

THE UTILIZATION OF AUTOMATIC PLASTIC SEAL PRESS MACHINES TO IMPROVE PRODUCT PACKAGING QUALITY OF BREAD ENTREPRENEURS IN SINGOSARI, MALANG

Zakki Fuadi Emzain ^{1*}, Agus Harijono ², AM. Mufarrih ³, Nurul Hidayatinnisa ⁴,
Vinan Viyus ⁵, Etik Puspitasari ⁶, Utsman Syah Amrullah ⁷, Suyanta ⁸

Politeknik Negeri Malang

Jl. Soekarno-Hatta No. 9, Malang 65141, Indonesia.

^{1*} zfemzain@polinema.ac.id, ² agus.harijono@polinema.ac.id, ³ mufarrih@polinema.ac.id,

⁴ nurulnisa@polinema.ac.id, ⁵ vinan.viyus@polinema.ac.id,

⁶ etik.puspitasari@polinema.ac.id, ⁷ utsman.syah@polinema.ac.id,

⁸ suyanta@polinema.ac.id

Abstract

Micro, Small, and Medium Enterprises (UMKM) are one of the driving forces of the economy in a local area and a booster for the community's welfare. One of the obstacles often faced by the bread entrepreneurs in Singosari District, Malang Regency, is the lack of quality product packaging that still uses manual tools and is not optimal in creating marketing content. This community service aims to provide automatic plastic seal press machines and training on marketing content creation for micro-business actors in the bread entrepreneurs so that it is expected to increase partners' competitiveness. The stages of community service were observation and coordination, providing machines, handing over machines, holding training, and evaluation. The results of the community service activities showed that the training participants were enthusiastic and actively participated during the training. The quality of product packaging after using a plastic seal press machine has also improved, evidenced by a tighter and well-protected packaging seal. The copywriting training has also broadened the participants' knowledge about strategies for creating product marketing content by utilizing applications available on Android.

Keywords: Automatic Plastic Seal Press Machine, Bread Entrepreneurs, Copywriting Marketing, Packaging Quality.

INTRODUCTION

One of the primary human needs is food, and the government is responsible for ensuring this basic need for society in terms of quality, quantity, and easy access (Apriyani et al., 2021). Facts prove that Indonesia is a country that is abundant in various types of food. It is not surprising that many processed food products are also exported abroad. One example of its product is pastry food, which has become a tradition for Indonesians to eat pastries as a snack or snack when relaxing.

Micro, Small and Medium Enterprises (MSMEs) produce most of these snacks. MSMEs are one of the driving forces of an area's economy and a booster for people's welfare (Qosim et al., 2022). The number of MSMEs in 2019 has reached more than 56 million. In general, the obstacles for MSMEs are limited capital, difficulty creating brands, lack of innovation in product and packaging design, and difficulty creating a brand image (Marlinah, 2020).

The government's efforts are in the 2014 National Entrepreneurship Movement by increasing guidance to MSMEs. The State Ministry for Cooperatives and Small and Medium Enterprises said that Small and Medium Enterprises Cooperatives (KUKM) could potentially develop the national economy (Widiati, 2019). The Community Service Program (PPM) is also one of the media to increase MSMEs because it is the main topic in the PPM program either through universities or through ministries (Kemendikbudristek) (Prahutama, 2018).

The MSME problem is that the packaging is generally still simple. Even for the home industry scale, it is still available manually, namely by burning plastic packaging using a candle. Some are tied with rubber and string or staples. Some have used a hand sealer tool. However, the packaging method mentioned above has drawbacks. It is still untidy, leaves mark and blackening on the plastic, is not dense enough, is dangerously sharp, and cannot be processed quickly. At the same time, packaging is important in marketing as a visual medium for consumers who provide product images (Uchyani & Irianto, 2015).

UMKM Tsuroyya Bakery is a business owned by Mr. Saiful Anwar, having his address in Watugede Village, Singosari, Malang, and produces various types of bread such as original bread, donuts and banana cake. Currently, sales are still stuck around the village, after six years of management, where every day produces approximately 3 kg of bread dough. These MSMEs should have great potential to increase due to limited human resources, which are only managed by family partners, lack of marketing knowledge, and lack of tools/machines to support the production process. In addition, the obstacle encountered was when the packaging process was still manual, using OPP plastic one by one. Figure 1 shows the manual packaging process. Because the limited packaging causes it to be less dense and strong, the product life decreases, and there is often a return from sales because the product is sluggish.



Figure 1. Previously used manual OPP plastic with isolation

From the partners' problems mentioned above, it can be concluded that one solution to these obstacles is the need for automatic plastic seal press support tools/machines to package products so that they are stronger, tighter, neater, and faster (Alfatiyah et al., 2021). It is also necessary to carry out training and supporting skills such as machine use training and digital

product content marketing training (Mufarrih et al., 2022).

From the situation analysis and referring to the partner's problems, it is necessary to have a Community Service Program (PPM) to improve the quality of product packaging using automatic plastic seal press machines as a substitution process for science and technology for appropriate technology with packaging automation and with the provision of knowledge and supporting training in bread entrepreneurs, Singosari District, Malang Regency (Emzain et al., 2022; Rizza et al., 2020). This PPM activity is expected to increase the quality and quantity of product packaging using an automatic plastic seal press machine and increase knowledge and skills in loading online marketing content to support business for Tsurroya Bakery business actors. So that competitiveness increases, developed businesses are created, income increases, and the quality and welfare of people's lives also increases.

IMPLEMENTATION METHOD

The method used in community service activities (PPM) is to approach partners, namely the MSME community, and formulate solutions to problems faced by partners. There are five main stages in this community service activity (PPM), as shown in Figure 2 (Agustriyana et al., 2022; Witono et al., 2021).

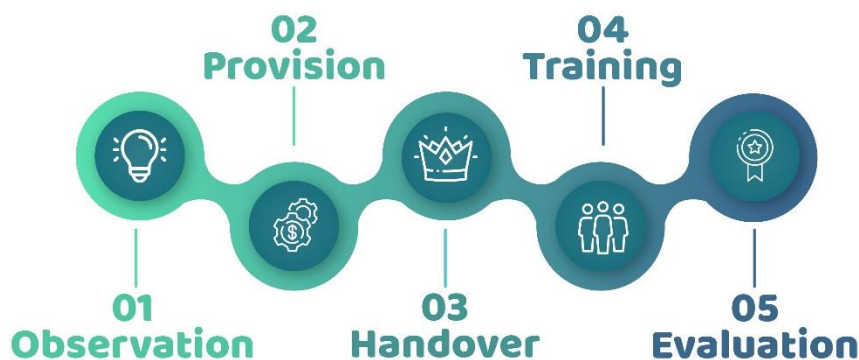


Figure 2. Stages of community service implementation

1. Observation and coordination

This observation and coordination were carried out by visiting the home of the Tsurroya Bakery partners located in Watugede Village, Singosari District. This observation aims to determine the conditions and facilities the Tsurroya Bakery owns in their business production. Meanwhile, coordination aims to discuss problems and deficiencies experienced by partners so far and formulate solutions offered to partners and record the need for tools or machines and the required training. Then, coordination is also discussed for determining the time plan for implementing the machine handover activities and training.

2. Provision and testing of plastic seal press machines

At this stage, searching for and purchasing tools, machines, spare parts, and materials needed to supply and test practical seal press machines is carried out online and offline. The provision of an automatic, practical seal press machine is done based on the data obtained during the initial observation. The data collected includes the specifications of the machine

that are suitable as needed, including the type of machine model, machine dimensions, available power, seal width, temperature, load, and speed needed to improve the quality of the seal press for packaging either made of plastic or aluminum foil with various types of thickness.

3. Handover of automatic plastic seal press machine

The plastic seal press machine handover is carried out before the training on the partners' agreed-upon day, time, and place. The automatic plastic seal press machine will be donated directly to the owner of the Tsurroya Bakery, and the community service implementation team will carry out installation and installation. The handover of the plastic seal press machine was accompanied by a manual book containing the Standard Operational Procedure (SOP), from how to operate the machine to how to maintain and repair machine.

4. Support skills training

After the handover, Tsurroya Bakery micro-entrepreneurs, employees, and neighbors, mostly entrepreneurs, were given training programs. The training in question is how to operate and maintain automatic plastic seal press machines to comply with SOPs so that the machine can last a long time. Followed by a demonstration of sealing plastic packaging from one of the training participants' products. The second training provided is copywriting training, which contains tips and product marketing strategies, how to create content with beautiful and persuasive choices and arrangement of words according to the target customer's subject, the right time to advertise, and easy media applications to utilize.

5. Evaluation, publication, and report.

After the core activities of implementing PPM have been carried out, the next stage is evaluating activities by summarizing the implementation process and noting obstacles and suggestions for the future. Then making publications that will be submitted to national journals of community service with ISSN and national accreditation. And at the same time, making a report on the implementation of PPM as a form of accountability to the donor from the DIPA of the State Polytechnic of Malang.

The subject of this community service is the micro-entrepreneurs in the Tsurroya Bakery and the neighbor. This PPM activity was held at the main house of the Tsurroya Bakery in Watugede Village, Singosari District, Malang Regency, from April to June 2023. Berisi gabungan antara rencana/laporan pelaksanaan penelitian atau PkM dan prosedur yang digunakan menjadi satu bagian naratif. Pelaksanaan yang sudah dilakukan harus menunjukkan dengan referensi dan dengan teknik pelaksanaan yang sesuai.

RESULTS AND DISCUSSION

The results of direct observations and discussions with partners, namely Mr. Saiful Anwar, the owner of the Tsurroya Bakery, concluded that from the problems faced, the partners' needs were formulated, namely an automatic plastic seal press machine as a solution to improve product packaging and copywriting training for MSMEs as a solution to increase marketing content. Coordination with partners agreed that the handover and pieces of training

would be held on Saturday, 1 April 2023, at the house of the Tsurroya Bakery in Watugede Village, Singosari District, Malang Regency.

The provision of an automatic plastic seal press machine and its accessories was running smoothly. This activity was carried out for approximately one month before the handover. Activities carried out include the supply and purchase of machines, tools, accessories, and spare parts for automatic plastic seal press machines, then assembly and adjustment of machines, after that machine trials are carried out, and finally, making a manual book. The manual book that has been made contains SOPs for starting the engine, SOPs for turning off the engine, SOPs for changing engine models, SOPs for adjusting temperature, and SOPs for machine maintenance. The automatic plastic seal press machine and manual book can be seen in Figure 3.



Figure 3. Assembly of an automatic plastic seal press machine and making manual book

At 10.00 am on Saturday, 1 April 2023, a series of handover activities and pieces of training began. The owner of the Tsurroya Bakery delivered several remarks and continued from the coordinator of enterprises Watugede village and remarks from the Malang State Polytechnic delivered by Mr. AM Mufarrih as the PPM Polinema team. And closed by handing over an automatic plastic seal press machine grant from PPM Malang State Polytechnic to the Tsurroya Bakery owner, as shown in Figure 4.



Figure 4. Handover of the plastic seal machine to the coordinator of the Tsurroya Bakery

After that, it was continued with training on the operation and maintenance of an automatic plastic seal press machine presented by Mr. Zakki Fuadi Emzain as the PPM

Polinema team. The material presented starts from how to set the machine's safety, how to start the engine, how to adjust the temperature, how to seal the packaging, how to turn off the machine, and how to properly maintain the machine so that the engine performance remains stable. In addition, a demonstration tutorial on packaging sealing one of the trainee's products was performed, as shown in Figure 5. The training participants were enthusiastic, as evidenced by the many participants who participated and the many questions and answers.



Figure 5. Plastic seal machine operation and maintenance training

The next training activity was copywriting training for MSMEs by inviting a student in Marketing Management at the State Polytechnic of Malang, namely Humaira Fathma. She presented material on product marketing tips and strategies, how to create marketing content with beautiful and persuasive choices and arrangement of words according to the subject of the targeted customer, the right time to advertise, and Android applications that can be used easily to create content marketing such as Whatsapp Business, Canva, VN Video Editor, and CapCut. Figure 6 shows the copywriting of marketing training.



Figure 6. Copywriting training for the Tsurroya Bakery MSME community

The community service activities were attended by 15 micro-entrepreneurs in the Tsurroya Bakery house, Singosari District, Malang Regency. The partners are grateful for this service program by providing plastic seal press machines and supporting training. This service activity showed that there had been an increase in the product packaging of MSME actors whose main product is snacks. Initially only using a manual plastic press tool (hand sealer) which was still prone to not being tight enough. After using this automatic plastic seal press machine, it was proven that the packaging was getting tighter, stronger, and not leaking. The

participants' insights from micro-business actors regarding marketing strategies also increased, so this service activity is very helpful for members of the Tsuruyya Bakery and neighbors to improve product packaging and increase competitiveness with factory products.

CONCLUSION

Community Service Activities (PPM) regarding improving the quality of product packaging using automatic plastic seal press machines in the bread entrepreneurs in Singosari District, Malang Regency, were running smoothly. The coordinating partners of the Tsuruyya Bakery community received it very well. The participants in the operation of the automatic plastic seal press machine training and copywriting training for MSMEs were also very enthusiastic.

Many benefits are obtained after using a plastic seal press machine and the training provided. Using an automatic plastic seal press machine has proven to be very helpful in improving the quality of product packaging to make it tighter, more durable, and enhance the product's appearance. Copywriting training for MSMEs also adds to the insights and skills of micro-entrepreneurs in the Tsuruyya Bakery to market their products by utilizing available Android applications such as Whatsapp Business, Canva, VN Video Editor, and Cap Cut.

Sustainable collaboration can be carried out by providing or manufacturing tools with other needs for advancing local MSMEs and supporting training. As for the next suggestion, namely that there are many partners, especially micro-entrepreneurs, who need science and technology grants like this so that community service programs can be maximized and on target.

Acknowledgment

We express our gratitude to the UPT Research and Community Service, State Polytechnic of Malang, which has financed this Community Service with SP DIPA funds – 023.18.2.677606/2023.

REFERENCES

- Agustriyana, L., Subagiyo, S., Emzain, Z. F., Nurchajat, N., & Yudianto, E. (2022). Fabricating Tools and Training on Making Fertilizer from Household Organic Waste for PKK Women RT 15 RW 11, Banjararum Village, Singosari District, Malang Regency. *ABDIMAS: Jurnal Pengabdian Masyarakat*, 5(1), 1504–1510.
- Alfatiyah, R., Bastuti, S., & Mualif, M. M. (2021). Perancangan Alat Press Packaging Produk Kripik Singkong Dan Kripik Pisang Untuk Usaha Umkm Masyarakat Kampung Situ, Desa. Karyabuana, Kecamatan Cigeulis, Kabupaten Pandeglang. *Pro Bono Jurnal Pengabdian Kepada Masyarakat*, 1(01).
- Apriyani, M., Desfaryani, R., Saty, F. M., Fitriani, F., Trisnanto, T. B., Sutarni, S., Berliana, D., & Fitri, A. (2021). PELATIHAN PENGEMASAN PRODUK OLAHAN PANGAN PADA SMKN 1 NEGERI BESAR WAY KANAN. *Jurnal Pengabdian Nasional*, 2(2), 94–100.
- Emzain, Z. F., Qosim, N., Firdaus, A. H., Agustriyana, L., & Rizza, M. A. (2022). Peningkatan Kualitas Kemasan Produk menggunakan Mesin Pres Segel Plastik Otomatis di Komunitas UMKM Shingara Kecamatan Singosari Kabupaten Malang. *Prima Abdika: Jurnal*

- Pengabdian Masyarakat*, 2(4), 343–351.
- Marlinah, L. (2020). Peluang dan Tantangan UMKM Dalam Upaya Memperkuat Perekonomian Nasional Tahun 2020 Ditengah Pandemi Covid 19. *Jurnal Ekonomi*, 22(2), 118–124.
- Mufarrih, A. M., Amrullah, U. S., Emzain, Z. F., & Qosim, N. (2022). Homemade Hanger Tool Untuk Meningkatkan Produksi UKM Gantungan Baju di Desa Sukodono Kabupaten Tulungagung. *Panrannuangku Jurnal Pengabdian Masyarakat*, 2(1), 19–24.
- Prahutama, A. (2018). Pengabdian Masyarakat Pengembangan Produk UMKM Olahan Ikan Bandeng. *Prosiding Seminar Nasional Unimus*, 1.
- Qosim, N., Emzain, Z. F., Monasari, R., Mufarrih, A. M., Raharjo, N. D., & Safarudin, Y. M. (2022). Pemberdayaan UMKM “Kusuma Wijaya” Poncokusumo, Kabupaten Malang Melalui Penyediaan Infrastruktur Berupa Rak Besi Susun. *Jurnal Hilirisasi Technology Kepada Masyarakat (SITECHMAS)*, 3(2), 77–83.
- Rizza, M. A., Monasari, R., Emzain, Z. F., & Agustriyana, L. (2020). Pertanian Tanaman Jagung dengan Alat Penyangga bagi Petani Jagung Desa Pulungdowo Kabupaten Malang. *JPKMI (Jurnal Pengabdian Kepada Masyarakat Indonesia)*, 1(4), 262–271.
- Uchyani, R., & Irianto, H. (2015). Pengemasan Produk Dalam Meningkatkan Produk Berbahan Baku Kacang Yang Marketable. *Laporan Prosiding Seminar Nasional 4th SME's Summit Dan Awards*.
- Widiati, A. (2019). Peranan Kemasan (Pacjaging) dalam meningkatkan Pemasaran Produk Usaha Mikro Kecil Menengah (UMKM) di “Mas Pack” Termial Kemasan Pontianak. *Jurnal Audit Dan Akuntansi Fakultas Ekonomi Dan Bisnis Universitas Tanjungpura*, 8(2), 67–76.
- Witono, K., Emzain, Z. F., Rizza, M. A., Agustriyana, L., & Hartono, M. (2021). Penyediaan Alat Peraga dan Pelatihan Pengajaran Sains dan Matematika Bagi MI Mambaul Hidayah Desa Sidorejo Kecamatan Jabung Kabupaten Malang. *JURPIKAT (Jurnal Pengabdian Kepada Masyarakat)*, 2(2), 69–78.