manual packing activity process by stepping on foot. The activity process goes through the stages of program socialization, preparation of press machine design, preparation of social media design and e-commerce, demonstration of the use of tools, utilization of tools by partners, monitoring and evaluation. Partners in this community service activity have 32 members. The results of community service activities show that partners can utilize tools and get convenience with the hydraulic waste press machine. In addition, recycled products by partners such as shampoo from water hyacinth can be sold online, which so far has been sold in the neighborhood around the partner.

Keywords: Financial Report, Information System, Waste Bank.



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INTRODUCTION

Surabaya is not free from environmental health problems (Pamurti, 2021). The threat of disease due to minimal ecological sanitation is a problem that always arises in everyday life (Iswanto, 2013). Zero waste as a lifestyle aims to minimize the amount of waste produced daily, including reducing, reducing, recycling, and reusing. RT 6 RW 2 Jambangan Village has an environmental conservation activity in the form of a Waste Bank called Diansati. The Diansati Waste Bank is located on the riverbank or on the edge of the Brantas River that crosses the city of Surabaya. The initiative to

establish this waste bank from the women of RT 6 was based on concern for the environment, especially locations on the riverbank, to reduce the accumulation of waste and the risk of flooding.

Jambangan District is one of the Districts in Surabaya City, which borders Sidoarjo Regency to the south. Jambangan District has four villages, namely Pagesangan, Kebonsari, Jambangan, and Karah, with an area of 0.39 km². The smallest area in Jambangan Village is 0.08 km². Although the Jambangan Sub-district is the smallest area, this sub-district has many riverbank areas or Brantas River banks and has the second largest number of RTs, 29 RTs, after the Karah Sub-district. The population of the Jambangan Sub-district is 11,718 people, with a population density of 146,475 people/km²; most of the residents have a high school education/equivalent with jobs dominated by entrepreneurs and employees (Badan Pusat Statistik Kota Surabaya, 2019).

The Diansati Waste Bank was established in 2021 and inaugurated in 2022 by the Head of Jambangan Village. Mrs. Yuliasih chairs the Diansati Waste Bank and currently has 32 members. The activities of this waste bank include collecting waste from members and managing it by the waste bank administrators. Waste collection and recording are still carried out manually. The small waste bank warehouse does not allow for long-term storage of goods, so the maximum storage time is one week. The collected waste is non-organic or dry, such as used plastic bottles, but organic waste is also accepted. So far, the administrators have done packaging manually by stepping on the bottles before handing them to the intermediaries.



Figure 1. Diansati Warehouse



Figure 2. Waste Bank location is 200m from the bank of the Brantas River

Deposits to the intermediaries are made once a week with an income of between IDR 1,000,000 - IDR 2,000,000. The funds collected are used for operational savings and loans from customers and for customers. The administrators manage the funds, which will be returned to customers once a year before Eid al-Fitr as a form of savings. Financial recording and reporting are done using conventional notebooks; there are ledgers, cash flow books, and laptops as savings books held by each customer. Conditions have the potential for several aspects to be forgotten. Files to be recorded are lost, and the risk of human error occurs. According to Skinner (1954) on (Warsita. B, 2014) in the Technology Acceptance Model (TAM) Theory that the use of appropriate information technology can improve company performance and individual performance, reduce the risk of human error and increase job efficiency and effectiveness.



Figure 3. Housewives packing organic waste by stepping on the waste

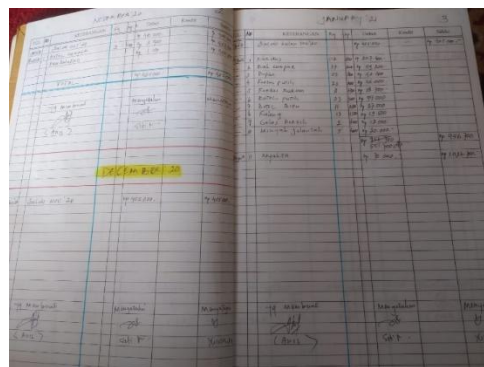


Figure 4. Record Book and Financial Report

Based on the condition of the partners, in general, the objectives of this community partnership empowerment program are:

1. Improving the management of Diansati Waste Bank management from a financial aspect with an information system
2. Improving the management of the Diansati waste bank management from a production aspect through automation of dry waste packing
3. Increasing additional income for Diansati waste bank with online marketing of organic waste creation products
4. Integration of information system technology in financial and production management so that the performance of the management is more effective and efficient in achieving zero waste in the RT 6 RW 2 environment
5. Diansati Waste Bank becomes a model waste bank for other areas in the City of Surabaya.

METHODS

They are improving the management of the Diansati waste bank in Jambangan Village through digitalization with several programs. The implementation of community service is carried out using a participatory method with a social community approach (Nurhikmawati & Yuhanna, 2020) namely emphasizing the active role and influence of society in acting and making decisions in everyday life. The main objective of implementing the service program is to help increase productivity from several perspectives, namely, the production and management aspects. The steps in achieving these goals are as follows:

1. Observation
An observation was conducted to obtain complete information about the village location, demographic conditions, and potential that the Diansati Waste Bank can develop. The community service team implemented the observation by searching for information via the Internet, visiting the location, and meeting the waste bank administrators to obtain more in-depth information before planning the program to be carried out.
2. Training
The training conducted was financial management and online marketing training through the creation of e-commerce and social media accounts for the waste bank, with participants being the administrators and members of the Diansati waste bank.
3. Making a plastic waste press machine
The application of technology through the provision of medium-capacity hydraulic press machine production tools for packing dry waste due to limited space or warehouses owned by the waste bank.

RESULTS AND DISCUSSION

Community service activities have been carried out by the service team, which consists of people from different study program backgrounds. The team carries out activities in accordance with the planning that has been carried out, namely field observation, determining program solutions, program planning, implementation, supervision, and evaluation of program success.

1. Observation

Based on the results of observations and data obtained and potential that can be used as a Community Service activity program by the team, problems were found that can be used as a background for implementing community service activities and solutions to the issues that arise in Diansati waste bank partners. The problems that arise are as follows:

- a. Additional income is obtained from the sale of waste creations, including soap from water hyacinth from the Brantas River, utilizing used cooking oil (oil left over from frying) for flower decorations and aromatherapy candles, leaf waste is used as a primary material for coloring, and batik cloth motifs and other creations. The high creativity and enthusiasm of the mothers who manage and are customers of this waste bank have obstacles in marketing products, which have been on a local scale. Several years ago, sales of creative products were obtained by consumers from the surrounding environment and foreign tourists, who the city government indeed directed to visit the waste bank on the Brantas River. However, there is no longer any direction from the city government for visits by foreign tourists, and local-scale purchases have decreased. They are losing out to products from factories.
 - b. Diansati Waste Bank has production constraints at the storage location, namely a small warehouse, so a practical storage technique is needed when there is a stock of dry waste, such as plastic bottles; it needs to be summarized to be stored in a larger volume. So far, packing and pressing have been done manually by being stepped on by the administrators and wrapped in sacks. This condition drains the time and energy of the administrators, most of whom are homemakers who also work. It still needs a large warehouse, which Diansati Waste Bank needs. In addition, stacking that is too long is susceptible to damage to goods by insects or rats..
- ### 2. Financial management training and online marketing training through creating e-commerce and social media accounts
- a. Financial management is essential for the community to control spending for business and independent or family financial management. Knowledge and application of sound financial management will enable you to realize the plans you want to achieve in the future and achieve economic independence through good financial literacy (Mauliddah et al., 2023).
 - b. Financial management training was attended by mothers who are administrators and members of the Diansati waste bank. The media in this training included PowerPoint slides and a sample form for writing financial records. A greater proportion of practice aims to make it easier for people to create products (Nurhikmawati & Yuhanna, 2020).
 - c. Financial Management Training According to SAK, ETAP was held on August 24, 2023, at the house of one of the administrators of the Diansati Waste Bank on Jl Jambangan 50 Kav No. 70 AB Jambangan Surabaya with 32 people. The material presented was related to the financial management of the waste bank according to SAK ETAP, stages of financial management up to the allocation of funds to meet the needs of the waste bank, and sound recording so that it is more accountable. In addition to the theoretical material being delivered, training participants were also given experience filling in the financial recording columns manually in terms of income and routine and long-term expenses. Based on statements from participants through evaluation activities. After participating in this training, partners have been able to apply financial records more regularly using the table provided by the community service team.



Figure 5. Documentation of Community Service Activities

Source: processed by the team, 2024

3. Creating social media and e-commerce accounts

The first stage in creating social media and e-commerce accounts is design development. The design development process can begin with design inspiration that can be inspired by nature and the environment around us, reviewing real examples that already exist or building creativity from the participants. (Nurhikmawati & Yuhanna, 2020). The IPTEKS provided for solving marketing problems involves creating accounts on social media and e-commerce, such as online stores. For social media accounts, Instagram @BanksampahDiansati is used, while for e-commerce accounts, accounts are created on the Shopee and Tokopedia applications with the account name @BanksampahDiansati.

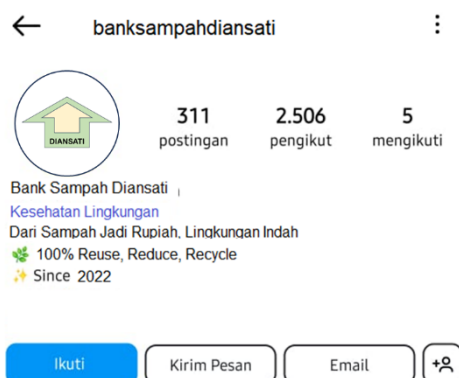


Figure 6. Social Media and E-commerce Account View

Source: processed by the team, 2024

4. Making a waste press machine

The IPTEKS provided to solve production problems is the provision of a dry waste press machine, such as plastic, cardboard, etc., with medium capacity. This press machine uses a semi-manual hydraulic technique. This can help improve the efficiency of dry waste packing work before it is deposited to collectors or intermediaries. Waste bank administrators no longer need to do manual packing with human power, namely by stepping on it. This press machine is a hydraulic press machine with a capacity of up to 10 tons with a working area of 41 x 33 cm. The waste to be pressed is put into a sack and placed on a square iron plate board as a working area and pressed with the available lever so that the waste is compacted with a smaller thickness so that it can be stacked more when stored in a narrow warehouse before depositing it to the collector.



Figure 7. View of Hydraulic Press Machine for Dry Waste
Source: processed by the team, 2024

After receiving training and community service activities, the administrators and members of the waste bank were very enthusiastic. Some comments and questions arose: "Recording expenses cannot be done routinely because of many activities, but if there is already a column like this, it is easier." In addition, "financial management with SAK ETAP becomes more transparent." Most participants stated that in the preparation of financial reports that were not yet in accordance, sometimes there was data that was archived properly.

CONCLUSION

The complete stages of community service activities have been carried out so that the objectives to be achieved through these programs can be realized. This can be based on the results of the evaluation that has been carried out and on the implementation practices when the activities are carried out. All participants are active and have a high interest in being involved in financial management and online marketing. The RT head and his staff also helped and provided full support during the activities. Full support from the ranks of the village apparatus because this program will be able to improve the economy and independence of the community through community service activities for members and administrators of the Diansati Waste Bank.

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