

Improving The Performance of Omah Oveje MSME in Banyuanyar Village, Ampel, Boyolali Regency

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Abstract

This Community Service Program (PKM) aims to improve the performance of UMKM Omah Varian Jahe in Dukuh Jumbleng, Desa Banyuanyar, Boyolali, by addressing production and marketing challenges. The identified issues include poor product quality (taste, color, and cleanliness) due to manual ginger cleaning, low product demand, and insufficient sales performance, with sales only reaching 60-70 units per month and low pricing. Other problems include inadequate packaging (clear standing pouch) and unattractive labels, limited marketing strategies, and a lack of understanding in price calculation. In response, the PKM team provided training on production cost calculations, product photography, social media management, and selling via online marketplaces. Additionally, a ginger washing and peeling machine was provided. As a result, the team successfully facilitated the procurement of packaging materials (plastic jars, bottles, and stickers), created a new Instagram account for marketing, and improved production cost calculation knowledge by more than 85%. Furthermore, 500 custom standing pouches were provided for the instant ginger powder product, which is currently in production. These initiatives are expected to enhance product quality, marketing, and sales performance, helping UMKM Omah Varian Jahe grow

Keywords: Ginger washing machine, instant ginger, marketing strategy, omah oveje, SME product photography

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INTRODUCTION

MSMEs are an important sector in regional and national economic development, including in Boyolali Regency, which has a relatively lower number of MSMEs compared to other areas in Central Java (Statistics Indonesia of Boyolali Regency, 2019). The Boyolali Regency Government has also highlighted that MSME development has not been optimal, making human resource capacity building and product standardization key priorities in the regional development agenda for 2021–2026 (Regent of Boyolali, 2021). Village-based MSME development initiatives have been carried out in several areas, including Kangkung, Sumberagung, and Pentur Villages, through training and empowerment programs involving academic partners (Kurniawati et al., 2020; Kusumaningrum et al., 2023; Ummah & Lisdiana, 2021).

Banyuanyar Village is one of the villages with potential in natural tourism, environmental education, agriculture, livestock farming, and cultural activities. The village head implements the “One Village, One Product” program, in which each hamlet develops a signature product, including the “Ginger Village” (Kampung Jahe) in Jumbleng Hamlet. In this area, there is an MSME called Omah Oveje that produces various ginger-based products such as herbal instant ginger powder, ginger dodol, ginger brittle (ampyang jahe), ginger pineapple tarts (nastar jahe), and ginger candies.

The flagship product routinely produced is herbal instant ginger powder. Each production cycle yields 20 packages of 100 grams each, with a capacity of up to 200 packages per month. However, sales reach only 60–70 packages per month at a price of Rp10,000, which is lower than the market price for similar products. The inaccurate pricing is influenced by the MSME owner's limited understanding of production cost calculations, which is a common issue among small-scale MSMEs (Setiadi, 2014). Low sales are also affected by unattractive packaging, simple labeling, and limited marketing efforts that rely solely on a village café and an old, inactive Instagram account. In fact, digital marketing has been proven effective in enhancing MSME visibility and sales (Kusumaningrum et al., 2023), including through Instagram Business (Permana & Pratiwi, 2021) and improved visual branding strategies (Nurlaily et al., 2021; Wijana et al., 2024). Additionally, the use of online

marketplaces can broaden consumer reach (Ma'rifah et al., 2022; Saputri et al., 2023).

Product quality issues also arise due to the manual ginger-washing process, resulting in a bitter taste, inconsistent powder color, and the presence of foreign particles in the ginger powder. The limited quality control indicates the need for technological innovation to support the production process, which aligns with the needs of local MSMEs to upgrade and improve their competitiveness (Limaseto, 2023).

METHOD

The implementation method of the community service program (PKM) was designed based on the characteristics of the Omah Oveje MSME, which is managed by adult community members; therefore, an andragogical approach is appropriate. This approach enables participants to understand the program's benefits independently and collaboratively. The technique employed is the utilization of existing assets and resources available in Banyuanyar Village, in line with the concept of asset-based community development (Ummah & Lisdiana, 2021).

The activities were conducted through training and mentoring, which are effective approaches for MSMEs because they combine theoretical understanding with practical application. The training sessions covered production cost management, product photography, social media management, and marketing through online marketplaces. In addition, the PKM team provided production tools in the form of a ginger washing and peeling machine, as well as supporting equipment such as a product photography backdrop. The selection of these methods aligns with the needs of MSMEs to improve competency, productivity, and competitiveness (Kurniawati et al., 2020; Kusumaningrum et al., 2023).

The participants vary across each training depending on the needs. As every member is highly involved in the financial aspect of the community, so the production cost management training was attended not only by the treasurer or the financial manager, but also by seven other members of the community. The production training was attended by at least three member who are in charge of the production process. Finally the rest of the training were participated specifically one person who is in charge of product

photography, social media management and marketing.

In order to measure the improvement in knowledge about production cost, we prepared written pre-test and post-test questionnaire, while other materials were printed and distributed to the participants. The instruments we used for other training were mostly handphone for the purpose of taking picture and managing social media and promotion.

RESULT AND DISCUSSION

Training on Cost of Goods Manufactured (COGM) Calculation

The training on calculating the Cost of Goods Manufactured (COGM) was conducted to improve the knowledge of Omah Oveje MSME partners in determining the Cost of Goods Sold (COGS). The PKM team from the Vocational College of Universitas Diponegoro delivered the training materials based on the needs identified and the data provided by the partners. The training covered components such as direct material costs, direct labor costs, and overhead costs, which were introduced at the beginning to help participants understand the differences between these cost categories. At the end of the session, the trainer, Anafil Windriya, S.E., M.M., explained the steps for preparing production cost calculations. This training is crucial given that many MSMEs set selling prices without a proper cost calculation basis (Setiadi, 2014).



Figure 1. COGM Calculation Training Activities

To measure the improvement in partners' knowledge, a pretest was administered before the training and a posttest afterward. The results showed a significant increase in participants' understanding. Based on the pretest and posttest data, most partners experienced higher scores after participating in the COGM training. These

findings align with empowerment programs in other regions, which demonstrate that cost management training can enhance business management competencies among MSME actors (Kurniawati et al., 2020).

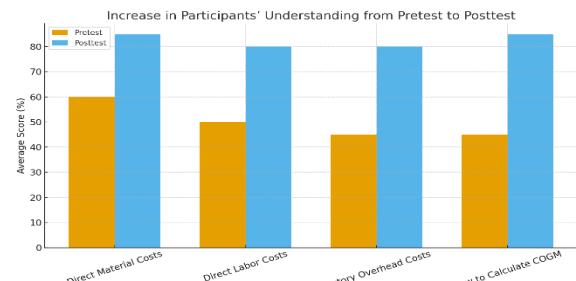


Figure 2. Results of Participants' Improved Understanding from the Training

Product Photography Training and Packaging Procurement

Product Photography Training was conducted to enhance the skills of Omah Oveje MSME partners in producing high-quality product photos. The PKM team from the Vocational College of Universitas Diponegoro provided training that covered key aspects of product photography, including composition techniques, lighting, and proper background selection. Improvements in these skills were evident from the more professional and appealing photos produced, enabling the products to be showcased more effectively for marketing purposes. Strong visual branding has been proven to increase consumer interest in digital marketing (Nurlaili et al., 2021).

In addition to the training, the implementation team also assisted participants during the hands-on product photography practice session for ginger products. The PKM team provided a foldable photo backdrop, which was later handed over to the partners. This backdrop was used to photograph the instant ginger powder products, resulting in more marketable and aesthetically pleasing images. These photos will be utilized in the next training session on Instagram account management, as high-quality visuals can strengthen visual identity on social media platforms. (Wijana et al., 2024). The purpose and the result of this training is similar to what Saptiyono et al., (2021) has done in their community service towards one of the SMEs in Semarang.



Figure 3. Product Photography Training

Below are the some of the photos resulted from the training.



Figure 4. Product Photo Result

The product photos generated from the training were also utilized in designing the new packaging. The new packaging provided to the partners includes plastic jars with stickers, plastic bottles with stickers, and custom standing pouches. Plastic jars were proposed as a more durable and visually appealing packaging alternative, while plastic bottles will be used for new product variants. Although standing pouches were not part of the initial procurement plan, the PKM team decided to facilitate the production of custom standing pouches so that the MSME could meet modern packaging standards. The use of more attractive and product-appropriate packaging has been proven to enhance brand image, consumer appeal, and the selling value of MSME products (Kusumaningrum et al., 2023). The custom standing pouches are currently in production and are expected to be completed soon, allowing the products to be marketed with a more professional appearance.



Figure 5. New Packaging

Social Media Management Training

To address the marketing challenges faced by Omah Oveje MSME, the PKM team conducted a Marketing Strategy Training session. The initial plan to reactivate the old Instagram account could not be implemented because the MSME owner no longer knew the username and password. The training was also delayed because most MSME managers were elderly and thus less skilled in using social media.

The training was finally carried out after a family member agreed to take on the role of social media administrator. The new admin already had basic knowledge of using Instagram and the Shopee marketplace. The PKM team, with Stacia Reviany Mege, S.E., M.S.M., as the speaker, provided explanations on the use of Instagram Business, digital marketing features, and hands-on practice for initial content uploads using product photos from the previous photography training. This approach aligns with studies on the effectiveness of Instagram in MSME marketing (Permana & Pratiwi, 2021; Wijana et al., 2024).



Figure 6. Team member provided Assistance in Marketing Strategy Training

The main obstacle during the training was the unstable internet connection, which prevented the creation of Instagram and Shopee accounts on the same day. However, the social media admin was able to complete the creation of the Instagram account the following day, indicating that the participant had understood the fundamentals of social media management (Ma'rifah et al., 2022).

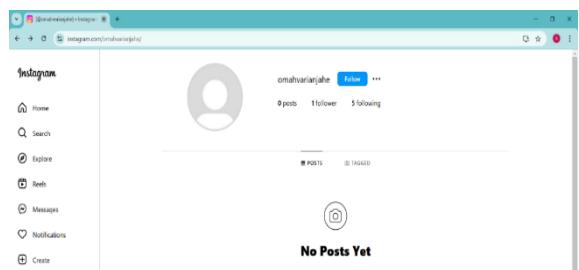


Figure 7. Omah Oveje New Instagram Account

After the Instagram account was successfully created, the PKM team provided training on content design (Instagram feeds) using the Canva application. The training focused on color selection, visual consistency with the logo and products, and the use of previously generated photos. MBKM students assisted the admin in drafting captions, selecting hashtags, and developing posting strategies to make the content more engaging and relevant to the target audience, as commonly practiced in social media performance analysis (Wijana et al., 2024). This activity was in line with the previous community service from Permana & Pratiwi (2021) where they trained one of the culinary SMEs.

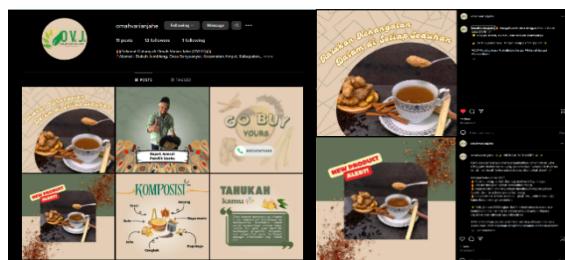


Figure 8. Display of the Omah Oveje MSME Instagram Account with Feed Posts

Development of Ginger Washing and Peeling Machine and Training on Machine Operation

To improve production efficiency, the PKM team developed a ginger washing and peeling machine for the Omah Oveje MSME. The machine was designed with a capacity of 5 kg and underwent several adjustments—such as repositioning the motor, adding an output door for the ginger, and installing a wastewater drainage channel—to make it easier for partners to use. After the construction process was completed, the PKM team, together with Ibu Sri Utami Handayani, S.T., M.T., as a mechanical engineering expert, conducted a series of ginger-washing trials to ensure the machine functioned properly. The next stage was training in machine operation at the MSME site, where participants directly practiced how to use the equipment with ginger harvested from their own fields. This technological innovation aligns with the need for MSMEs to adopt appropriate technology to improve product quality and production efficiency (Limaseto, 2023).

From the training, the managers of Omah Oveje MSME were able to observe that the ginger produced was clean from soil residue and adequately peeled in less than 1 minute for 2 kg of ginger. In comparison, the time required to

manually wash and peel 5 kg of ginger is 3 hours or 180 minutes.



Figure 9. Training on Operating the Ginger Washing and Peeling Machine

When adjusted proportionally, washing and peeling 5 kg of ginger using the machine would take only 2.5 minutes. Thus, the time efficiency gained is as follows:

$$\text{Time Efficiency} = \text{Manual Time} \div \text{Machine Time}$$

$$\text{Time Efficiency} = 180 \text{ minutes} \div 2.5 \text{ minutes} = 72 \text{ times more efficient}$$

With the introduction of this machine, the volume of water used during the washing and peeling process is significantly reduced compared to manual washing. The processing time is also much shorter, and the results are highly satisfactory.

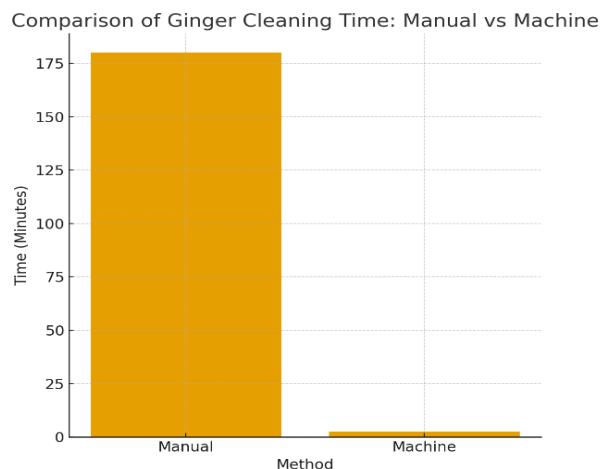


Figure 10. Graph of Manual vs Machine Ginger Cleaning Time Comparison

CONCLUSION

Program PKM strengthened the performance readiness of Omah Oveje MSME by improving production support and digital marketing capability. The partner demonstrated an improvement of more than 85% in knowledge and skills related to calculating the cost of goods manufactured (COGM) and managing sales

through online marketplaces, indicating stronger pricing and operational decision-making capacity. The provision of supporting equipment and marketing materials further contributed to more standardized production processes and improved packaging quality. Nevertheless, unstable internet connectivity, limited human resources, and the temporary unavailability of product stock constrained several mentoring sessions and limited the achievement of some targets. Therefore, follow-up assistance should prioritize improving connectivity solutions and production continuity to ensure the sustainability and scalability of performance gains.

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