



DIVERSIFICATION AND INNOVATION OF TEMPE PROCESSED PRODUCT'S TO IMPROVE COMPETITIVENESS IN SMALL AND MEDIUM-SIZED ENTERPRISES TEMPE BUSINESS IN MEKAR BARU VILLAGE

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Abstract

At the moment, many small and medium-sized business actors are either pursuing or even starting a business within the realm of small and medium-sized cottage industries. The UKM of Tempe Mekar Baru is a forerunner in service-oriented commercial enterprise. It is in the Kabayan Village of the Mekar Baru Village of the Kopo District of the Serang Regency of the Banten Province. This business is owned by Mr. Wasis, who also serves as the president. One of the most significant activities contributing to the economy is the production of tempe. However, there are stumbling blocks in tempeh production that eventually become problems. The main issue for tempe artisans is the fluctuating demand for tempe, which is caused by many factors that cause a lack of buyer interest in tempe itself, which in turn causes some tempe to be damaged and not sold, resulting in a decline in sales. Therefore, it is necessary to innovate the product to transform processed tempe into an innovative product and foster sustainable business development. This Product Knowledge Management (PKM) has been developed to innovate processed tempe products, diversifying tempe products.

And it is increasing the production capacity of processed tempe with numerous variants of processed products, including Tempe chips, Tempe egg rolls, Tempe nuggets, and others. This PKM utilizes mentoring activities, increases production capacity, introduces the market share of processed tempeh, and integrates e-commerce marketing into the activity evaluation stage. These are the method or approaches that took. In this PKM program, the anticipated results include an increase in the total number of sales, production, and the development of a method for the Mekar Baru UKM to maintain a sustainable marketing strategy for the tempe that it processes to the next step.

Keywords: Tempe, Product Innovation, Product Diversification, Processed Tempe

INTRODUCTION

Small and medium-sized businesses (also known as SMEs) play an extremely significant part in the country's economy. SMEs' contribution to the Gross Domestic Product and the number of workers they absorb is substantial. One of the small and medium-sized enterprises (SMEs) developing and producing soybean-based processed foods and producing a processed product called tempe can find in Mekar Baru Village, located in the Kopo District. Because time is a staple in Indonesian cuisine, this opportunity to start a business processing tempe-based foods is auspicious. In addition to that, tempe can be transformed into a variety of other kinds of processed snacks as well. In addition, companies operating in the food industry are continually expanding and diversifying regularly (Rachmawati, 2011). Tempe SMEs are small and medium-sized enterprises managed by the local community and based in Mekar Baru Village, Kopo District, Serang Regency. Their primary line of business is the manufacture of ready-to-eat snack products derived from processed tempe.

Most of the newly formed Tempe in Mekar Baru village UKM's 24 members are homemakers and farm wives from the Mekar Baru Village and surrounding area in the Kopo District. The newly UKM Mekar Baru gives its members the ability to produce tempe and encourages members to work together. The members of Tempe of UKM Mekar Baru are responsible for transforming approximately 25 kilograms of soybeans into tempe daily. Tempe products manufactured by UKM Tempe Mekar Baru include smaller and larger tempe packages. UKM Tempe Mekar Baru is responsible for their production. The Kopo District and the areas immediately surrounding it are the primary target markets for the supply of fried Tempe mendoan sold in large packages of tempe. In the meantime, tempe is sold in traditional markets, vegetable shops with point-of-sale systems as part of its conventional marketing strategy, and tempe is sold in small packages.

The fluctuating number of sales and demand for tempe is the challenge that small and medium-sized enterprises (SMEs) like Tempe Mekar Baru face today. This problem can be caused by sales in traditional markets, vegetable shops, or requests from fried food tempe mendoan businesses. As a result, product returns or replacements frequently occur (returns), and tempe is damaged because it is not returnable or sellable. Conditions such as these are extremely harmful to the growth of tempe Mekar Baru businesses. As a result, it needs to be processed into products with higher value when it's put up for sale (discount). In fact, in 2018, mentoring efforts carry out to obtain the results of the Community Partnership Program in partnership with the Tempe Mekar Baru UKM in Mekar Baru Village, Kopo District, Serang Regency. These efforts have successfully increased the quality and quantity of tempe nugget products by implementing appropriate technology in the production process using a tempe nugget milling machine (Al Faritsy et al., 2018).

The implementation of the Student Work Lecture Program (KKM) that was carried out by a group of 16 students at Bina Bangsa University this time was more focused on providing a new product of tempe in Mekar Baru UKM facilities. Establish financial autonomy by broadening the range of products that can be processed using tempe and introducing novel approaches to sales and distribution. In addition to developing processed tempe nuggets as a product, it is deemed necessary to establish other tempe processed products to increase the selling value of tempe and be accepted by the market. This activity will allow the tempe Mekar Baru in small and medium-sized enterprises to be more successful.

The product development is accomplished through various efforts, including training and assistance with quality assurance, which, in the end, get results that can implement correctly and to their full potential. Egg rolls, Tempe chips, and tempe nuggets are the outcomes of the collaborative effort that has been put into diversifying processed tempe products. Because the flavor and image of tempe can be improved, as well as its economic value, and because it can eat instantly or directly, diversification of tempe has the potential to create new market opportunities for processed tempe. These new market opportunities could include children and adolescents. The KKM program of the group 16th of Bina Bangsa University not only produces processed tempe products but also facilitates marketing

strategies with e-commerce media. It is anticipated that all these tempe-processed products will gain market share and be known to consumers on a broader scale.

METHOD AND PROCEDURES

Focus group discussions (FGDs) between partners (UKM Tempe Mekar Baru) and companion parties (KKM members and Field Supervisors) are used in the KKM Group 16th at Bina Bangsa University the activity program to investigate the challenges and identify potential solutions. In most cases, the following steps of action implementation are included with proposed solutions:

A. Preparation phase

During this stage of preparation, the partners, along with the KKM team of group 16 at Bina Bangsa University, discussed the appropriate steps to be taken in the form of outreach activities and assistance to members of UKM of the Tempe Mekar Baru as a solution to the various problems that encountered in detail. This study was followed by identifying the multiple issues that are facing.

B. Product Development Stage

At this point, the KKM team of group 16 at Bina Bangsa University and the UKM Tempe Mekar Baru have newly identified the development of processed tempe products that will diversify based on the taste, volume, and content variants,

In addition, product packaging design begins with the preparation of raw materials and the production process. It continues down to the machinery utilized during the production process.

This development of processed tempe products will begin with the raw materials that must be prepared and continue through the production process.

C. Assistance Stage

Four distinct types of training make up this phase of mentoring:

- Help with developing new products (product diversification);
- Assistance with product quality and packaging design;
- Aid in strengthening institutional capacity;
- Marketing using *E-commerce*.

D. Activity Evaluation Stage

At this point, the KKM team of group 16 at Bina Bangsa University evaluated the entire series of activities held to measure the level of success of the actions by distributing questionnaires to the UKM of Tempe Mekar Baru. The evaluation did determine whether or not the activities were successful. Following the conclusion of the service activities in question, a thorough assessment of their success will carry out. The positive response of the participants, based on the attitude of the participants when following the entire plan of activities carried out by the KKM team of group 16 from Bina Bangsa University, can be seen as an indicator of the success of this activity. This positive response can be seen as an indicator of the success of this activity.

RESULTS

The operational steps that are being carried out in the KKM group of 16 activities that are being carried out at Bina Bangsa University are being adapted to the existing problems and potential. The KKM group of 16 at Bina Bangsa University is responsible for the programs that have been carried out. The following description will explain the successes that have been achieved as a result of those programs.

1. Assistance in making new products

This KKM activity program is carried out eight times a month with a series of activity stages: introduction of tempe chips; discussion with UKM of Tempe Mekar Baru about Tempe chip products; product innovation of tempe chips; and assistance by holding cooking classes (cooking class). The KKM team from Bina Bangsa University's group 16th met to discuss the importance of diversifying processed products from tempe chips as a strategy to increase the competitiveness of processed tempe chips by SMEs, given the opportunities and business of tempe chips. The group 16th of KKM Bina Bangsa University also proposed introducing new flavors of processed tempe chips to the UKM of Mekar Baru Tempe, including cheese-flavored, spicy, and Balado varieties in 200-gram and 150-gram packaging. Group 16 of KKM, a student group at Bina Bangsa University, contributed to the development of cheese-flavored, spicy, and Balado-flavored chips by actively participating in the manufacturing process (in a cooking class).



Figure 1 Raw Materials, Tempe Chips, Egg Roll, and Tempeh Nuggets

2. Assistance with product quality and packaging design

During this socialization and mentoring activity, the KKM team from group 16 at Bina Bangsa University discussed product quality. Product quality is critical in determining whether or not a product is successful in the marketplace. Because the texture of the tempe chips needs to be crispy and the thickness of the tempe slices needs to be really thin and evenly distributed, Tempe chips must select from the best raw materials and freshly cooked tempe, not old tempe. It is because old tempe does not have the same nutritional value as freshly cooked tempe. Therefore, to preserve the authentic flavor of the tempe, you need to ensure that the flour dough you use is proportional to the seasoning you prepare and the number of chips you intend to fry.



Figure 2 Thickness of Tempe and Process of Making Chips

At this stage, assistance is also being provided by the KKM team of group 16 of Bina Bangsa University, which is providing input to the UKM of Mekar Baru tempe to be able to design packaging and product labels that are understandable and straightforward for customers. On the product label, you'll find the following information: the product's brand name, the product's P-IRT number, the product's raw material content, the product's expiration date, and the location where produce the product. The standing pouch packaging is an example of the material used for the packaging, which is a more robust plastic material with an appealing design. Additionally, the used packaging can be quickly opened and closed when necessary.



Figure 3 Assistance in Product Quality and Packaging Design

3. Mentoring and strengthening institutional capacity

The KKM team of groups 16 from Bina Bangsa University used the SWOT analysis at this stage to assist in identifying the strengths, weaknesses, opportunities, and challenges that SMEs will be facing the problem. After that, the KKM team of the 16 Bina Bangsa University group offered their assistance in explaining how to practice good financial management in an organization (cost accounting).

And they also explained to and motivated the UKM of Tempe in Mekar Baru to be able to collaborate in the process of running an organization. Furthermore, the KKM team of group 16 at Bina Bangsa University also provided special assistance in communicating in English to all members of the Tempe Mekar Baru UKM so that they could communicate in English with foreign tourists. This study did facilitate cross-cultural understanding.

4. Marketing using *E-commerce*

The marketing of products carried out by UKM of Tempe Mekar Baru is accomplished by depositing tempe chips to the stalls of Mekar Baru Village and based on orders from several residents or officials of Serang Regency at certain events such as UMKM exhibitions or specific events. Because of this, UKM Tempe Mekar Baru's tempe chip products are not particularly well-known, even though they do not trail behind more prominent brands in terms of flavor or quality. As a result, the KKM team from group 16 at Bina Bangsa University offered assistance on how to market products through E-commerce or the internet. The KKM team of 16 Bina Bangsa University used the Tokopedia and Shopee *marketplaces* to market products made from tempe processed by UKM Mekar Baru tempe online. Assistance is provided starting from how to create and log in to an account, *update* products to Tokopedia and Shopee, check orders, check financial results, and check delivery status to the testimonial stage.

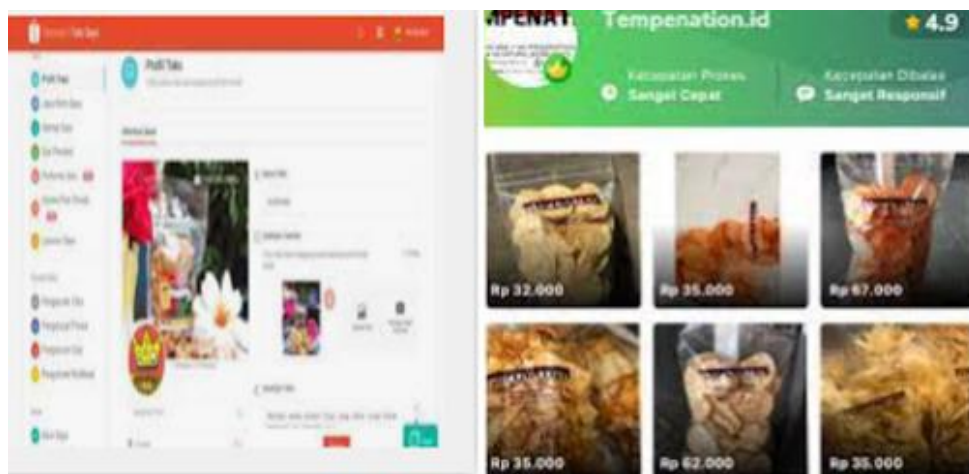


Figure 4 Display of the Tempe Mekar Baru UKM Online Store

5. Activity Evaluation

The positive response of participants, based on the attitude of participants when participating in various series of activities held by the KKM team of group 16 of Bina Bangsa University, can be seen as an indicator of the success of a workout. This activity can be seen from the participants' attitudes when participating in the activities held by the KKM team. Furthermore, the number of people from the village the tempe artisans took part in the action from the beginning to its conclusion demonstrated a high level of enthusiasm, as indicated by the findings obtained from this series of events and activities.

In addition, it is measured by the results of questionnaires filled out by respondents as follows:

Table 1 Summary of Evaluation Results

No.	Statement	SS	S	TS	STS
1	I am satisfied with the activities carried out by the KKM team of group 16 at Bina Bangsa University	25%	75%		
2	Activities carried out by the KKM team of group 16 Bina Bangsa University are following the needs of the community/targets	20%	80%		
3	Personnel/members involved in activities provide services according to the needs of the community/targets.		100%		
4	Every complaint/question/problem is followed up properly by the resource persons/members involved.		100%		
5	If this activity is held again, the community/target is willing to participate/be involved.		100%		

It can see from the summary table of the results of the evaluation of activities carried out by the KKM team of group 16 at Bina Bangsa University.

It found that participants were satisfied with the activities carried out, which was indicated by a strongly agree score of 25% and an agree score of 75%. This result is based on the questionnaire distributed to participants, and it can be seen from the summary table of the evaluation of activities carried out by the KKM team. Meantime, the score for agreeing or strongly agreeing with the appropriateness of the activities carried out is 20% and 80%, respectively. In addition, all the personnel participating in the action can provide services per the community's requirements, earning a perfect score of 100 percent. The participant's questions about the presented problems can all be followed up on by the resource person, resulting in a perfect score of 100 percent. The target is willing to be directly involved in the entirety of the series of activities, as shown by the score of 100%. It is helpful to do so if another action similar to this one is held in the future.

This result indicates that the KKM team from group 16 at Bina Bangsa University completed the entire series of activities they had planned. Furthermore, the level of interest shown by those who participated in the activities throughout the program was also very high.

CONCLUSION

It provided an understanding of the importance of product diversification and innovation based on all of the process activities carried out by the KKM team of group 16 at Bina Bangsa University.

Furthermore, it did increase the competitiveness of the new tempe product. It is evidenced by the success in making tempe chip product innovations, as well as in improving tempe chip product quality, online marketing, and strengthening the management of the Institute, which was attended by all UKM of Tempe Mekar Baru with a great deal of enthusiasm.

All of the process activities carried out by the KKM team of group 16 at Bina Bangsa University have the potential to provide input, learning, and experience for all of the new members of the Tempe Mekar Baru UKM. In addition, this activity will allow them to continue to develop their business in the future.

Sustainable activities that continue to be developed in the production of local food processing are proposed for this service to be used as standalone commercial ventures, particularly in the current pandemic era.

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