THE 2ND INTERNATIONAL CONFERENCE ON ECONOMICS, BUSINESS, AND MANAGEMENT RESEARCH (ICEBMR) "Shaping the Sustainable Future: Trends and Insights in Economics, Business, Management, and Information Technology" https://e-conf.usd.ac.id/index.php/icebmr/ | ISSN: 3032-596X



PRODUCT DEVELOPMENT CAPABILITY AND MARKETING INNOVATIVENESS: EVIDENCE FROM INDONESIAN SMALL LOCAL FOOD PRODUCT

Berta Bekti Retnawati¹, Okti Ruenda², Bernadeta Irmawati³, Christiana Retnaningsih⁴ ^{1,2,3,4}Soegijapranata Catholic University

Email: ¹*berta@unika.ac.id,* ²*oktiruenda@gmail.com,* ³*irmawati_b@unika.ac.id,* ⁴*nik@unika.ac.id*

ABSTRACT

Central Java has the potential for processed food based on local wisdom that is spread in various regions. Local food is food that is produced and developed by the potential and resources of the region and local culture. This study aims to determine the existing conditions of MSMEs processing local food products in terms of product development capabilities and marketing innovation capabilities. This research focuses on MSMEs processing local food products in Banyumas Regency, Grobogan, Sragen, Semarang, and Wonosobo. Samples were taken by purposive sampling with as many as 50 respondents. Descriptive analysis was used to describe the data collected using the three-box method. The results showed that most of the MSMEs are micro-businesses. Product development capability is considered high, indicated by an average index value of 83.55. Where the highest indicator value is believing that the products made are original to the market at 87.6. Marketing innovativeness is also high, with an average index value of 79. Where the highest indicator value is continuously making product improvements at 84.2. This article strengthens optimism that the development of local food products will continue to increase even though there are still many challenges and problems **Keywords**: Local food, Product development capability, Marketing innovativeness

1. Introduction

Central Java has the potential for processed food based on local wisdom that is spread in various regions. Local food is food that is produced and developed by the potential and resources of the region and local culture. Specific conditions other than natural resources are also closely related to the socio-economic and cultural conditions of the local community (Imelda et al., 2017; Retnaningsih, 2010).

In supporting product development, the adaptation process can be done according to the situation and circumstances of each entrepreneur. Varied ways of adaptation show that entrepreneurs can maintain their business (Retnaningsih, 2020). Adaptability and continuous improvement are good steps to maintain intense competition. Innovation is considered to be able to answer these challenges. Micro, Small, and Medium Enterprises (MSMEs) of food products innovate not only in terms of products but also in marketing processes and business strategies (Baregheh, Anahita; Rowley, Jennifer; Sambrook, Sally; Davies, 2012).

Emphasizes innovation and creativity in developing products or services that are offered to consumers. This concept aims to fulfill the needs and wants of consumers in a more effective and efficient way, as well as providing more added value to consumers. In the context of food, marketing innovativeness can be interpreted as the development of innovative and creative food products, taking into account the needs and desires of consumers as well as the potential of locally available food resources. This can be done by developing food products that are different from existing ones or combining several existing food products into new and more

548 | PROCEEDINGS THE 2ND INTERNATIONAL CONFERENCE ON ECONOMICS, BUSINESS, AND MANAGEMENT RESEARCH (ICEBMR)

attractive products for consumers.

Innovative and creative food product development can help improve the competitiveness of local food products in domestic and international markets. In addition, innovative and creative food product development can also help increase the added value of local food products, thereby providing greater economic benefits to local communities. In developing marketing innovations in local food products, it is also necessary to take into account the local wisdom that exists in the local community. Local wisdom can be a source of inspiration in developing innovative and creative food products and can help maintain environmental sustainability and local food diversity.

The conceptualization of innovativeness can be done in various ways. First, innovativeness is part of entrepreneurial orientation so it becomes one part of the five dimensions of entrepreneurial orientation, namely autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness (Cruz et al., 2018; Lumpkin & Dess, 1996). Second, innovation is the capacity to introduce new processes, products, ideas and marketing. Third, innovation is the company's willingness to synergize and adapt. Fourth, innovativeness describes product changes by offering new features and good performance (Hadi & Supardi, 2020). Fifth, innovativeness is the belief to innovate by exploring new ideas to create new creations to improve services, processes, and products. The company's ease of achieving positional advantage can be done through marketing innovation (Larsson, 2020). This research was conducted to determine the existing condition of MSMEs processed local food products in terms of product development capabilities and marketing innovativeness.

2. Literature Review

Implementation of strategies that utilize resources as unique expertise and assets become capital in building competitive advantage (Martelo et al., 2013; Martin et al., 2013). Competitive advantage requires innovation and product development capabilities to create differentiation and meet consumer needs and preferences (Cass & Sok, 2013; Martin et al., 2013).

Product development capability is resource-based optimization by focusing on company resources as the main source of competitive advantage (Klewitz & Hansen, 2013; B. B. Retnawati & Retnaningsih, 2020). Product development capability, quality, cost, development time, and development cost are the five dimensions required in development (B. Retnawati & Irmawati, 2016). Product development capability is the ability of a company to carry out a series of activities starting from the perception of market opportunities and ending with the production, sale and delivery of products (Orth & Malkewitz, 2012).

Entrepreneurial actions capabilities are important for business actors to develop new products, processes and organizations through modifying and reconfiguring resources, as well as coping with the speed of market change (Alpay et al., 2012; Leong et al., n.d.). Previous empirical research still found contradictory results of product development capability on marketing performance, some were significantly positive (Covin & Miller, 2014; Tian et al., 2010), but some were significantly negative (Soba & Aydin, 2013; Tooksoon & Mohamad, 2016).

3. Research Methods

3.1 Population and Sampel

The population of this study included local food processing industry entrepreneurs in Central Java, particularly in Banyumas Regency, Grobogan Regency, Sragen Regency, Semarang Regency, and Wonosobo Regency. Official data on the population of small and medium entrepreneurs was not available, so a sample of 50 respondents was taken. The sampling technique was purposive sampling, namely entrepreneurs of processed local food products who already have at least one year of experience as an effort to obtain quality information as needed from the indicators of the research variables (B. B. Retnawati et al., 2021).

3.2 Data Analysis

Descriptive analysis in this study was used to describe the data collected. In describing the research data, an index number is used to determine the degree of respondents' perceptions of the variables being examined. The number of respondents' answers used ranged from 1-10, so the resulting index ranged from 1 to 10 with a range of 90, without the number 0. This analysis uses the three-box criteria, so a range of 90 divided by three will produce a range of 30 and will be used as the basis for interpreting the index value, which is as follows (Ferdinand, 2012):

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: Index Value = $\frac{((\%F1x1) + (\%Fx2) + ... + (\%F10x10))}{(\%F10x10)}$

Description:

F is the frequency of respondents' answers

4. Research Findings and Discussion

The general description of respondents in this study is that 62% of MSMEs are not included in clusters or groups of MSMEs. Respondents in this study were dominated by owners or owners of processed food businesses (86%) with the highest educational background, namely a high school education level of 62%. When viewed from the business category, 66% of respondents were in the micro business category with a length of work of 1-5 years (24%) and 11-15 years (24%) with a balanced number. Most of the MSMEs that have only been established for a long time do not yet have the strength of the cluster that covers their activities.

The product development capability variable is formed by four factors shown in the following table:

		erc	en	Index Value	Cate gory							
Indikator			2	4	_	(7	0	0	1		
	T	2	3	4	3	0	/	ð	9	U		
Ability to make various kinds of					0	0,	1,	3	1,	1		
processed food from local	0	0	0	0	,	3	2	2, 2	6	,	81,4	High
ingredients					1	6	6	2	2	6		
Ability to modify processed food				0,	0	0	1,	2	1,	1		High
	0	0	0	0	,	0, 6	9	\angle ,	0	,	78,2	
				8	1	0	6	4	8	6		
Believing that the products made are						0,	0,	2,	2,			High
original to the market	0	0	0	0	0	1	5	5	5	3	87,6	
						2	6	6	2			

Table 6. Product Development Capability Index Value

550 | PROCEEDINGS THE 2ND INTERNATIONAL CONFERENCE ON ECONOMICS, BUSINESS, AND MANAGEMENT RESEARCH (ICEBMR)

Indikatan			en	tage	Index Value	Cate gory						
Indikator	1	2	3	4	5	6	7	8	9	1 0		
Attempts to brand the products that				0,			0,	2,	2			High
have been produced	0	0	0	0	0	0	8	0	$\frac{2}{7}$	3	87	
				8			4	8	/			
Average Variable Index Value 83,5									Hig			
							83,55	h				
Source: Primary data (2023)												

Based on the results of the calculation of the index value of the product development capability variable in Table 1 above, it is 83.55, meaning that the index value of this variable is in the high category. This indicates that the average respondent's answer is in the high category and the percentage of this answer number indicates the existence of product development capability. All questions on product development capability variables are indicated by four indicators as in Table 1 above and are responded to well by local food processing business actors in this study. The respondents' perceptions related to the product development capability variable are as follows:

Indicators	Index Value	Research Findings Respondents' Perceptions
Ability to make various kinds of processed food from local ingredients	81,4 High	Analysis of findings: The ability of entrepreneurs to utilize local food sources as the main raw material for products is very diverse. Entrepreneurs can process food ingredients from leaves, green vegetables, tubers, cereals, nuts, flowers, fruits, seeds, spices, herbs, fish, mushrooms, most milk and aggs into products with aconomia
		value.
Ability to modify processed food	78,2 High	Analysis of findings: Entrepreneurs are able to make modifications to their products. Modifications are made in various ways, starting from modifying the production process, modifying variants and types, modifying flavors, modifying packaging and modifying the raw materials used. One raw material can be processed into various flavors and types.
Believes that the products made are original to the market	87,6 High	Analysis of findings: Entrepreneurs believe that the products produced are still limited and even believe that there are no similar products in the market. Entrepreneurs believe that the products they make are the result of their brainstorming. Their products also become the brand image of the local area because when people buy their products, they will know that the product is the identity of the area.

Table 7. Respondents' Perceptions of Product Development Capability Variables

Indicators	Index Value	Research Findings Respondents' Perceptions
Attempts to brand	87	Analysis of findings:
products that have been produced	High	In an effort to brand the products that have been produced, entrepreneurs do various ways, one of which is by increasing knowledge and insights related to brands. Entrepreneurs also register their brands and products for patenting. In addition, to support increased consumer confidence and add value to the products, entrepreneurs also apply for certification for the products they produce.
	Sc	nurce: Primary data (2023)

Source: Primary data (2023)

Table 2 above confirms that in their ability to develop products, entrepreneurs can process food ingredients from local food sources (leaves, green vegetables, tubers, cereals, nuts, flowers, fruits, seeds, spices, herbs, fish, mushrooms, meat, milk, and eggs) and can modify products in various ways ranging from modification of the production process, modification of variants and types, modification of flavors, modification of packaging and modification of the raw materials used. Entrepreneurs also believe that the products produced are still limited and there are no similar products on the market. Their products also become the brand image of the local area because people will know that the product is the identity of the region.

To brand products that have been produced, entrepreneurs do various ways, one of which is by increasing knowledge and insights related to brands, registering their brands and products for patenting, and supporting increased consumer confidence by applying for certification for the products they produce.

The marketing innovativeness variable is formed by four factors as shown in the following table:

Indikataw	P	ercer	ntage	Index Value	Cate gory							
Indikators		_	_		_		_			1		
	1	2	3	4	5	6	7	8	9	0		
Trying new things in	Δ	0	0,	0	0,	0,	1,	2,	1,	r	70.6	Iliah
product marketing	0	U	06	06 0	4	36	26	08	8	2	/9,0	пign
Have openness to new	Δ	0,	0	0,	0,	0,	1,	2,	1,	1,	9 77	High
marketing ideas	U	04	0	08	4	48	12	24	62	8	//,8	
Continuously make	Δ	0	0,	0	0,	0,	0,	3,	2,	2,	817	High
product improvements	U	0	06	0	1	24	42	04	16	4	04,2	
	0	0	0,	0,	0,	0,	1,	2,	1,	1,	744	High
Make new product models		U	18	16	3	72	12	08	08	8	/4,4	
Average Variable Index Value79									High			
Source: Primary data (2023)												

Table 6. much value of Marketing milovativeness variable
--

Source: Primary data (2023)

Based on the results of the calculation of the marketing innovation variable index value in Table 4 above of 79, it means that the variable index value is in the high category. All indicators in this variable are in the high index category. This indicates that this answer shows the existence of marketing innovativeness. The respondents' perceptions related to marketing innovation are as follows:

552 | PROCEEDINGS THE 2ND INTERNATIONAL CONFERENCE ON ECONOMICS, BUSINESS, AND MANAGEMENT RESEARCH (ICEBMR)

Table 9. Respondents	s' Perceptions o	of the Marketing Innovativeness Variable
Indicators	Index Value	Research Findings Respondents' Perceptions
Trying new things in	79,6	Analysis of findings:
product marketing	High	New things done by entrepreneurs in the marketing process are utilizing digital marketing and opening opportunities and opportunities for partnerships. The marketing process that has previously been carried out can continue to run along with implementing a new
		marketing process.
Have openness to new	77,8	Analysis of findings:
marketing ideas	High	In the process of innovation, entrepreneurs are open to ideas and ideas that come from various sources for the marketing process of their products.
Continuously make product	84,2	Analysis of findings:
improvements	High	Entrepreneurs make continuous and continuous product improvements. The evaluation that has been carried out during the marketing process provides results to be able to maintain and improve product quality, improve product packaging to keep it safe during the distribution process, and improve product branding to be better known to the wider community.
Make new product models	74,4	Analysis of findings:
	Hıgh	Entrepreneurs innovate product models by modifying packaging and making innovative products in accordance with millennials and healthy living trends. In the process of creating product novelty, inspiration is obtained from various sources. New products that are marketed will have promos within a certain time.

Source: Primary data (2023)

Table 4 confirms that the new things done by entrepreneurs in the marketing process are utilizing digital marketing and opening up opportunities for partnerships. The marketing process that has previously been carried out can continue to run along with implementing a new marketing process. Strategic use of information technology can be used to acquire and manage knowledge and improve competitiveness (Del Giudice, M & Della Peruta, 2016; Sotoacosta et al., 2014). Social media is increasingly used by both the industry and everyone around the world. Through social media companies can gain useful knowledge, conduct marketing activities, increase sales, provide services to customers and can create joint products and services (Bresciani et al., 2016; Piller et al., 2012; Scuotto, Veronica; Del Giudice, Manlio; Carayannis, 2017).

In the innovation process, entrepreneurs are open to ideas and ideas that come from various sources for the marketing process of their products. Entrepreneurs make continuous and continuous product improvements. Evaluations that have been carried out during the marketing process provide results to be able to maintain and improve product quality, improve product packaging to keep it safe during the distribution process and improve product branding to be better known to the wider community. Entrepreneurs make new product models by modifying packaging and making innovative products for millennials and healthy living trends. In the process of creating product novelty, inspiration is obtained from various sources.

5. Conclusion

MSMEs processed food local products in this study are categorized as micro businesses (66%) with the final education level of business actors SMA (62%). Based on the results of the product development capability variable index value of 83.55 (high). The average respondent's answer is in the high category for each indicator point. The percentage of this answer shows that there is product development capability. Where the highest indicator value is believing that the products made are original to the market at 87.6. In their ability to develop products, entrepreneurs are able to process food ingredients from local food sources, able to modify products in various ways ranging from modification of the production process, modification of raw materials. Entrepreneurs also believe that the products produced are still limited and there are no similar products on the market to become the brand image of the local area. Entrepreneurs also register their brands and products for patenting and to increase consumer confidence, entrepreneurs apply for certification for the products they produce.

In terms of marketing innovativeness, the index score was 79 (high). Where the highest indicator value is continuously making product improvements at 84.2. Entrepreneurs utilize digital marketing and open up opportunities for partnerships. Entrepreneurs make continuous product improvements to maintain and improve product quality. The novelty of product models by modifying packaging and making products in accordance with current trends.

Acknowledgements

The Research Team would like to thank those who have funded this research with a national competitive basic research grant from the Ministry of Research, Technology and Higher Education Indonesia Fiscal Year 2023.

References

- Alpay, G., Bodur, M., Yilmaz, C., & Büyükbalci, P. (2012). How does innovativeness yield superior firm performance? The role of marketing effectiveness. *Innovation: Management, Policy and Practice, 14*(1), 107–128. https://doi.org/10.5172/impp.2012.14.1.107
- Baregheh, Anahita; Rowley, Jennifer; Sambrook, Sally; Davies, D. (2012). Innovation in food sector SMEs. *Journal of Small Business and Enterprise Development*, 19(2), 300–321. https://doi.org/10.1108/14626001211223919
- Bresciani, S., Ferraris, A., Santoro, G., Nilsen, H. R., Bresciani, S., Ferraris, A., & Santoro, G. (2016). Wine Sector: Companies 'Performance and Green Economy as a Means of Societal Marketing Wine Sector: Companies 'Performance and Green Economy. *Journal of Promotion Management ISSN:*, 22(2), 251–267. https://doi.org/10.1080/10496491.2016.1121753
- Cass, A. O., & Sok, P. (2013). Exploring innovation driven value creation in B2B service fi rms: The roles of the manager, employees, and customers in value creation. *Journal of Business Research*, 66(8), 1074–1084. https://doi.org/10.1016/j.jbusres.2012.03.004
- Covin, J. G., & Miller, D. (2014). International Entrepreneurial Orientation: Conceptual Considerations, Research Themes, Measurement Issues, and Future Research Directions. *Entrepreneurship: Theory and Practice*, 38(1), 11–44. https://doi.org/10.1111/etap.12027

- Cruz, E. S. D. C., Lalel, H. J. D., & Kale, P. R. (2018). Evaluasi Penerapan Hazard Analysis Critical Control Point (HACCP) pada Mutu Daging Se'i Babi di Kota Kupang. Jurnal Peternakan Indonesia (Indonesian Journal of Animal Science), 20(3), 201. https://doi.org/10.25077/jpi.20.3.201-210.2018
- Del Giudice, M & Della Peruta, M. (2016). The impact of IT-based Knowledge Management Systems on internal venturing and innovation : A Structural Equation Modeling approach to corporate performance. *Journal of Knowledge Management*, 20(3), 484–498.
- Hadi, S., & Supardi. (2020). Revitalization Strategy for Small and Medium Enterprises after Corona Virus Disease Pandemic (Covid-19) in Yogyakarta. April. https://doi.org/10.37896/JXAT12.04/1149
- Imelda, I., Kusrini, N., & Hidayat, R. (2017). Development Strategy 0f Local Food Diversification. *Jejak*, 10(1), 62–79. https://doi.org/10.15294/jejak.v10i1.9127
- Klewitz, J., & Hansen, E. G. (2013). Sustainability-oriented innovation of SMEs : a systematic review. *Journal of Cleaner Production*. https://doi.org/10.1016/j.jclepro.2013.07.017
- Larsson, S. (2020). Marketing Innovation for SMEs during COVID-19 Pandemic.
- Leong, H., Murniati, C. T., Komputer, F. I., Inggris, S., & Soegijapranata, U. K. (n.d.). *PEMBERDAYAAN KELOMPOK BURUH TANI DAN NELAYAN*. 355–362.
- Lumpkin, G. T., & Dess, G. G. (1996). LINKING TWO DIMENSIONS OF ENTREPRENEURIAL ORIENTATION TO FIRM PERFORMANCE: THE MODERATING ROLE OF ENVIRONMENT AND INDUSTRY LIFE CYCLE. 9026(00), 429–451.
- Martelo, S., Barroso, C., & Cepeda, G. (2013). The use of organizational capabilities to increase customer value ☆. *Journal of Business Research*. https://doi.org/10.1016/j.jbusres.2013.02.030
- Martin, B. C., Mcnally, J. J., & Kay, M. J. (2013). Journal of Business Venturing Examining the formation of human capital in entrepreneurship : A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, 28(2), 211–224. https://doi.org/10.1016/j.jbusvent.2012.03.002
- Orth, U. R., & Malkewitz, K. (2012). The Accuracy of Design-based Judgments: A Constructivist Approach. *Journal of Retailing*, 88(3), 421–436. https://doi.org/10.1016/j.jretai.2011.11.004
- Piller, F., Vossen, A., & Ihl, C. (2012). From Social Media to Social Product Development : The Impact of Social Media on Co - Creation of Innovation. Unternehmung, 66(1), 1– 22.
- Retnaningsih. (2020). Adaptasi Usaha Mikro, Kecil, dan Menengah (UMKM) Bandeng Presto Selama Masa Pandemi Covid-19: Studi Kasus di Kota Semarang. *Percetakan Universitas Sriwijaya*, 1099–1107.
- Retnaningsih, C. (2010). Koro: Pengolahan dan Keterlibatan Petani dalam Proses Pengolahan.
- Retnawati, B. B., & Retnaningsih, C. H. (2020). Role of Entrepreneurial Orientation and Market Orientation on Competitive Advantage Through Marketing Performance: The Study at Marine-Based Food Processing Industry in Central Java. 135(Aicmbs 2019), 66–71.
- Retnawati, B. B., Retnaningsih, C., & Ruenda, O. (2021). OLAHAN PANGAN HASIL LAUT SELAMA MASA PANDEMI COVID-19 DI KOTA SEMARANG. Unika Press.
- Retnawati, B., & Irmawati, B. (2016). Orientasi Entrepreneur: Anteceden dan Implikasinya pada Speed Market Response Capability dan Kinerja Perusahaan Industri Jamu sebagai Produk Pewaris Budaya Indonesia. November.
- Scuotto, Veronica; Del Giudice, Manlio; Carayannis, E. (2017). The effect of social networking sites and absorptive capacity on SMES ' innovation performance. *The Journal of*

Technology Transfer, 42(2), 409–424. https://doi.org/10.1007/s10961-016-9517-0

- Soba, M., & Aydin, M. (2013). Product Placement Efficiency in Marketing Communication Strategy. *International Journal of Business and Management*, 8(12), 111–116. https://doi.org/10.5539/ijbm.v8n12p111
- Soto-acosta, P., Colomo-palacios, R., & Popa, S. (2014). Web knowledge sharing and its effect on innovation : an empirical investigation in SMEs. *Knowledge Management Research* & *Practice*, 12(1), 103–113. https://doi.org/10.1057/kmrp.2013.31
- Tian, J., Wang, K., Chen, Y., & Johansson, B. (2010). From IT deployment capabilities to competitive advantage: An exploratory study in China. *Information Systems Frontiers*, 12(3), 239–255. https://doi.org/10.1007/s10796-009-9182-z
- Tooksoon, P., & Mohamad, O. (2016). Marketing Capability and Export Performance: the Moderating Effect of Export Dependence. *The South East Asian Journal of Management*, 4(1). https://doi.org/10.21002/seam.v4i1.5630