

MICRO BUSINESS PERCEPTIONS ON THE DEVELOPMENT OF LOCAL PROCESSED FOOD PRODUCTS IN SEMARANG REGENCY

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ABSTRACT

Background: The potential for local food processing in Central Java, especially in Semarang Regency, has the opportunity to be developed by Micro, Small and Medium Enterprises.

Objectives: This research aims to determine the perceptions of local food processing businesses regarding product development capabilities.

Methods: The sample was determined by purposive sampling, 10 micro business respondents who processed local food products in Semarang Regency. The research method was carried out using surveys and interviews. The research results analyzed using the three-box method with index values. The index value is determined by assessing the perception of respondent regarding product development capabilities.

Results: The product development index value for each indicator is in the high category. The indicator with the highest index value is the belief that the product is original, which is 91. The ability to make various types of processed foods scored high, which is 86. The indicator of efforts to brand the resulting product scored 85, and the ability to modify processed foods also scored high, which is 81.

Conclusion: The results of the research show that all indicators of product development capability obtained high index values, namely belief in original products, the ability to make various kinds of food preparations, efforts to brand the products produced and the ability to modify food preparations.

Keywords: Local food, product development capabilities

INTRODUCTION

Indonesia has rich biodiversity and contributes to the abundant availability of local food. Staple and complementary foods that are developed according to regional potential are known as local foods. Local culture usually has a strong relationship with local food. Local food products are usually made with local knowledge, local raw materials and local technology, so they have a strong connection with local culture.¹ Maximizing local food processing can be done by maintaining the nutrients it contains so that local food meets nutritional and nutritional needs. Local food sourced from carbohydrates, protein and fat can easily be found in every region because each region has certain characteristics.² Micro, Small, and Medium Enterprises (MSMEs) are the main foundation of the community's economic sector, which encourages the

ability to be independent in the economic sector. MSMEs create jobs, encourage inclusive economic growth, and improve community welfare. MSMEs also encourage innovation, skills development, and expand business networks.³ Indonesia has the potential for a strong national economic base because the number of MSMEs, especially micro businesses, is very large and the labor absorption capacity is very large. The government and business actors must raise the 'class' of micro businesses to medium businesses. This business base has also proven strong in facing the economic crisis. Micro businesses also have fast transaction turnover, use domestic production, and are in touch with the community's primary needs. Product development capability is resource-based optimization by prioritizing company resources as the main source of competitive advantage.^{4,5} Product development

capability requires five dimensions: capacity, quality, cost, time and development costs.⁶ A company's capability to do various things, from seeing market opportunities to producing, selling and delivering products, is known as product development capability.⁷

The development of innovative and creative food products can increase the competitiveness of local food products in domestic and international markets. In addition, the development of innovative and creative food products can increase the added value of local food products, which can produce greater economic benefits for local communities. The processing industry is the largest in the economy in Semarang Regency, and the biggest supporter is the food processing industry. The classification of agricultural commodities in Semarang Regency which are prime commodities is rice, developing commodities are cassava and sweet potatoes while potential commodities are corn. Soybeans and peanuts have so far been one of the underdeveloped commodities.⁸ Food potential must be utilized in accordance with the Ministry of Agriculture's program for Food Diversification and World Food Storage. With consumer preferences continuing to change, diversifying the use of raw materials is very important. Producer can produce derivative products from local food raw materials that have added value and are highly competitive⁹. In Central Java, the implementation of a local food product diversification program in Women Farming Groups in Bahasa *Kelompok Wanita Tani (KWT)*. KWT are farmer groups whose members are women who are involved in agricultural activities. KWT or Micro, Small and Medium Enterprises (MSMEs) can increase the income of business actors. It can direct people to consume local food.¹⁰ This research aims to determine the perceptions of business actors regarding the capability to develop locally processed food products in Semarang Regency.

METHOD

The research was carried out for one month, namely June 2023. The research used a survey

$$\text{Index Value} = \frac{((\%F1x1)+(\%F2x2)+\dots+(\%F10x10))}{10} \quad (1)$$

Information:

F is the frequency of respondents' answers

RESULT

Data was obtained from a total of 10 randomly selected respondents, as shown in Table 1, which describes the profile of the respondents. The data in Table 1 shows that the number of producer who are members of the cluster has the same number, 5 respondents (50%); respondents

method and was conducted in Semarang regency. The data used in this research is primary data. Primary data was obtained from interviews using a research instrument in the form of a product development capability questionnaire for 10 respondents in Semarang Regency. The data on the number of MSMEs in Semarang Regency is not known with certainty, so the number of respondents taken was 10 MSMEs. Determining respondents used a purposive sampling technique with the criteria for respondents being local food processing businesses that have been producing for at least one year and have their production site. The data obtained from the questionnaire results will be tested for validity and reliability to determine whether or not the question instrument is valid to determine the knowledge, perceptions and preferences of respondents.¹¹

Analyze survey and interview data descriptively to provide an overview of the data collected. The results of data analysis are presented in the form of systematic, logical and complementary descriptive descriptions. The results of the analysis can illustrate the perceptions of respondents and the potential for developing locally processed food products. In describing research data, index numbers are used to determine the degree of respondent's perception of the variables studied. The respondent's answer numbers used start from 1-10, so the resulting index starts from 1 to 10 with a range of 90, without the number 0. This analysis uses the three-box method criteria with a range of 90 divided by three to produce a range of 30 and will used as a basis for interpreting index values, namely as follows:

10.00 – 40.00 : Low

40.01 – 70.00 : Medium

70.01 – 100.00 : High

The formula for calculating the index value is as follows:

with the position of the owner have the largest number, 8 respondents (80%) and 10 respondents are in the micro business category 100 %. Respondents with a length of work of 1-5 years and 6-10 years had the same number 3 respondents (30%). Respondents with a final education level of high school were 6 respondents (60%), bachelor's degrees were 3

respondents (30%), and elementary school was one respondent (10%).

Table 1. Respondent Profile

Category	Amount	Percentage
Cluster		
Join	5	50%
No	5	50%
Respondent Position		
Owner	8	80%
Manager	0	0%
Etc	2	20%
Length of work		
1-5 years	3	30%
6-10 years	3	30%
11-15 years	1	10%
16-20 years	2	20%
21-25 years	1	10%
Business Category		
Micro	10	100%
Small	0	0%
Medium	0	0%
Level of education		
Elementary School	1	10%
Junior High School	0	0%
Senior High School	6	60%
Bachelor	3	30%

Source: Primary Data (2023)

Respondents' Perceptions

Indicators of the percent frequency of respondents' answers and respondents' perceptions on the

capability variable for developing locally processed food products can be seen in Table 2.

Table 2. Respondents' perceptions of the product development capability variable

Indicator	Index Value	Research Findings on Respondents' Perceptions
Ability to make various kinds of food preparations	86 High	Making various preparations for products:
		- Coffee leaves, moringa
		- Roselle flowers, butterfly pea
		- Cassava, purple sweet potato, pumpkin
		- Banana, durian
		- <i>Cetul</i> fish, tilapia, <i>wader</i> , <i>peda</i>
		- Eel
		- Rebon shrimp
		- Bitter Gourd, Tomato
		- Green beans, soybeans, peanuts
		- Corn
		- Beef
		- Chili, onions
		- Spice
		Analysis of findings:

Indicator	Index Value	Research Findings on Respondents' Perceptions
Ability to modify food preparations	81 High	Owners are able to make various kinds of processed food from locally available food sources such as leaves, flowers, vegetables, tubers, cereals, nuts, fruit, spices, fish, meat and seafood. - Flavor modifications are varied - Modification of shape variants - Processing leftover dough into new products Analysis of findings: Owners are able to modify food preparations from local ingredients into various flavors and shapes and use leftover dough to make new products - Product creation from your ideas - There are still a few competitors - Becomes a regional specialty - Famous in society - Own a franchise Analysis of findings: Owners believe that the products they make are the creation of their ideas, there are no competitors, and they have a franchise. The products sold are well-known in the community and have become a regional specialty.
Believe that the products are made original	91 High	- Create an attractive brand - Marketing products to be known online - Manage permits for products such as P-IRT - Passed the halal test Analysis of findings: As part of their branding efforts, product owners use a variety of methods, such as creating an appealing brand that is easy for consumers to remember and marketing the product so that it is well-known through online sales. Additionally, to enhance the product's credibility with consumers, owners obtain P-IRT and halal permits.
Trying to brand the products produced	85 High	

Source: Primary Data (2023)

From table 2, it can be described that the ability of local food processing businesses to make various kinds of processed food is high. This is shown by the high index value of 86. Respondents are able to make various kinds of processed food from locally available food sources such as leaves, flowers, vegetables, tubers, cereals, nuts, fruit, spices, fish, meat and seafood. Some local food ingredients such as corn, bananas, cassava, sweet potatoes and so on have the potential to be developed and have more benefits, especially for health and can become functional foods. Apart from that, it has a large market opportunity.¹²

DISCUSSION

Overall, the respondents in this study were owners or business owners who had local product processing businesses on a micro scale with a senior high school education level and who had worked in processing the business for 1-10 years. Various types of locally processed food products produced by the 10 micro-enterprise respondents, that is coffee leaf

tea, roselle tea, moringa leaf tea, butterfly pea flower tea, milk candy, meatball tofu, roulade, butterfly pea flower syrup, *getuk burn*, *getuk kress*, *getuk* various flavors, *croquettes*, fried cassava, torakur (date-flavored tomato), mung bean *tumpi*, spicy chili sauce, *rebon* chili sauce, *wader* chips, shrimp chips, eel chips, tilapia chips, *tape* brownies, and pumpkin brownies.

In indicators related to the ability to modify processed food, respondents are able to modify processed food from local ingredients into various flavors and shapes and utilize leftover dough in new products. The index value shown is high, namely 81. Increasing production capacity based on local raw materials, maximizing product promotion, increasing product variety, improving product quality and quantity, and affordable production prices are alternative strategies that can be carried out to support local food product diversification programs¹⁰.

The highest index value is in the indicator of believing that the product is original, namely 91.

Owners believe that the product they are making is a creation of their idea, has no competitors and has a franchise. The products sold are well-known in the community and have become a regional specialty. In the last indicator, namely trying to brand the products produced, the index value obtained is also high, 85. In an effort to brand the products produced, respondents use various methods, including creating an attractive brand so that it is easy for consumers to remember and marketing the product so that it is known through online sales. Apart from that, to support the product's increasing trustworthiness with consumers, respondents take care of P-IRT and halal permits.

This research suggests that MSMEs can enhance their innovation and product development by utilizing the Triple Helix approach, which involves collaboration between universities, industry/business actors, and government¹³. The Triple Helix concept is based on dynamic knowledge development through innovation systems. Recent studies have highlighted the importance of collaboration among Triple Helix agents in improving innovation performance, particularly in SMEs. According to Nakwa et al.,¹⁴ the Triple Helix approach can provide SMEs with access to valuable resources such as knowledge and skills, which can contribute to the development of innovative solutions. Moreover, Brink & Madsen¹⁵ found that SMEs can benefit from integration within the Triple Helix context, which can lead to synergistic collaboration and ultimately foster innovation.

CONCLUSION

The respondents perceive a high level of product development capability for each indicator. The indicator with the highest index value is the belief that products are original, which is 91. The ability to make various kinds of processed food scores high at 86. Similarly, the indicator of trying to brand the products produced is rated at 85, and the ability to modify food preparations also receives a high score of 81.

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