

# Improving the diversification of herbal pastries and digital marketing applications to increase product sales

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## ABSTRACT

Members of KWT Sewagati Pasekan Lor encountered difficulties as a result of their lack of knowledge and expertise about the diversification of various processed herbal pastries, food labeling and packaging technology, and digital-based product marketing. This volunteering project aims to improve members' knowledge and abilities in relation to the variety of processed herbal pastries, label and packaging technology, and digital-based marketing. The community service method used is counseling which includes theories regarding the diversification of processed herbal pastries, brands, and types of packaging, as well as digital-based marketing practices. The counseling continued with making herbal pastries such as turmeric cakes, cinnamon egg rolls, and ginger nastar. The training on labeling and packaging as well as digital-based marketing practices. The outcomes of this community service project demonstrate that the Partner's knowledge about the variety of processed herbal pastries increased from 50% to 90%, partners' skills in processing various herbal pastries rose from 55% to 80%, the capacity for comprehending and creating labels and food packaging also improved from 45% to 80% and knowledge and skills in digital marketing increased from 40% to 75%.

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## 1. INTRODUCTION

The COVID-19 pandemic in Indonesia, which took place from 2020 to 2022, harmed the world economy and global society. One of the areas affected is the business sector. Many people are forced to work from home and even experience layoffs. The pandemic also impacts the economic resilience of families, MSMEs, KWTs, and small traders who depend on business profits for their livelihood. One of the community groups affected is the Sewagati Women's Farmers Group (KWT) located in Pasekan Lor, RT 04/04 Balecatu Gamping Sleman Yogyakarta, with 20 active members and chaired by Mrs. Sumarni.

Apart from carrying out land processing activities, KWT Sewagati also carries out food processing activities. Since the beginning of 2019, KWT Sewagati has been actively producing dry cakes sold as snacks and souvenirs. The dry cakes made by KWT Sewagati are very popular with the public because,

apart from the affordable price, the product quality is no less competitive. Based on information from the chairman of KWT Sewagati, Mrs. Sumarni, before the Covid-19 pandemic took place, in the month before the Covid-19 pandemic, KWT Sewagati was able to produce an average of 300 jars of dry cakes every three months, with an average turnover of Rp. 2,000,000.00 per month. However, during the pandemic, production numbers decreased drastically to 50 jars every four months, with an average monthly turnover of only Rp. 250,000.00. Moreover, production stopped for eight months due to the need for more buyers. KWT Sewagati usually produces pastries, including pineapple cake, castangel, and snow princess cake, with prices ranging from IDR 20,000/jar.

KWT Sewagati will carry out its final production in January 2023 due to a decrease in demand. Over the last four months, December 2022 has been the month with the highest order because it coincides with Christmas and New Year celebrations. However, demand declined again after that, and there was no production for several months. While processing cookies, KWT Sewagati still uses elementary equipment such as a 'tangkring" stove and spatula. The use of mixers has not been implemented yet due to limited capital.

Diversifying and developing a variety of herbal dry cakes is one step that can be taken to increase the selling price of dry cake products. Herbal plants, such as ginger, turmeric, and cinnamon, grow widely in Indonesia, but the diversification of processed products still needs to be widespread. Active substances such as zingerone and other antioxidant compounds are contained in many rhizomes of this plant (Majdi & Rizkiwati, 2021). One of the diversification innovations carried out is by further processing it into a mixture of herbal-based dry cakes, such as turmeric dry cakes (Pujimulyani et al., 2023; Setiyoko & Astuti, 2019), cinnamon egg rolls (Ratnaningtyas, 2018), and ginger pineapple. Innovation in herbal cake products is essential because this product is already popular among the public. Apart from that, this product has the advantage of containing antioxidant compounds, which help increase the body's endurance.

Product marketing is one of the critical factors in achieving success in an increasingly competitive market. The rapid development of information technology has encouraged the development of digital marketing disciplines and concepts. Not only that, but digital marketing also makes it easier for consumers to find information about products and compare the prices and quality of the various brands offered. Consumers can easily see reviews and testimonials from other users before buying a product. Consumers are more helped choosing products from confident marketers because the information they need can be easily accessed. Apart from that, the ease of ordering and purchasing products is also an advantage for consumers (Nurpratama & Anwar, 2020). In the industrial world, especially at the MSME level, often integrated digital marketing activities based on online media are not implemented or ignored by entrepreneurs. In fact, if products from MSMEs are managed well from a marketing perspective, their potential is no less competitive than mass products from large companies (Lestari et al., 2021).

In diversifying various herbal pastries in selling products, having safe and attractive packaging is very important to provide more value to the product. Attractive and unique packaging is essential to attract every new product that will be launched on the market. Herbal dry cake hampers are one packaging option that the producers can use. The producers must recognize the importance of packaging in increasing the value and function of a product. This packaging can have a genuinely innovative look, style, materials, and design or modify from the previous packaging. Some of the functions of packaging include protecting product quality, increasing product durability, as a medium for product and brand communication to consumers, supporting the distribution process from producers to consumers, enabling mass production, and triggering consumer interest. They are buying or using the product until the final decision to purchase or use the product (Kusumawati et al., 2022). By processing herbal

dry cakes innovatively, it can increase sales value and become a source of income for the community through the diversification of dry cake products and the application of attractive and efficient digital packaging and marketing technology.

To improve the skills of the Sewagati Women (KWT) group, located in the Pasekan Lor Hamlet, Balecatur Village, Gamping District, Sleman Regency, community service has been started. The initiative's main goal is to give them more influence in areas like internet marketing, packaging technology, and various processed herbal cakes. The community service program aims to increase their competence by strengthening their knowledge and abilities through these programs.

## 2. METHODS

This community service was carried out on 09 September 2023 at the house of the Chairman of KWT Sewagati Pasekan Lor using several methods. The stages of this community service activity include: partner problem analysis; create solutions to partner problems, conducting outreach regarding the diversification of various herbal pastry preparations (turmeric cookies, cinnamon egg rolls, and ginger nastar), practice and training in making various herbal pastries (turmeric cookies, cinnamon egg rolls, ginger nastar), education regarding various types of labels, packaging and packaging methods, online product marketing counseling and practices, delivery of production equipment assistance and monitoring and evaluation of community service programs. The method used is presented in Figure 1.

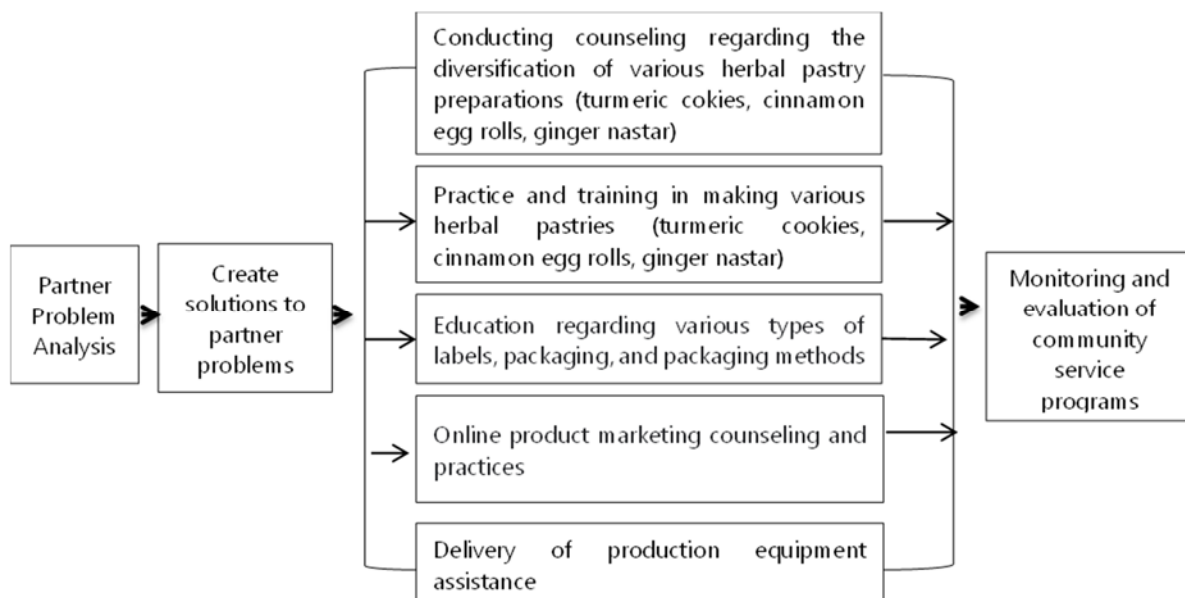


Figure 1. Stages of implementing service activities

### Analyze Partner Problems

The scenario analysis's first phase is a thorough procedure that includes a number of important elements. It starts with the methodical data collection, which includes obtaining relevant information and meticulously recording different features. This data serves as the basis for additional investigation. Apart from gathering data, an essential aspect of the procedure is holding productive discussions with

Mrs. Sumarni, the KWT Sewagati Chairperson. These sessions accomplish two goals: they provide a thorough grasp of the organization's concerns and pinpoint the problems that need the cooperation of their partners right now. To ensure a planned and knowledgeable approach to tackling the difficulties experienced by KWT Sewagati and its partners, the analysis aims to shed light on the current concerns and the highest priority issues by sharing views and viewpoints throughout these encounters.

### **Creating Solution to Overcome the Problems**

Solutions to these problems include: (1) Conducting outreach regarding the diversification of various herbal pastry. Counseling was given to members of KWT Sewagati Pasekan Lor with the aim of increasing knowledge about the benefits of herbal pastry, the nutritional content, and how to process pastry into contemporary foods such as turmeric cookies, cinnamon egg rolls, ginger nastar. Through this outreach, it is hoped that KWT Sewagati members can expand their knowledge in producing various products made from pastry which have a higher selling value; (2) Practice and training in making various processed of herbal pastry. In this training, six students and a laboratory technician acted as facilitators. Partners are divided into three groups, each comprising 5-6 people. The first group practiced making turmeric cookies, the second group practiced making cinnamon egg rolls, and the third group practiced making ginger nastar. This group division aims to optimize training time so that it is manageable. After that, group members can ask each other questions and practice between groups on how to process their respective products. Through this method, each group member will have the skills to process all products being practiced. The service team, students, and laboratory technicians assisted in implementing this activity; (3) Education regarding various types of labels, packaging, and packaging methods. Apart from that, this counseling also explains the importance of packaging and labels in marketing food products. Packaging not only protects the product but can also increase the attractiveness of consumers to buy the product (Kusumawati et al., 2020). The label, on the other hand, functions as a product identity so that consumers can choose the right product (Pratiwi, 2019); (4) Counseling and online product marketing practices. Providing counseling regarding digital marketing by providing examples of using Facebook, Instagram, and also status on WhatsApp to partners. After the counseling, participants were invited to practice marketing their products online using Facebook, Instagram, and status on WhatsApp, which can be accessed by everyone. After the counseling, a question-and-answer session is held between partners and resource persons to ensure a practical two-way discussion; (5) Delivery of production equipment assistance. In this service activity, the service team assisted in the form of equipment needed to support the independent production process of various processed purple herbal pastries. Some equipments handed over to partners include a mixer, gas stove, egg roll-making equipment, Cookie maker, and packaging sets.

### **Monitoring and Evaluation**

The final step is monitoring and evaluation. This stage is completed after the counseling, training, and assistance process for independent production. Evaluation is carried out both at the beginning and end of the activity. The pre-test is carried out before the training starts, while the post-test is carried out after the activity is finished. This evaluation aims to see the success of the service program in increasing the knowledge, skills, and awareness of KWT Sewagati members regarding the diversification of herbal pastry processing, herbal pastry processing skills, learning about labels, packaging, and digital marketing. Besides that, monitoring is also helpful for providing consultations regarding products, costs, and equipment.

### 3. RESULTS AND DISCUSSION

#### Counseling and practice of diversifying herbal cake preparations

Counseling was given to members of KWT Sewagati Pasekan Lor to increase their knowledge about the benefits of herbal cookies, the nutritional content, and how to process herbal pastries such as cinnamon egg rolls, ginger nastar and turmeric cookies. With this outreach, KWT Sewagati members can increase their knowledge in producing various herbal cake products with higher selling prices than in general dry cakes. The activity ended with a question-and-answer session, where participants were allowed to ask questions about things, they still needed help understanding regarding processed herbal pastries. Extension activities regarding the diversification of processed herbal pastries are shown in Figure 2.



**Figure 2.** Counseling regarding diversification of processed herbal pastries

After the counseling activities were completed, it continued with the practice of processing various herbal pastries, including cinnamon egg rolls, ginger pineapple, and turmeric cookies. In this activity, the service team was assisted by six students and two technicians as facilitators. The training activities for processing herbal cookies are presented in Figure 3. The products resulting from the training are presented in the picture 4.



**Figure 3.** Training on processing herbal pastries

**Figure 4.** Herbal pastry products

#### Counseling and Training Regarding Labels, Packaging, and Digital Marketing

In this counseling, participants were given an explanation about the importance of packaging and labels in marketing food products. Packaging not only functions to protect the product but also



has an essential role in influencing consumers to decide to buy the product (Kusumawati et al., 2020). The function of a label is as a product identity that provides essential information to consumers. This information includes product composition, expiration date, instructions for use, nutritional value, and possibly safety or halal certification. With clear and informative labels, consumers can choose products that suit their needs (Pratiwi, 2019). The strategic role of digital marketing is something essential to attract consumers and directs them to communicate electronically and conventionally (Saputra et al., 2020). A digital marketing strategy using social media is fundamental because it can provide knowledge and input to business actors about ways or stages of expanding networks through social media to increase competitive advantages for business actors. The training results are presented in Figures 5.



**Figure 5.** Pastries packaging

Participants have explained the concept of digital-based marketing, a general explanation of the development of digital marketing, as well as the advantages and disadvantages of its use. Digital marketing is marketing activities based on digital media (Saputra et al., 2020). Digital marketing refers to the use of digital technology to achieve marketing targets and adapt or develop marketing strategies carried out by a company (Gunawan & Septianie, 2021; Septiani, 2023). In Indonesia, Facebook and Instagram are the two most frequently used social media platforms, ranking second and third. Sagita & Wijaya (2022) state that digital marketing is carried out through social media platforms such as Facebook, Instagram, and WhatsApp, aiming to introduce products to a broader audience. Trust is the element that affects customers' desire for buying goods through online media. One of the cornerstones of every business is trust; if there is mutual trust between two or more parties, a commercial transaction will take place. Trust was shown to have a considerable beneficial impact on purchase intention in online buying and selling transactions (Putri & Sudiksa, 2018). The intention to purchase goods through social media is positively correlated with customer confidence in online product vendors (Manzoor et al., 2020). Based on the description above, we explained and trained these two social media platforms in this activity. Socialization activities regarding digital marketing are presented in Figure 6.

Participants are also taught about the steps to create a Facebook account and a Facebook Page account. After successfully registering, they are given guidance on the various icons on the main Facebook page and instructions on uploading photos and editing their profile. Users need pages on Facebook if they want to do professional marketing because Facebook prohibits using personal accounts for buying and selling activities and limits the number of friends to 5,000. With Pages, there is no limit to the number of followers; they can openly become followers and follow the latest news from users without needing approval. The social media accounts Facebook and Instagram are presented in Figure 7.

After completing training and counseling on using Facebook, the next step is training to create an Instagram account. The methods used to create an account are like creating an account on Facebook.

In this training session, participants are also taught about techniques for uploading and editing photos and other topics related to content management on social media platforms. Participants are taught how to upload pictures to social media platforms, including simple photo editing techniques to improve image quality. Apart from that, participants also learned several tips and tricks for creating exciting and relevant content to attract social media users' attention and increase potential consumers' involvement in interactions and transactions in marketing.



**Figure 6.** Counseling regarding digital marketing  
**Figure 7.** The social media accounts Facebook and Instagram

### **Delivery of Production Equipment Assistance**

In this service activity, the service team assisted in the form of equipment needed to support the independent production process of various processed herbal pastries. Some of the equipment handed over to partners includes a mixer, gas stove, egg roll-making equipment, Cookie maker, and packaging sets. The head of the service team handed over this equipment to the head of the KWT Sewagati Pasekan Lor. After the equipment handover process is carried out, the service team provides assistance in using the equipment. Partners are taught how to use the equipment supplied for independent production. The distribution of production equipment assistance is presented in Figure 8.



**Figure 8.** Delivery of production equipment assistance

### **Monitoring and Evaluation**

This evaluation was carried out to measure the effectiveness of the service in increasing the knowledge, skills, and awareness of partners, including understanding the diversification of herbal dry

cake processing, herbal dry cake processing skills, knowledge of label packaging, and learning and expertise in digital marketing. Participants were also interested in making herbal pastries, and they said they made nastar ginger, turmeric cookies and cinnamon egg rolls turn out to be very easy. Tools and ingredients for making those pastries are easy to find at cake supply stores. And they can use the ginger plants, turmeric plants and cinnamon plants planted in their yard. Apart from that, the high selling prices of those herbal pastries motivate participants to improve their family's economy. After participating in this activity, participants are expected to have competence in making quality cake products, produce according to work procedures, and be able to increase their potential and that of the environment. This evaluation shows that the service activities have succeeded in increasing the participants' knowledge, skills, and understanding regarding the diversification of herbal pastries processing, food labels and packaging, and digital marketing. The evaluation results of these service activities are presented in Figure 9.

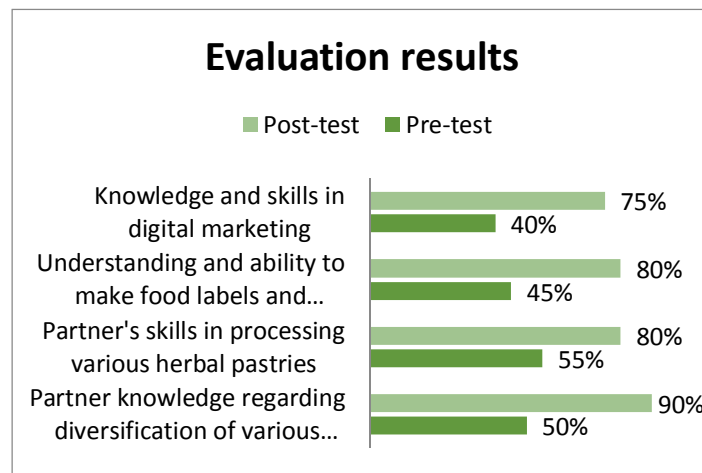


Figure 9. Evaluation results

From Figure 8, it can be seen that partners' knowledge regarding diversification of processing various herbal dry cakes increased from 50% to 90%, partner skills in processing different herbal dry cakes rose from 55% to 80%, and there was also an increase in understanding and skills in making labels. And food packaging increased from 45% to 80%, and knowledge and skills in digital marketing increased from 40% to 75%. The results of this evaluation show that the service activities have succeeded in increasing the participants' knowledge, skills, and understanding regarding the diversification of herbal pastries processing, food labels and packaging, and digital marketing. This result indicates that the community service program has successfully delivered benefits and empowered the community to develop businesses for processed herbal pastries products.

#### 4. CONCLUSION AND RECOMMENDATIONS

Members of KWT Sewagati Pasekan Lor encountered difficulties as a result of their lack of knowledge and expertise about the diversification of various processed herbal cakes, food labeling and packaging technology, and digital-based product marketing. This community service aims to improve members' knowledge and abilities in relation to the variety of processed herbal pastries, label and packaging technology, and digital-based marketing. The outcomes of this community service project



demonstrate that partner is knowledgeable about the variety of processed herbal cakes increased from 50% to 90%, partners' skills in processing various herbal cakes rose from 55% to 80%, the capacity for comprehending and creating labels and food packaging also improved from 45% to 80% and knowledge and skills in digital marketing increased from 40% to 75%. Partners who have received this counseling and training can develop their own herbal pastry business. Herbal pastry can be a profitable business opportunity for helping KWT Sewagati members generates additional income.

Limited raw materials for herbal plants still depend on stock in traditional markets. Partners need to familiarize themselves with selling/marketing products using digital marketing intensively. There is a need to increase knowledge regarding the procedures and methods for obtaining a PIRT certificate. Based on the limitations above, the suggestion for further service is to provide training and cultivation of herbal plants, more intensive assistance and training regarding product marketing using digital marketing, counseling, and assistance to obtain a PIRT certificate from the relevant Health Service.

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