

Strategic analysis of the creative business development of processed agricultural products in Surabaya, Indonesia

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Abstract

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This research aims to classify the creative business development of processed agricultural products and to formulate alternative strategies for development. Using random sampling methods, 50 respondents were selected. Based on a Klassen typology classification analysis, the creative businesses of processed food crops and processed fishery products are defined as prime subsectors. In contrast, the creative business of processed livestock is classified as a potential subsector. More detailed analysis of each subsector shows that 26% of creative businesses of processed food crops have a prime classification, another 46% have a potential classification, and the remaining 27.1% have an underdeveloped classification. The fishery subsector predominantly comprises creative businesses with potential classification (54%), followed by prime classification (27%), and finally underdeveloped classification (19%). Location quotient analysis indicates that all the creative businesses of processed food crops and processed fishery products are included in basic status. According to analysis of strengths, weaknesses, opportunities, and threats (SWOT), the creative businesses of processed food crops and fishery products are primarily in quadrant I (aggressive region), indicating that they are in a good position to capitalize on their strengths and seize opportunities. This strategy could be applied based on the principle of harnessing the power of the creative businesses to effect development.

Keywords: creative economy; processed products; agricultural products; SWOT analysis

Introduction

As the second largest metropolis in Indonesia after the capital city of Jakarta, Surabaya is a city of trade, as well as a service center for Eastern Indonesia. Based on the Statistics Central Bureau of Surabaya (SCBS) data for 2011–2015 the gross regional domestic product (GRDP) of Surabaya at constant pricing shows an increasing trend. The leading sectors are still dominated by wholesale and retail trade and car and motorcycle repair services, together contributing around 28.39%. The processing industry contributes 19.57% to GRDP, followed by services providing accommodation, food, and beverages at 14.16%. In contrast, agriculture, forestry, and fisheries have only contributed 0.18% on av-

erage to Surabaya's GRDP over the last five years, a tiny percentage. The low contribution of the agricultural sector is inseparable from the loss of fertile land to meet the needs of the continuously increasing population of Surabaya City, for example, regarding housing, education, health, and other public facilities.

Although Indonesia is an agrarian country, in reality, the contribution of the agricultural sector in Surabaya to GDRP is minimal. The city of Surabaya, as a metro city, does not permit the development of agricultural activities in farming. Indeed, the government of Surabaya City has implemented a policy to develop businesses that use the necessary materials of primary agriculture as processed materials to foster creative economic activity drawing on the human resources

of the city. The government of Surabaya is greatly focused on providing coaching for business actors who use the raw materials of agricultural products, whether food crops, livestock, or fisheries, prioritizing their creativity to develop processed products that have value added.

Concerning the scope of the agricultural sector regarding the sub-sectors of crops, livestock, fisheries, and plantations, in the city of Surabaya, there are no plantations. The creative economy has been developed only to cover businesses processing crop, fishery, and livestock products. These three sub-sectors are continuously striving for development. Thus, it is necessary to study in greater depth what creative efforts need to be developed because these will have a considerable impact on enhancing Surabaya's economy. It is also necessary to analyze what strategies are effective and efficient in developing them.

As a manifestation of the focus of the city of Surabaya on developing a creative industry that processes primary agricultural products, it has been established a non-formal institution called the "Economic Hero" (Pejuang Ekonomi) to accommodate the community of creative business actors. This provides technical assistance in production, marketing, and the provision of business information, as well as facilities to support the development of creative businesses in Surabaya. Thus, many creative entrepreneurs have emerged, currently operating both on a national scale and in the form of a home industry that is not yet stable.

Analysis of strengths, weaknesses, opportunities, threats (SWOT) is the first stage in the process of strategic management. Such analysis involves assessment of the strengths and weaknesses of the organization in light of the opportunities and threats in the environment, seeking to attain a match, or fit, between internal capabilities and external possibilities. Ifediora, Idoko, and Nzekwe (2014) point out that SWOT analysis has helped firms advance in the face of growing challenges, thereby leading to stability and increased productivity. This study aims: to identify the classification of creative businesses in processing agricultural products, and to formulate alternative strategies for the development of creative businesses in Surabaya processing agricultural products through SWOT analysis (Klerkx et al., 2010).

This implies that instead of aiming to plan and control innovation entirely, agricultural innovation policies should foster the emergence of flexible, supportive instruments that enable adaptive innovation management. Changran et al. (2015) argue the need for innovative development, global strategy, collaborative innovation, agricultural technology, production research, and marketing with sci-tech support to realize modern agriculture. In this study, a model of strategic planning is used to analyze the characteristics and differentiation of cre-

ative businesses at different levels. The main aim of the proposed model is the identification and formulation of specific action programs prioritized through a composite application of integrated multi-criteria decision-making methods.

This research will contribute valuable input to the local Surabaya government in developing a policy to strengthen creative businesses based on processed agricultural products. Indeed, good policy increases the added value of the business, as well as improving the welfare of agricultural product owners. Ultimately, it will strengthen the competitiveness of the products in the global markets.

Material and Methods

Study Context

This research was located purposively in the city of Surabaya, Indonesia, an industrial and trading city with good economic growth, and increasing population growth. This has triggered the emergence of businesses based on creativity of the actors to gain added value and increase the ability to compete.

Study Sample

The target respondents were creative business actors using raw agricultural materials, including food crops, and livestock and fishery products. In all, 50 respondents were selected using the random sampling method.

Data Collection

Both primary and secondary data were collected. The Delphi technique was used to retrieve data (Burandt et al., 2018). Primary data were collected through interviews with respondents using a questionnaire prepared beforehand. Secondary data were obtained from the Central Bureau of Statistics, the Office of Food Security and Agriculture of Surabaya City, and the Office of Cooperatives, Micro, small and Medium Enterprises (UMKM), etc.

Data Analysis

To determine the classification of creative businesses employing processed agricultural products, this study used the Klassen typology, namely classification as prime, developing, potential, and underdeveloped. This is used to provide an overview of the growth pattern of the economic development of a region. The technique employs the location quotient to divide an area into four quadrants based on economic growth and income per capita of the region. The four quadrants of development in question are: quadrant I, denoting an advanced and fast-growing area, i.e., presenting a higher than average growth rate compared to the province as a whole (prime creative businesses); quadrant II, denoted

by an advanced but pressured area, presenting a lower rate of economic growth but per capita income higher than the provincial average (developing creative businesses); quadrant III, denoting a rapidly growing area, indicated by a higher rate of economic growth but per capita income lower than the provincial average (potential creative businesses); quadrant IV, denoting relatively underdeveloped regions, with a rate of economic growth and income per capita lower than that of the province (Munandar, 2015).

In this research, the method used to classify creative businesses was based on the pattern, growth structure (fast vs. slow), and contribution (major vs. minor) indicators of the sector. These were then compared to the growth and contribution of GRDP for Surabaya. Based on this method, the creative businesses of processed agricultural products in Surabaya could be characterized into four categories, as presented in Table 1.

As can be seen from the Table 1:

- Prime creative businesses are those employing processed urban agricultural products with a growth rate and contribution higher than the GRDP of Surabaya;
- Potential creative businesses are those employing processed urban agricultural products with a high contribution, but a rate of growth lower than the GRDP of Surabaya;
- Developing creative business are those employing processed urban agricultural products with a higher growth rate, but a contribution was lower than the GRDP of Surabaya;
- Underdeveloped creative businesses those employing processed urban agricultural products at a growth rate and contribution lower than the GRDP of Surabaya.

These classifications reflect the characteristics of creative agricultural businesses. This implies that the essential characteristics are a real contribution to GRDP, as indicated by high economic value, and growth in economic value more significant than the average growth of the sector in GRDP.

To identify the development strategy, two stages of strategy formulation were used. First, the input stage was performed by analyzing the internal and external environments;

then these were evaluated using the internal factor evaluation (IFE) and external factor evaluation (EFE) matrices. SWOT analysis is a precursor to strategic planning and performed by expert panels who can assess the organization from a critical perspective. This panel could comprise senior leaders, board members, employees, community leaders, and technical experts. Panel members base their assessments on utilization rates, outcome measures, satisfaction statistics, organizational performance measures, and financial status. While employing data and facts, the conclusions drawn from the SWOT analysis are based on the expert opinion of the panel (Harrison, 2010).

The strategic issues that need to be monitored in this research concern the opinions and inputs of respondents and experts from related agencies derived from forum group discussions (FGDs). Such issues should be determined as they might affect the capabilities of creative businesses and the commodities regarding processed urban agricultural products in the future. Thus, the use of quantitative methods is highly recommended for forecasting and making assumptions concerning the future (Rangkuti, 2002). Second, the strategy formulation phase was undertaken using a combination of matrices of internal and external evaluation factors, and employing SWOT analysis.

The next step was looking for the relative positions of creative commodities for urban farming, calculated as follows: a) the weights and ratings of strengths and weaknesses were multiplied to obtain an X value; b) the weights and ratings of opportunities and threats were multiplied to obtain a Y value. Based on these relative positions, calculations could be applied in the SWOT matrix, i.e., choosing a strategy corresponding to the relative positions of the commodities. This matrix generated four sets of possible alternative strategies as shown in Table 2.

The results of the SWOT analysis will be employed, among other things:

- As a guide for organizations to develop strategic policies. With this analysis, it is expected that organizations will be able to choose the best policies and plans for future development.

Table 1. Basic classification of creative businesses of processed agricultural products by Klassen typology

Growth rate of urban agricultural commodities	Contribution of agricultural subsector commodities	
	Major contributions (Contribution _{commodity} ≥ Contribution _{GDP})	Minor contributions (Contribution _{commodity} < Contribution _{GDP})
Fast growth $r_{commodity\ i} \geq r_{GDP}$	Quadrant I An advanced and fast growing area (Prime creative businesses)	Quadrant II An advanced but pressured area (Developing creative businesses)
Slow Growth $r_{commodity\ i} < r_{GDP}$	Quadrant III A rapidly growing area (Potential creative businesses)	Quadrant IV Relatively underdeveloped regions (Underdeveloped creative businesses)

Table 2. SWOT matrix diagram

External	Internal	
	Strength (S) Determining 5-10 internal strength factors	Weakness (W) Determining 5-10 internal weaknesses factors
Opportunity (O) Determining 5-10 external opportunity factors	S-O Strategy Creating strategies that use strength to take advantage of the opportunity	W-O Strategy Creating strategies that minimize weakness to take advantage of the opportunity
Threat(T) Determining 5-10 external threat factors	S-T Strategy Creating strategies that use strength to overcome the threat	W-T Strategy Creating strategies that minimize weakness to overcome the threat

Source: Rangkuti, 2001

- To assist organizations in conducting policy evaluations. These will establish alternative solutions for any problems encountered.
- To provide information on the condition of the organization, enabling it to consider its development efforts.
- To motivate the management of the organization through understanding of the different factors to identify more effective and efficient policy ideas.

Results and Discussion

As already noted, in Surabaya there are no plantation areas, and thus the raw agricultural material for processing in creative businesses can be classified into three categories:

processed food crops, livestock and fishery products, as presented in Table 3.

Table 4 further illustrates the categorization according to the Klassen typology. From this, it can be seen that creative businesses of processed food crops and fishery products are included in the prime classification, indicating that the implementation of the right strategy in their development will significantly influence the economic development of Surabaya city. In contrast, the creative businesses in processed livestock fall within the potential category, indicating that the development of such businesses will not have a significant impact on the economy of Surabaya in the short term. Therefore, in the further analysis of this study, determining the development strategy, only creative businesses focused on processed food crops and fishery products are considered.

Table 3. Classification of creative business of processed agricultural products in Surabaya in 2017

Business types	Value (millions Rp)	The contribution of creative business (%)	The contribution of gross domestic product	The rate of creative business	The rate of gross domestic product
Food crops	2319.23	30.41	18.57	9.83	4.91
Livestock	950.88	12.47	18.57	6.72	4.91
Fishery	4.354	57.1	18.57	8.45	4.91
Total	7624.11				

Source: Primary data analysis, 2017

Table 4. Basic classification of creative businesses of processed agricultural products by Klassen typology in Surabaya in 2017

Growth rates of commodities	Contribution of commodities	
	Major contributions (Contribution _{Commodity} ≥ Contribution _{GDP}) Food crop: 9.83 ≥ 4.91 Livestock: 6.72 ≥ 4.91 Fishery: 8.45 ≥ 4.91	Minor contributions (Contribution _{Commodity} < Contribution _{GDP})
Fast growth (rate of growth _{commodity} ≥ rate of growth _{GDP}) Food crop: 30.41 ≥ 18.57 Fishery: 57.1 ≥ 18.57	Prime creative business Food crop Fishery	Developing creative business
Slow growth (rate of growth _{commodity} ≤ rate of growth _{GDP}) Livestock: 12.47 ≤ 18.57	Potential creative business Livestock	Underdeveloped creative business

Source: Primary data analysis, 2017

A detailed classification of creative businesses related to processed food crops can be seen in Table 5.

Of the 26 creative businesses using processed food crops, only 7 are included in the prime classification (Table 6).

These seven businesses require greater attention as their development could exert a great influence on economic development in Surabaya. In contrast, 27% of creative businesses employing food crops are in the underdeveloped category, indicating that they are not stable, only produce to order, or are side enterprises rather than professional going concerns.

A detailed classification of creative businesses related to processed fishery products can be seen in Table 7.

Table 7 shows that of the 13 creative businesses in this subsector, 5 are classified as prime, indicating that their de-

velopment would have a significant influence on the economic progress of Surabaya, as shown in Table 8.

Identification of internal and external factors

In identifying internal and external factors related to the firms, the qualitative descriptive analysis was carried out to map them into strategic factors (strengths, weaknesses, opportunities, and threats), and finally to develop a strategy for the development of creative businesses employing processed agricultural products in Surabaya.

Key internal and external factors driving creative businesses in processed food crops

Internal and external key factors were derived from internal factor evaluation (IFE) and external factor evaluation

Table 5. Classification of creative business of processed food crops of Surabaya in 2017

Business types	Production in 2016 (Unit)	The value in million (IDR)	Growth rate of commodity (%)	Growth rate of GRD (%)	Contribution of Commodity (%)	GDP contribution (%)	Classification
Snack sumpia mercon banting	6.000	35.00	1.5	0.56	1.57	18.57	Potential
Kirei Saffron	12.000	24.00	-0.8	0.56	3.62	18.57	Potential
Idola Tempeh Chips	12.000	144.00	4.95	0.56	19.20	18.57	Prime
Kampung Semanggi	24.000	268.00	78	0.56	27.24	18.57	Prime
Mushroom Satay	9.600	9.60	-1.07	0.56	0.41	18.57	Under-developed
Rainbow Rounded Tofu	3.120	10.92	-4.00	0.56	0.47	18.57	Under-developed
Sari delight	4.560	11.92	6	0.56	1.37	18.57	Potential
Opak Gapit Kacang	1.200	16.00	-2	0.56	1.55	18.57	Under-developed
Lyly Bread	2.400	240.00	42.3	0.56	20.35	18.57	Prime
Nyikutis (nastar + kembang goyang)	960	33.20	-3	0.56	1.86	18.57	Under-developed
Orumy (processed seaweed)	5.760	201.60	4.95	0.56	18.70	18.57	Prime
Kendi Jati Herbal Drink	4.800	168.00	13.7	0.56	27.24	18.57	Prime
Variety fruit flavoured juices	3.600	18.80	23	0.56	11.24	18.57	Potential
Healthy tempeh	4.800	20.00	0	0.56	0.86	18.57	Potential
Kusem (turmeric tamarind)	3.360	6.88	0.5	0.56	0.29	18.57	Potential
Bang Jarwo Tempeh	4.800	4.80	32	0.56	0.21	18.57	Potential
Kriukz Kebab Leather Chips	1.080	9.80	0	0.56	0.46	18.57	Under-developed
Krispy Semanggi	2.496	14.96	0	0.56	1.08	18.57	Under-developed
Opak Jepit Lima Jaya	2.304	6.95	10	0.56	0.43	18.57	Potential
Sami Jali (Samiler Jarak Dolly)	4.800	600.00	11.7	0.56	25.87	18.57	Prime
Akifa Rosella Drink	7.200	43.20	0	0.56	1.86	18.57	Under-developed
Pure Soybeans	67.200	268.80	11.1	0.56	21.59	18.57	Prime
Surabaya Food Kembang Goyang	36.000	14.00	8.3	0.56	0.60	18.57	Potential
Cool Yes (red ginger powder)	360	9.00	8.3	0.56	0.39	18.57	Potential
Pastel dried with cow abon	19.200	8.80	16.7	0.56	0.38	18.57	Potential
Gundih Asri Aneka jamu	1.680	42.00	3.5	0.56	1.81	18.57	Potential
Total		2.230.23	216.447				
Average			9.84	0.56			

Source: Results of primary data analysis, 2017

Table 6. Typology Klassen matrix of creative business of processed food crops of Surabaya in 2017

Growth rates of creative business of food crop	Contribution of food crop commodities	
	Major contributions (Contribution _{Commodity} ≥ Contribution _{GDP})	Minor contributions (Contribution _{Commodity} < Contribution _{GDP})
Fast growth (rate of growth _{commodity} ≥ rate of growth _{GDP})	Prime creative business Sami Jali Tempeh Chips “Idola” Kampung semanggi Lyly Bread Orummy (processed seaweed) Kendi jati herbal drink Pure soybeans	Developing creative business -
Slow growth (rate of growth _{commodity} < rate of growth _{GDP})	Potential creative business Snack sumpia mercon banting Kirei Saffron Sari delight Variety fruit-flavored juices Healthy tempeh Kusem (turmeric tamarind) Bang Jarwo Tempeh Opak Jepit Lima Jaya Surabaya Food Kembang Goyang Cool Yes (red ginger powder) Pastel dried with cow abon	Underdeveloped creative business Mushroom Satay Rainbow Rounded Tofu Opak Gapit Kacang Nyikutis (nastar + kembang goyang) Kriukz Kebab Leather Chips Krispy Semanggi Akifa Rosella Drink

Source: Primary data analysis, 2017

Table 7. Classification of creative business of processed fishery of Surabaya in 2017

Business types	Production in 2016 (Unit)	Value in millions (IDR)	Growth rate of commodity (%)	Growth rate of GDP (%)	Contribution of commodity (%)	Contribution of GDP (%)	Classification
Processed Shells	30.000	750	7.34	5.6	22.36	18.57	Prime
Prime Crispy Sea Ccmbr	36.000	1.240	30.87	5.6	27.15	18.57	Prime
Catfish Nuggets	18.000	270	2.9	5.6	8.05	18.57	Under-developed
Various Salted Fishes	15.000	900	10.12	5.6	26.83	18.57	Prime
Smoked Fish	60.000	120	23	5.6	3.57	18.57	Potential
Smoked Fish	24.000	48	11.5	5.6	1.43	18.57	Potential
Fish Crackers	3.000	75	12	5.6	2.24	18.57	Potential
Smoked Fish	14.400	288	6.5	5.6	8.58	18.57	Potential
Smoked Fish	12.000	240	9.75	5.6	7.16	18.57	Potential
Abon Lele (Catfish Abon)	2.400	48	7	5.6	21.43	18.57	Prime
Sea Fish Crackers	4.800	48	5.7	5.6	1.43	18.57	Potential
Pais Makmur (Crackers)	4.800	288	7.34	5.6	18.58	18.57	Prime
Processed Sea Crab	14.000	39	5.87	5.6	1.16	18.57	Potential
Total		4.354					

Source: Primary data analysis, 2017

(EFE) matrices respectively. The internal and external key factors of creative businesses employing food crops are presented in Table 9.

From Table 9, it can be seen that mastering the skills of production and having a clear purpose and market are the essential factors in creative businesses related to food crops. The reason is that although the weight of these factors is lower (0.12) than developing products long known to and preferred

by consumers (0.23), the overall values are higher. This is indicated by the highest ranking of 4. The most prevalent weaknesses are depending on aid, funds, and programs from the government in running the business, such as grants, revolving funds, exhibition facilities, etc. The greatest opportunity lies in providing opportunities for growth, i.e., the increase in population numbers, while numbers of competitors in terms of similar businesses are a threat that require serious attention.

Table 8. Klassen typology matrix of creative business of processed fishery of Surabaya in 2017

Growth rates of creative business of fishery	Contribution of fishery commodities	
	Major contribution (Contribution _{Commodity} ≥ Contribution _{GDP})	Minor contribution (Contribution _{Commodity} < Contribution _{GDP})
Fast growth (rate of growth _{commodity} ≥ rate of growth _{GRDP})	Prime creative business Bunda Processed Shells Various salted fishes Catfish Abon Prime crispy sea cucumber Pais Makmur (Crackers)	Developing creative business

Source: Primary data analysis, 2017

Table 9. Internal and external factor evaluation of creative business of processed food crops in Surabaya in 2017

A. Internal Factor			
1	2	3	4
Indicator	Weight	Rating	Score
(1)	(2)	(3)	(4)
1. Strength (S)			
Mastering production skills	0.12	4	0.48
The business had a clear purpose and market	0.12	4	0.48
The business had sufficient capital	0.11	3	0.33
Products had been known for a long time and preferred by consumers	0.23	2	0.46
Availability of manpower	0.13	2	0.26
The product is unique	0.03	4	0.12
It's a hobby	0.11	3	0.33
Maintaining product quality	0.13	3	0.39
Facilities from the government	0.09	3	0.27
Number of strength	1		3.12
2. Weakness (W)			
The actor had not been doing business analysis	0.12	-4	-0.48
The actor mastered less product design	0.11	-2	-0.22
The business was running traditionally, product-oriented, not market-oriented.	0.10	-3	-0.30
The actor mastered less promotional techniques	0.08	-2	-0.16
Low quality of existing labour	0.10	-2	-0.20
Reliance on government grants, funds, and programs in running their business, such as grant funds, revolving funds, exhibition facilities, etc.	0.13	-4	-0.52
The actor did not control the market information	0.11	-3	-0.33
Production goods were not durable	0.10	-2	-0.20
Long-duration for production (Manual)	0.14	-2	-0.28
Number of weakness			-2.69
Number of internal factors			0.43
B. External Factor			
1. Opportunity			
The way of opening on the regional and export market	0.12	4	0.48
The existence of soft credit facility	0.17	3	0.51
The existence of training assistance and government facilities	0.14	4	0.56
The existence of partnerships with big companies	0.12	2	0.24
Increasing population	0.16	4	0.64
Increasing purchasing power and consumer's appetite	0.14	4	0.56
There were a number of exhibition activities in various regions to expand the market	0.15	3	0.45
Number of opportunities	1		3.44

Table 9. Continued

1	2	3	4
2. Threat			
Limitations on Raw Materials	0.14	-4	-0.56
Business competition of similar products	0.3	-3	-0.90
The flow of export products (similar/substitute)	0.13	-3	-0.39
The tightness of online business competition	0.29	-2	-0.58
The emergence of traders who did not follow the rules of the government	0.14	-1	-0.14
Number of threat			-2.57
Number of external factors			0.87

Source: Primary data analysis, 2017

Key internal and external factors driving creative businesses in processed fishery products

The critical internal and external factors for creative businesses in processed fishery products are presented in Table 10.

The relative position of creative businesses in processed agricultural products

This study utilizes a SWOT quadrant matrix to determine the relative positions of creative businesses. For the X-axis, the study uses total internal factors, while the external fac-

Table 10. Internal and external factor evaluation of creative business of processed fishery of Surabaya in 2017

1	2	3	4
A. Internal Factors			
Indicator	Weight	Rating	Score
1. Strength (S)			
Mastering production skills	0.13	4	0.52
The business had a clear purpose and market	0.12	3	0.36
The business had sufficient capital	0.11	4	0.44
Products had been known for a long time and preferred by consumers	0.08	2	0.16
Availability of manpower	0.12	3	0.36
The products were unique	0.11	4	0.44
It's a hobby	0.19	2	0.38
Maintaining product quality	0.15	4	0.60
Facilities from the government	0.10	2	0.20
Number of strength	1		3.46
2. Weakness (W)			
The actor had not been doing business analysis	0.14	-2	-0.28
The actor mastered less product design	0.14	-3	-0.42
The business was running traditionally, product-oriented, not market-oriented	0.11	-3	-0.33
The actor mastered less promotional techniques	0.09	-2	-0.18
Low quality of existing labour	0.09	-2	-0.18
Reliance on government grants, funds, and programs in running their business, such as grant funds, revolving funds, exhibition facilities, etc.	0.15	-3	-0.45
The actor did not control the market information	0.13	-3	-0.39
Production goods were not durable	0.12	-3	-0.26
Long-duration for production (Manual)	0.11	-3	-0.33
Number of weakness			-2.82
Number of internal factors			0.64
External Factors			
Indicator	Weight	Rating	Score

Table 10. Continued

1	2	3	4
1. Opportunity (O)			
The way was opening on the regional and export market	0.12	3	0.36
The existence of soft credit facility	0.17	4	0.68
The existence of training assistance and government facilities	0.14	4	0.64
The existence of partnerships with big companies	0.12	3	0.36
Increasing population	0.16	2	0.32
Increasing purchasing power and consumer's appetite	0.14	2	0.28
There was number of exhibition activities in various regions to expand market reach.	0.15	3	0.45
Number of opportunities	1		3.09
2. Threat			
Limitations on raw materials	0.14	-3	-0.42
Business competition of similar products	0.3	-2	-0.60
The flow of export products (similar/substitute)	0.13	-2	-0.26
The tightness of online business competition	0.29	-3	-0.87
The emergence of traders who did not follow the rules of the government	0.14	-2	-0.28
Number of threat			-2.43
Number of external factors			0.66

Source: Primary data analysis, 2017

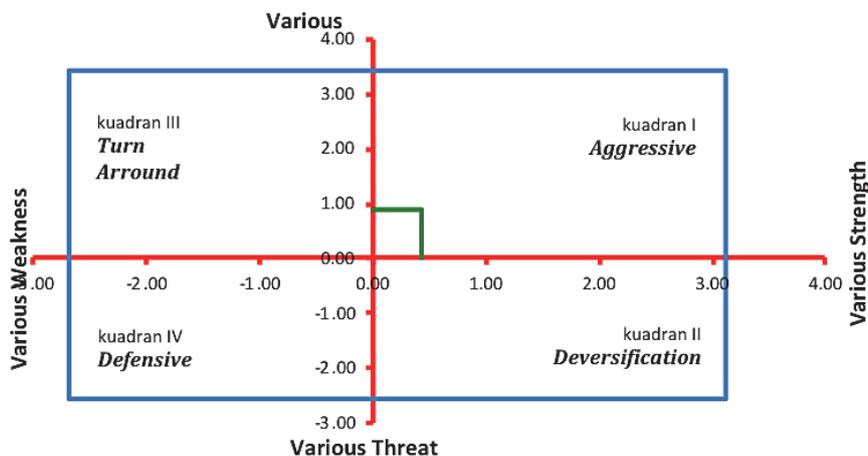


Fig. 1. Relative position of the creative business of processed food crops of Surabaya in 2017

tors comprise the Y-axis. The relative position of the creative businesses employing processed food crops in Surabaya can be seen in Fig. 1.

It can be seen that the relative position of creative businesses employing processed food crops lies in quadrant I (aggressive) with point coordinates $X = 0.43$ and $Y = 0.87$. This indicates that the creative businesses employing food crops are in a strong position and have development opportunities. The results of the analysis of the relative position of these creative businesses indicate the strategy that should be used for their development is a

strengths/opportunities (S-O) strategy. The SWOT matrix for the creative businesses employing processed food crops can be seen in Table 11.

The relative position of creative businesses employing processed fishery products also lies in quadrant I (aggressive), illustrating considerable opportunities for development. Therefore, the appropriate strategy for the development of the subsector is also one focusing on the use of strengths to seize opportunities, namely an S-O strategy (Table 12). The SWOT matrix is provided in Fig. 2.

Table 11. SWOT matrix of the creative business of processed food crops

External	Internal	
	Strength Mastering production skills The business had a clear purpose and market The business had sufficient capital Products had been known for a long time and preferred by consumers Availability of workforce The product is unique It is a hobby Maintaining product quality Facilities from the government	Weakness The actor had not been doing business analysis The actor mastered less product design The business was running traditionally, product-oriented, not market-oriented The actor mastered less promotional techniques Low quality of existing labour Reliance on government grants, funds, and programs in running their business, such as grant funds, revolving funds, exhibition facilities, etc. The actor did not control the market information Production goods were not durable Long-duration for production (Manual)
Opportunity The way of opening on the regional and export market The existence of soft credit facility The existence of training assistance and government facilities The existence of partnerships with big companies Increasing population Increasing purchasing power and consumer's appetite There was number of exhibition activities in various regions to expand the market	S-O Strategy Creating strategies that used strength to take advantage of the opportunity	W-O Strategy Creating strategies that minimized weakness to take advantage of the opportunity
Threat Limitations on Raw Materials Business competition of similar products The flow of export products (similar/substitute) The tightness of online business competition The emergence of traders who did not follow the rules of the government	S-T Strategy Creating strategies that used strength to overcome the threat	W-T Strategy Creating strategies that minimized weakness to overcome the threat

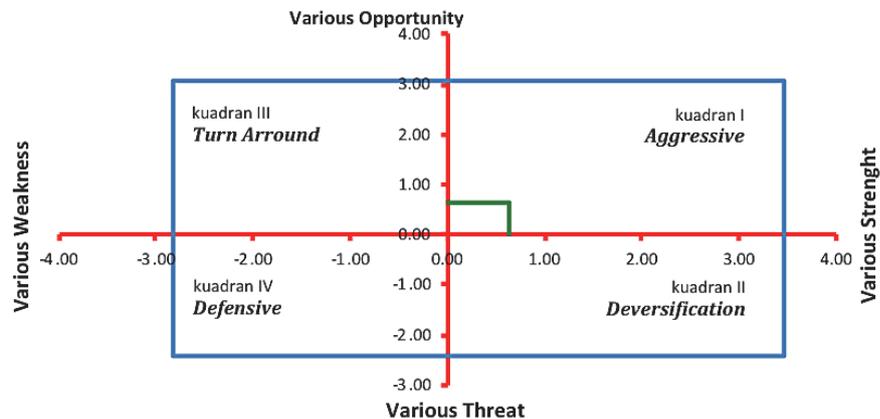


Fig. 2. Relative position of creative business of processed fishery of Surabaya in 2017

Table 12. SWOT matrix of the creative business of processed fishery

External	Internal	
	Strength	Weakness
	Mastering production skills The business had a clear purpose and market The business had sufficient capital Products had been known for a long time and preferred by consumers Availability of workforce The product is unique It is a hobby Maintaining product quality Facilities from the government	The actor had not been doing business analysis The actor mastered less product design The business was running traditionally, product-oriented, not market-oriented The actor mastered less promotional techniques Low quality of existing labour Reliance on government grants, funds, and programs in running their business, such as grant funds, revolving funds, exhibition facilities, etc. The actor did not control the market information Production goods were not durable Long-duration for production (Manual)
Opportunity The way was opening on the regional and export market The existence of soft credit facility The existence of training assistance and government facilities The existence of partnerships with big companies Increasing population Increasing purchasing power and consumer's appetite There were some exhibition activities in various regions to expand the market	S-O Strategy Creating strategies that used strength to take advantage of the opportunity	W-O Strategy Creating strategies that minimized weakness to take advantage of the opportunity
Threat Limitations on Raw Materials Business competition of similar products The flow of export products (similar/substitute) The tightness of online business competition The emergence of traders who did not follow the rules of the government	S-T Strategy Creating strategies that used strength to overcome the threat	W-T Strategy Creating strategies that minimized weakness to overcome the threat

Source: Result of analysis data, 2017

The results of the SWOT analysis for both the creative businesses employing food crops and fishery products thus both recommend an S-O strategy, prioritizing the utilization of strengths to seize business development opportunities and thus also favor the economic development of Surabaya as a whole. This is consistent with the study of Orr (2011), which concludes that SWOT analysis can provide strategies to support relevant business sectors.

Alternative strategies that could be applied to develop the creative businesses related to food crops and fisheries in Surabaya are as follows:

- The market could be expanded by participating in exhibition events, either held by the government or private parties, both within and outside the city of Surabaya;
- The number and quality of consumers could be enhanced by improving production capacity through training and utilizing business facilities provided by the government;
- Capital capacity could be enhanced by taking advantage of soft credit facilities;

- Pioneering relations with large entrepreneurs need to be created, either in the form of traditional partnerships or the development of core-plasma partnerships.

Conclusions

Summary

Some important issues have been highlighted in the analysis. First, creative businesses in the field of processed agricultural products in Surabaya, Indonesia, make an essential contribution to the regional economy. However, of the 26 types of creative businesses identified related to food crops, only 27% categorized as prime creative businesses, while 46% and 27% are potential and undervalued, respectively. Moreover, of the 13 types of creative businesses using processed fishery products, 38% are classified as prime, 54% as potential, and 8% as underdeveloped. Nonetheless, the relative position of creative businesses in processed food crops and fishery products lies in quadrant I in the

analysis, i.e., the aggressive quadrant between the strengths (S) and opportunities (O) lines; thus, the strategy proposed for the development of these creative businesses is to capitalize on strengths in order to seize business development opportunities.

Recommendations

The findings of this study give rise to several recommendations, as follows:

- Creative businesses based on processed agricultural products in Surabaya absorb a considerable amount of the workforce, potentially attenuating the negative impacts of unemployment and improving the welfare of the community. However, many such creative businesses are still classified as potential or underdeveloped. Thus, intensive coaching is needed to address the problems encountered and raise their level to prime.
- Coaching opportunities need to be added to facilities such as Kapas Krampung Plaza, in particular removing obstacles preventing creative entrepreneurs located far away from attending.
- More orderly administration of creative businesses in Surabaya is necessary, making it easier to monitor their development and address any problems encountered.
- There is a need of good synergy between government institutions that have relevant competencies and the creative businesses in Surabaya to facilitate their development.

References

- Annemarie, B., Lang, F., Schrader, R., & Thiem, A.** (2013). Working in regional agro-food networks – Strengthening rural development through cooperation. *Eastern European Countryside*, 19, 153-176.
- Burandt, Annemarie, Lang, F., Schrader, R., Thiem, A.** (2013) Eastern European Countryside, Torun, 19, 153-176. DOI:10.2478/eec-2013-0008.
https://e-resources.perpusnas.go.id:2057/docview/1547308084/FB79CF681EB24458PQ/6?accountid=25704. (Accessed on Jan 21 2018)
- Central Bureau of Statistic of East Java.** (2015). Gross Regional Domestic Product (GRDP) Of Surabaya city according to business field 2010-2014. Surabaya, Indonesia (Id).
- Central Bureau of Statistic of Surabaya.** (2015). Surabaya in numbers 2015. Surabaya, Indonesia (Id).
- Changran, L., Man, Z., Qing, W., Minzan, L., & Wanlin, G.** (2015). Summary of China Development Forum 2015 and the 2nd International Conference on Smart Agriculture Innovative Development. *International Journal of Agricultural and Biological Engineering*, 8(5), 176-178.
- Darwanto, H.** (2006). Basic Principles of Regional Economic Development (Id). <http://www.bappenas.go.id>. (Accessed: 27 September, 2016).
- David, F. R.** (2009). Strategic Management. Salemba Empat, Jakarta (Id).
- Evan-Wong, S.** (1996). Marketing agricultural information services in the Eastern Caribbean. *Library Management*, 17(3), 22-8.
- Harrison, J. P.** (2010). Essentials of Strategic Planning in Health-care. Health Administration Press, Chicago.
- Hendayana, R.** (2003). Application of the Location Quotient (LQ) method in determining national superior commodities. *Informatika Pertanian*, 12, 658-675 (Id).
- Ifediora, C. O., Idoko, O. R. and Nzekwe, J.** (2014) Organization's stability and productivity: the role of SWOT analysis an acronym for strength, weakness, opportunities and threat. *Intern. J. of Innov. and Appl. Res.*, Volume 2, October.
- Klerkx, L., Aarts, N., & Leuwis, C.** (2010). Adaptive management in agricultural innovation systems: The interactions between innovation networks and their environment. *Agricultural Systems*, 103(6), 390-400.
- Lamprou, A., & Vagiona, D.** (2017). An innovative spatial planning model: The municipal unity of Themi (Thessaloniki-Greece) case study. *Cogent Social Sciences*, 3, 1395784.
- Minister of Internal Affairs of Republic of Indonesia.** (2014). Regulation No. 9, Year 2014: Guidelines of Regional Superior Product Development Jakarta, Indonesia (Id).
- Munandar, T. A., & Winarko, E.** (2015). Regional development classification model using decision tree approach. *International Journal of Computer Applications (0975 – 8887)*, 114(8) 28-35.
- Nickel, R.** (2017). Do a SWOT Analysis on your farm. Retrieved from <https://www.agriculture.com/farm-management/business-planning/do-a-swot-analysis-on-your-farm> on 29 January, 2018.
- Nworie, J.** (2011). Using the Delphi Technique in educational technology research. *TechTrends*, 55(5), 24-30.
- Orr, S. K.** (2011). The private sector on public land: Policy implication of a SWOT analysis of Banff National Park. *Journal of National Resources Policy Research*, 3(4), 341-345.
- Osita, I. C., Onyebuchi, I., & Justina, N.** (2014). Organization's stability and productivity: the role of SWOT analysis an acronym for strength, weakness, opportunities and threat. *International Journal of Innovative and Applied Research*, 2(9), 23-32.
- Rangkuti, F.** (2001). SWOT Analysis Technique for Dissecting Business Cases: Reorienting Strategic Planning Concepts to Face the 21st Century. PT Gramedia Pustaka Utama, Jakarta (Id).
- Rangkuti, F.** (2002). Analysis Technique for Dissecting Business Cases: How to Calculate Weight and Rating. PT Gramedia Pustaka Utama, Jakarta (Id).
- Umar, H.** (2002). Strategic management in action. PT Gramedia Pustaka Utama, Jakarta
- Vijulie, I., Manea, G., Matei, E., Tirla, L., & Trinca, I.** (2013). Analysis of farming types' characteristic in the Boianu Plain (Romania). *Human Geographies*, 7(1), 61-70.