

**CREATING BUSINESS MODEL OF MSME DAIRY COW PRODUCTS
THROUGH THE CONCEPT OF SUSTAINABLE MARKET
ENTERPRISES (4C DIAMOND-TRIANGLE-CIRCLE)**

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ABSTRACT

Product assessment decisions are determined based on the cooperative's quantity and quality of milk-based on a grading system. Farmers are powerless in bargaining, so they often experience a gap between income and costs that have been incurred, even those costs are still in the form of unpaid loans. This was experienced by several farmers who finally decided not to join as members of the cooperative and chose to cultivate independently and formed a livestock group called "*Sumber Abadi*" however, it turns out that farmers are having difficulties again when they have to access the market because so far the market is determined by partners. This study aims to create a model that is ready to be applied based on the condition of farmers using the concept of Sustainability Marketing Enterprises (SME), which consists of 4c diamonds, triangles, and circles. Dairy products are the main object of MSMEs in the healthy drink category, with the number of public requests increasing, especially during the pandemic. Still, the MSME sector during the pandemic is experiencing a significant decline due to the declining purchasing power of the people. The method uses purposive sampling and snowball sampling. Data analysis by identifying used business landscape analysis through mapping key performance indicators, then continued with TOWS and AHP analysis. So the SME model is applied to the *Sumber Abadi* livestock group. It is hoped to become a strategic solution for livestock groups in marketing dairy

products and their processed products in times of crisis.

Keywords: independent farmers, sustainability marketing enterprises, milk, MSMEs

INTRODUCTION

Livestock subsector makes great contribution to food availability of animal protein in the national economy. In 2019, livestock subsectors contributed the greatest performance in comparison with agriculture and fishery sectors, 7.84%. Commodities that provide the greatest support for national food sovereignty are poultry, beef and dairy cows. If they are categorized between poultry and ruminant commodities, poultry plays great role, but 80% of the poultry sectors are dominated by investors, while 20% investors cooperate with the smallholder farmers from ruminant commodities. Based on 20% proportion, most of the investors chose the dairy cows. It indicated that dairy cows are superior commodities, in which able to maximize the value of their production from the smallholder farmers. Majority of the dairy cows' investors partner with the smallholder farmers as suppliers of domestic fresh milk (DFM), but in the past 10 years, the dairy cows productivities in the smallholder farmers' level have not maximum yet, however, the dependence on cooperative as mediator between industries is getting higher, so that independence of the farmers is increasingly being eroded along with the provision of *Sapronak* (livestock production facilities) savings and loan facilities provided by the cooperative. Today, industries have also imposed a quota system for each cooperative with the maximum amount of milk supply of 50 tons of milk per day, and for the rest supply, the farmers must sell themselves without the cooperative's assistance, while so far, farmers rely on partners for the market. It indicates that conductivity level of the dairy cows business in smallholder-scale is quite low. Based on data from Ministry of Industries (2019), comparison of percentage for the imported milk is 70% and 30% from the smallholder farmers.

Polemic of dairy cows business in the smallholder farmers level is very complex, both at the upstream subsystem, on farm and the downstream, which give a domino effect to each other. It has been perceived by several farmers who chose to breed the livestock independently by assumption that if they rely on the mediator, the farmers would not have a strong bargaining position in setting price and even more *sapronak* loans to the cooperatives. Therefore, the farmers run the dairy cows business independently, but they have some difficulties in facing the fluctuating market dynamic against the livestock products. Basically, the farmers have difficulties to access the market because they used to rely on the partners. The study initiated to design a business model to maximize the marketing of dairy products in a sustainable manner. Livestock products have opportunities to be the object of MSME as sector which makes great contribution to national economy, if it is assessed on the basis of competitive superiority levels

and high comparative at each region. MSMEs businesses are competitive due to majority of the livestock products are foodstuff. Foods and beverage industries make great contribution to the increase of GDP (Gross Domestic Product) other than the non-oil and gas sector in the last five years, with an average of 5% per year (Ministry of Industries 2015).

If it is studied through the concept of SME business, the dairy products are potential products that could assist the society to fulfill the nutritious animal protein food products. During pandemics, the people change quickly, which in fact, has been predicted by marketer that such change will take place in 2025, but due to the pandemics of Covid-19, it will impose massive impact on consumers behavior in purchasing nutritious and hygienic food product, as well as has high accessibility. If farmers of the dairy cows make contribution to MSMEs through fresh milk products and their derivatives, so it is expected that the dairy cows' farmers will be able to be resilient during pandemics, because the livestock subsector was affected by the pandemic in the Second Quarter.

In the previous study, Kusumastuti et al. (2021) reported that during the pandemic, business performance in the MSMEs sector has decreased from the upstream process for procurement to downstream for market share. It is due to the purchasing power of the public falling. The technological prowess is both a solution and a challenge for producers to survive in a situation that full of uncertainty. Producers that are able to survive are adaptive to the change of marketing system as a result of the changing consumers' behaviors along with the dynamic of economy. For certain social groups who experience the decline of purchasing power, they will prefer the affordable products; meanwhile, consumers who have stable purchasing power will keep buying honey even though it is expensive, but they have positive recommendation from the consumers (Putritamara et.al. 2021)

Through creating model in order to realize the sustainable MSMEs business marketing, the dairy cows' farmers should be optimized through 4C diamond-triangle-circle. It is expected that the initiation of SME (Sustainability Marketing Enterprises) model will also become a solution in the form of a ready-to-apply model for producers of MSMEs by 3 aspects, namely outlook with a diamond system that measures the change, competitor, customers, and company. The method becomes a business development of the smallholder farmers to increase business performance of the dairy cows from upstream-downstream without rely on the institution and it will become new solution for the dairy cows' farmers in increasing their ability to work independently and make contributions through MSME sector from fresh milk as well as the processing products and the resilience against diverse situations and the changing condition in modern era.

METHOD

This research was conducted at dairy farmer group of Sumber Abadi, located in Donowarih Village, Karangploso Sub-district, Malang Regency, East Java Province during 2 months from May to July 2021. The data collecting was conducted through direct observation and depth interview to dairy farmer, livestock group, marketing agency, and consumers (end users). The sampling method used non probability with snowball sampling, so that the key informant should be determined first using purposive sampling method toward the dairy farmers who produce MSMEs products made of milk and its processed products. So that, the next respondents will be determined by the key informant. It will continue until the data is considered to be homogenous.

The research method used a case study with the target of dairy cows' group of Sumber Abadi. This study used an approach of mixed research, both of qualitative and quantitative. According to Moleong (2008), qualitative research is a study using a concept to comprehend social symptoms or phenomena, which are experienced by the observer. While, quantitative research is a method that assists the researcher in formulating the results by involving numeric in the obtained data as measuring instrument and results that are going to be interpreted.

Data were analyzed by using TOWS analysis, followed by AHP and descriptive analysis, which will be identified first with the business landscape analysis to interpret the key performance indicator of each variable element from 4C Diamond analysis. According to Rangkuti (2017), TOWS analysis is an analysis which emphasizes on logic that can maximize the strength and opportunity, but simultaneously, minimize the weakness and threat. The strategic decision-making process always relates to development of the mission, objective (goal), strategy, and policy of the producer.

RESULTS AND DISCUSSIONS

Characteristics of the Respondent

The Livestock Group of *Sumber Abadi* has 34 members of farmers who also the active members of dairy cows cooperative in Karangploso Subdistrict of Malang Regency. Initiation of the livestock (dairy cows) group establishment outside the cooperative's members is intended to exchange information as means and media of the farmers to solve the problems on farm and efforts to increase productivity, which is directly monitored by the experts, both from public sector and veterinarian. For farmers, the establishment of livestock groups has positive impact on the members, because when some problems cannot be solved by the farmers, they can be discussed and coordinated together in group, which provide options of solution for farmers who need quick action to make a decision. In the Livestock Group of *Sumber Abadi*, The farmers

have the same vision and mission, they want to increase independence and no longer rely on institution such as cooperative and etc. Cooperative is a facilitator, which accommodate fresh milk supply and then distributed to dairy processing industries.

Based on the demographic factor in accordance with age criteria, 34 farmers who join in the Livestock Group of *Sumber Abadi* comprises of 32% is farmers of baby boomers generation who were born in 1946-1960, 55% is X generation who were born in 1961-1980, and 13% is Y generation who were born in 1981-1994. Distribution of generation in the Livestock Group of *Sumber Abadi* relates to technology adoption system and innovation in dairy cows business. If it is compared between the purposes of the livestock group who want to be independent by optimizing business in the downstream subsystem, so that the digital immigrant generation urgently need to straighten up out of the conventional system toward the innovator groups who have to be adaptive to the technological change, so that the dairy cow business will be able to survive and develop. An agenda that can be conducted to facilitate the adoption system quickly is the involvement of the youth and women as solution improvement for the farmers in baby boomers generation. The heritage culture system of the conventional farmers is the main obstacle in dairy cows' business as it makes the farmers are to be used to stay in the "secure zone" and among institutions which rely to each other. Age percentage in baby boomers generation and X is a challenge in shifting from conventional to business that leads to sustainable marketing enterprises.

If it is studied from duration of raising cattle, majority of the farmers raise their cattle more than 10 years, on average, and as they have the hereditary business system, so that the business knowledge sources were obtained from experience and not from formal education. Majority of the livestock group' members graduated from Elementary School (47%), Junior High School (32%), and Senior High School (21%). It indicated that cognitive abilities of the farmers were obtained from business experience.

Based on the job perspective, 100% dairy cow farmers integrate the dairy cow business and the crops, both as horticultural farmers and as plantation farmers, especially citrus. So far, the integrated activities just support the financial capital, so that the main job is as dairy cow farmer. 100% farmer respondents devote their energy in dairy cow business. The job factor relates to involvement of the family in dairy cow business. Majority of the dairy cow farmers in the Livestock Group of *Sumber Abadi* do not involve human resources (workforce) from external environment of the family, but the whole activities are devoted by the workforces from internal environment of the family.

Motivation of the farmers to join in the Livestock Group of *Sumber Abadi* is to increase business

productivity by increasing knowledge, exchanging ideas, and efforts to get solution in subsystem of on farm, desire to become an independent and prosperous farmer. In general, the reason expressed by the respondent is the great desire to adopt new knowledge, which has never got before when they became small farmers. While joining a livestock group, the progresses include a strict monitoring system from experts, the animal husbandry and animal health service in Malang Regency and veterinarian. For farmers, the system is very helpful in assisting the farmers to solve the problems at on farm level that relates to culturing technique, but the problem at the downstream level has not been solved yet. The farmers want to market the milk, but they face difficulties in identifying market segmentation due to lack of knowledge about marketing. Fluctuating quality and quantity of milk have also become a dynamic of the dairy cow farmers at the downstream level. Milk quality is often not in accordance with cooperative standards set by supplying industry, so that the selling price of milk is low. It relates to income of the farmers when they get less revenue and smaller proportion than the expended cost, so that they sustain a loss. During the pandemic of Covid-19, the dairy cow farmers' income tend to be stable, but raw material procurement process that could not run sustainably becomes the main obstacle, which finally affect on the decreased production scale. Cases that mostly faced by the farmers is difficulty in feed availability, particularly concentrate which is costly and the qualities are not uniform.

On average, the livestock compositions, which are owned by the farmers, comprise of dry and productive female cows. There are 3-4 male cows out of 34 cows of the Livestock Group of *Sumber Abadi*. But, the farmers prefer to sell the male than to raise them. The sales results will be used as extra cost of production. On average, numbers of the cattle unit is 6.5 that comprises of 3 lactation cows, 2 dry cattle, and 3 calves.

An effort to optimize problem at the downstream level, the farmers want to increase independence in determining market share for dairy products with some processing alternatives of a product that can be optimized through housewife empowerment. If so far the farmers rely on the cooperative to market their products, so that in this study, the writer optimized the business through Sustainable Market Enterprises to bring the resilient business into reality in the middle of crisis due to the decrease of purchasing power. Focus on SME is see the business external factor, and then internal management adjust the transformation or the rapid changes and create a business which is adaptive to various threats from social, economy, technology and socio-culture, as well as market.

Identification of External and Internal Environment Factors

The study focused on external environment, which was projected to internal business and used

TOWS analysis to build new strategy in market system development. This concept is more adaptive for the start-up businessman such as dairy cows farmers who want to determine market in times of crisis. The table below presents TOWS analysis of the dairy cow farmers' condition in the Livestock Group of *Sumber Abadi* (Table 1).

Table 1: EFA and IFA Matrixes

<i>Threats</i>		<i>Opportunities</i>	
The change of dairy processing industries and mega farm adhere to a market monopoly system (the government concession/lack of supervision)	T1	The increase application ratio of sales method from offline to online	O1
The change of industrial competition from low to high for dairy products (IPS has its own cattle)	T2	The increase of promotion media through social media application	O2
IPS should report the milk distribution to the government	T3	The increase awareness of the youth to get involved in livestock sector	O3
IPS opens a upstream-downstream business/agribusiness system	T4	The change of supply chain management from cooperative to independence pattern	O4
The change of services in selling milk by Milk Processing Industry (Agritourism) - Vlogging	T5	Consumers' support to dairy processing of MSMEs class	O5
Restricted access to market due to the change of consumers behaviors toward purchasing of dairy products	T6	Stakeholders support the dairy production	O6
The change of demand for dairy products during pandemic	T7	Village apparatus's support to business development in potential location for dairy cows development	O7
The increase chain of dairy products value from upstream-downstream	T8	Environmental support in MSMEs business of dairy products	O8
High consumers' <i>anxiety</i> during pandemic due to the purchasing power decreases	T9	Tourists prefer local products (authentic)	O9
Consumers prefer primary products	T10	Abilities of the youth at the village in operating social media and marketplace as marketing media	O10
Higher credibility of consumers to competitors	T11	High demand for pasteurized milk from coffee shop	O11
Competitors expand the market share of dairy consumers by opening agritourism for engaging consumers through leisure economy	T12	High demand for milk from schools	O12
<i>Weaknesses</i>		<i>Strengths</i>	
Slow increase in the level of downstream technologies adoption by the farmers	W1	The shift from one-way communication to two-way communication	S1
Has not able to increase strategy of market expansion due to the number of group members is not much	W2	Having wide opportunity in business improvisation because of concession from the cooperative	S2
Has not have any strategy to compete with competitors	W3	Producers recognize who belongs to market segmentation of dairy products (demography)	S3

Less knowledge of the producers about the processing and nutrient of the products	W4	Producers recognize market segmentation of dairy products based on social circles and lifestyle	S4
The livestock group has not oriented to long-term business	W5	High involvement of family members MSMEs business	S5
Producers have not able to promote dairy products in accordance with social media used by the market target	W6	Producers optimize production and promotion to aim for one market share which is considered to be potential	S6
Producers have not comprehended the Online Check in Fast Check out	W7	Producers initiate diverse products	S7
Producers have not had ability to comprehend database of the consumers of dairy products	W8	Producers serve custom services for dairy products that consumers want	S8
Producers have not initiated to provide complaint services and solutions for consumers	W9	Producers appreciate the strength of dairy products in comparison with other dairy products	S9
Producers have not reached strategy in increasing dairy product sales conversion	W10	Producers have great intention in MSMEs business development in order to be independent	S10
Producers do not comprehend design of product which is easily remembered by the consumers and become characteristics of the dairy products from the livestock group of <i>Sumber Abadi</i>	W11	The livestock groups want to cooperate with outside parties (not restrict the access)	S11
Producers have not able to increase credibility of the dairy products through sterile and hygienic dairy processing facilities of the livestock group of <i>Sumber Abadi</i>	W12	Producers comprehend superiorities and shortages of the product in comparison with other competitors	S12

Based on EFA and IFA matrixes (Table 1), it resulted a hierarchical model of strategy formulation of the livestock (dairy cows) groups in creating business through a Sustainable Marketing Enterprises (SME) approach to compare the priority values of EFA and IFA as follow.

Table 2: Pairwise comparisons among TOWS groups

TOWS Factor	T	O	W	S	Group Priority
<i>Threats</i>	1	1	3	1	0,3
<i>Opportunities</i>		1	3	1	0,3
<i>Weaknesses</i>			1	1/3	0,1
<i>Strengths</i>				1	0,3

Based on Table 2, the results show that threats, opportunities, and strengths have the same priority than weaknesses. It is due to in TOWS analysis, the experts prioritize the external factors as the main perspective in adapting efforts, which have been designed by the Livestock Group of *Sumber Abadi*, so that the business concept tends to adapt to the massive changes in external environment of the business, and the internal environment will adapt to the change outside the

environment. This is so that the business has ability to be resilient against diverse changes that take place in external environment. The weaknesses factor gets the lowest priority because the experts assumed that if the external factors and strengths are optimized, then the weaknesses could be minimized, so the risks and uncertainties of business in internal environment could be overcome.

According to Blackburn (2013), business strategy is very important for continuation of a business, in which company’s strategies are basically applied to overcome the change demands from external and internal environments. In accordance with Sutanto (2008), a company should be able to be adaptive to global competition, particularly competition from external side of the company, which may threat the whole resources of the company. Five strengths from external factors of the company are as follow: industrial condition of the competitor, access potency to the same market with companies, suppliers, buyers, and the substitute products (Wang and Chang 2009). Table below presents the comparison among threats factors to become priority and the main concern of producers in overcoming the risks in external environment of the business (Table 3).

Table 3: Pairwise comparisons of Threats Factor

Threats	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	Factor Priority
The change of dairy processing industries and mega farm adhere to a market monopoly system (the government concession/lack of supervision)	1	0,33	0,33	0,33	3	5	3	3	3	0,33	0,33	5	1,52
The change of industrial competition from low to high for dairy products (IPS has its own cattle)		1	0,33	1	3	5	0,33	3	0,33	0,33	0,33	5	1,20
Lack of industrial data transparency toward public sector			1	0,33	3	0,33	0,20	0,33	0,33	0,20	0,33	3	0,90
IPS opens a upstream-downstream business/agribusiness system				1	5	3	0,33	3	0,33	0,33	0,33	5	1,27
The change of services in selling milk by Milk Processing Industry (Agritourism) - Vlogging					1	0,20	0,20	0,33	0,20	0,20	0,20	1	0,24
Restricted access to market due to the change of consumers behaviors toward purchasing of dairy products						1	0,33	3	0,33	0,33	0,33	3	0,75
The change of demand for dairy products during pandemic							1	3	1	0,33	0,33	5	1,60

The increase chain of dairy products value from upstream-downstream in the industry								1	0,33	0,33	0,33	3	0,60
High consumers' <i>anxiety</i> during pandemic due to the purchasing power decreases									1	0,33	3	5	1,91
Consumers prefer primary products										1	0,33	5	2,44
Higher credibility of consumers to competitors											1	5	2,40
Competitors expand the market share of dairy consumers by opening agritourism for engaging consumers through leisure economy												1	0,25

Based on Table 3, the experts assumed that creating business in the Livestock Group of *Sumber Abadi* should pay attention to the change transformation aspect of supply and demand as a result of economy factor. It relates to consumer consideration in consuming the product based on priority scale as it is viewed from per capita income of the consumers during the social restriction period (PPKM) that affect on the household income, so that dairy products are no longer a priority product for the community. According to the analysis result of AHP based on the priority factor, the highest value is in the consideration of the majority of consumers who consider that milk is not a primary product.

It conforms to the opinion by Allen (1999), external factors that must be concerned by company in order to be able to compete with markets and competitors are as follow: 1) barriers to entry in the industry, 2) threat from substitute products, threat from suppliers bargaining power, 3) threat from buyers bargaining power, dan 4) rival among existing industry firms. Barriers to entry in the industry are situation in which the company should recognizes barriers that might be faced to entry in the same market. This needs to be realized from the beginning so that the company will be ready to face market competition. Threat from substitute products is situation in which the company should recognizes the existence of a product that will be able to substitute function of the product, which is manufactured by the company. If such matter occurred, it will decrease market share of the company. Threat from suppliers bargaining power is situation in which the company should recognizes its position in the eyes of supplier. If the supplier has stronger position than the company, then the company must be vigilant and endeavor to find the solutions to reduce the suppliers' power over the company. Threat from buyers bargaining power is situation in which the company should recognize the consumers' position toward the company. This situation relates to convenience of the consumers to switch to other products and shows its strength to the company. Meanwhile, rival among existing industry firms is situation in which

the company should read the competitive conditions today and how the competitor's position is with the company.

Table 4: Pairwise Comparisons of Opportunities Factor

<i>Opportunities</i>	O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	Factor Priority
The increase application ratio of sales method from offline to online	1	0,3 3	0,3 3	0,3 3	0,3 3	0,3 3	3	3	3	0,20	0,33	0,33	0,74
The increase of promotion media through social media application		1	1	3	1	3	3	3	3	1	0,33	0,33	1,54
The increase awareness of the youth to get involved in livestock sector			1	1	1	3	3	1	1	1	1	1	1,35
The change of supply chain management from cooperative to independence pattern				1	1	1	1	1	1	1	1	1	1,03
Consumers' support to dairy processing of MSMEs class					1	3	1	1	1	1	1	1	1,19
Stakeholders support the dairy production						1	1	1	3	1	1	1	0,92
Village apparatus's support to business development in potential location for dairy cows development							1	1	3	0,33	0,33	0,33	0,66
Environmental support in MSMEs business of dairy products								1	3	1	0,33	0,33	0,73
Tourists prefer local products (authentic)									1	0,20	0,33	0,33	0,45
Abilities of the youth at the village in operating social media and marketplace as marketing media										1	1	1	1,47
High demand for pasteurized milk from coffee shop											1	1	1,63
High demand for milk from schools												1	1,63

Based on Table 4, it shows that opportunities factor, which is applied to minimize external threats in MSMEs business of dairy cows by the Livestock Group of *Sumber Abadi*, is quite great with the highest scoring score 1.63, when the dairy cows' farmers have already known market segmentation of the pasteurized dairy products, which will be sold at several sustainable market shares. Such market share is not regardless of the youth's role to assist the small farmers in identifying potential buyer for variation of the dairy products, in which the second highest score is social media optimization. It refers to human resources ability of the rural youth toward

the technology mastery. Involvement of the youth will become a new color for the dairy cow farmers to make the business to be more adaptive to the existing trends.

Bleeke and Ernst (1993) suggested that collaborative strategy will increase in the future, in comparison with competitive strategy, as effort to welcome cross-border economic and business relations. Collaboration is considered as the best concept and negotiation tools as well as arbitration of the company’s resources in the form of expertise, access, and capitalization. Marshal (1995) described that the new form of organization in the future also relates to business collaboration. Moreover, collaboration is an alternative of competitive strategy for sharing services to customers and stakeholders. Collaboration is a concept (mindset) to set agreement, expertise arbitration, access, capital and share scarce resources.

Table 5: Pairwise Comparisons of Weaknesses Factor

<i>Weaknesses</i>	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	Factor Priority
Slow increase in the level of downstream technologies adoption by the farmers	1	3	1	3	1	1	3	3	3	1	1	3	1,69
Has not able to increase strategy of market expansion due to the number of group members is not much		1	0,33	0,33	0,33	3	3	3	3	0,33	1	1	0,98
Has not have any strategy to compete with competitors			1	1	1	3	3	3	3	3	1	3	1,82
Less knowledge of the producers about the processing and nutrient of the products				1	0,33	3	3	3	3	1	3	3	1,60
The livestock group has not oriented to long-term business					1	3	3	3	3	1	3	3	2,00
Producers have not able to promote dairy products in accordance with social media used by the market						1	3	3	3	1	1	3	1,02

segmentation													
Producers have not comprehended the Online Check in Fast Check out							1	3	3	1	0,33	3	0,73
Producers have not had ability to comprehend database of the consumers of dairy products								1	3	0,33	0,33	3	0,54
Producers have not initiated to provide complaint services and solutions for consumers									1	0,33	0,33	0,33	0,35
Producers have not reached strategy in increasing dairy product sales conversion										1	3	3	1,43
Producers do not comprehend design of product which is easily remembered by the consumers											1	3	1,09
Producers have not able to increase credibility of the dairy products through sterile and hygienic dairy processing facilities of the livestock group												1	0,56

Based on AHP analysis, the top priority of alternatives, which was thought out by the expert, showed that the highest result is orientation of the Livestock Group of *Sumber Abadi* must be long-term, so that it requires social capital reinforcement of the livestock group’s members to run long-term MSMEs business of dairy products. Therefore, there is an initiation of informal business school in the form of training that provides basic provision for business and product processing to support the creating of continuous business model. The second highest priority is fast transformation of the livestock group’s members to adopt technology in the downstream subsystem, so that the youth should get involved to support continuation of the MSMEs business.

Riyanti (2003) quoted results of the research by Cunningham (in Meng & Liang, 1996) against 178 entrepreneurs in Singapore showed that the business success related to personality (49%), such as desire to do a good job, to desire to succeed, self-motivation, self-confidence, positive thinking, commitment, proactive, and to be patient. Those factors will determine success of an entrepreneur only if he/she has strength to manage the organization.

Table 6: Pairwise Comparisons of Strength Factor

<i>Strengths</i>	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	Factor Priority
The shift from one-way communication to two-way communication	1	1	0,33	0,33	3	3	3	3	0,33	0,33	0,33	0,33	1,13
Having wide opportunity in business improvisation because of concession from the cooperative		1	3	3	0,33	0,33	0,33	3	0,33	0,33	1	0,33	1,09
Producers recognize who belongs to market segmentation of dairy products (demography)			1	1	0,33	0,33	3	5	3	0,33	3	3	1,58
Producers recognize market segmentation of dairy products based on social circles and lifestyle				1	0,33	1	5	3	3	0,33	3	3	1,67
High involvement of family members MSMEs business					1	1	3	3	3	1	0,33	0,33	1,87
Producers optimize production and promotion to aim for one market share which is considered to be potential						1	3	3	1	1	1	1	1,40
Producers initiate diverse products							1	3	0,33	0,33	0,33	0,33	0,57
Producers serve custom services for dairy products that consumers want								1	0,33	0,33	0,20	0,33	0,32
Producers appreciate the strength of dairy products in comparison with other dairy products									1	1	3	1	1,35
Producers have great intention in MSMEs business development in order to be independent										1	1	3	2,00

The livestock groups want to cooperate with outside parties (not restrict the access)											1	0,33	1,28
Producers comprehend superiorities and shortages of the product in comparison with other competitors												1	1,58

Based on analysis results, the priority values in accordance with the highest value out of 12 conditions that become the strengths of the Livestock Group of *Sumber Abadi* in designing an adaptive MSMEs business creating model is priority toward intention of the whole members of the livestock group to become small-scale businessmen who are independent, adaptive, and resilient. Great opportunity for livestock products to fulfill the needs for animal protein for consumers is a promising business to support financial scheme of the farmers in order to increase the business scale of dairy cows. Therefore, the second priority must be optimized, by the value 1.87, involvement of the family members to contribute in MSMEs business. It requires youth empowerment to assist the marketing process by hybrid system and housewives empowerment to assist the product processing.

On the other hand, the growth of informal trade could be related to young generation in Indonesia who is familiar to technology. The statistics showed that youlg people in Indonesia are social media users. Indonesia ranks the 4th in the world for Facebook users (122 million people), the 5th for Twitter users, and has the largest population of Instagram users in Asia. Therefore, it is not surprising that the development of e-commerce in Indonesia continues to grow, particularly in informal trades. The growth of e-commerce transaction showed that e-commerce has become one of determining factors in economic growth. It took place due to the increase in online buying and selling activities, which also encourage more investment. These also create new jobs and increase income per capita of the community. For retail industries, e-commerce may change the financial performance even though it is not significant toward retail companies in Indonesia (Pramono, *et. al.*, 2020).

Table 7: Calculation for Total Weight of TOWS Factors Based on AHP Analysis

TOWS	Group Priority	TOWS Factor	Factor Priority	Total Factor
<i>Threats</i>	0,3	The change of dairy processing industries and mega farm adhere to a market monopoly system (the government concession/lack of supervision)	1,52	0,456
		The change of industrial competition from low to high for dairy products (IPS has its own cattle)	1,20	0,360
		IPS should report the milk distribution to the government	0,90	0,270
		IPS opens a upstream-downstream business/agribusiness system	1,27	0,381
		The change of services in selling milk by Milk Processing Industry (Agritourism) - Vlogging	0,24	0,072
		Restricted access to market due to the change of consumers behaviors toward purchasing of dairy products	0,75	0,225
		The change of demand for dairy products during pandemic	1,60	0,480
		The increase chain of dairy products value from upstream-downstream in the industry	0,60	0,180
		High consumers' <i>anxiety</i> during pandemic due to the purchasing power decreases	1,91	0,573
		Consumers prefer primary products	2,44	0,732
		Higher credibility of consumers to competitors	2,40	0,720
		Competitors expand the market share of dairy consumers by opening agritourism for engaging consumers through leisure economy	0,25	0,075
<i>Opportunities</i>	0,3	The increase application ratio of sales method from offline to online	0,74	0,222
		The increase of promotion media through social media application	1,54	0,462
		The increase awareness of the youth to get involved in livestock sector	1,35	0,405
		The change of supply chain management from cooperative to independence pattern	1,03	0,309
		Consumers' support to dairy processing of MSMEs class	1,19	0,357
		Stakeholders support the dairy production	0,92	0,276
		Village apparatus's support to business development in potential location for dairy cows development	0,66	0,198
		Environmental support in MSMEs business of dairy products	0,73	0,219
		Tourists prefer local products (authentic)	0,45	0,135
		Abilities of the youth at the village in operating social media and marketplace as marketing media	1,47	0,441
		High demand for pasteurized milk from coffee shop	1,63	0,489
		High demand for milk from schools	1,63	0,489
<i>Weaknesses</i>	0,1	Slow increase in the level of downstream technologies adoption by the farmers	1,69	0,169
		Has not able to increase strategy of market expansion due to the number of group members is not much	0,98	0,098
		Has not have any strategy to compete with competitors	1,82	0,182
		Less knowledge of the producers about the processing and nutrient of the products	1,60	0,160
		The livestock group has not oriented to long-term business	2,00	0,200

		Producers have not able to promote dairy products in accordance with social media used by the market segmentation	1,02	0,102
		Producers have not comprehended the Online Check in Fast Check out	0,73	0,073
		Producers have not had ability to comprehend database of the consumers of dairy products	0,54	0,054
		Producers have not initiated to provide complaint services and solutions for consumers	0,35	0,035
		Producers have not reached strategy in increasing dairy product sales conversion	1,43	0,143
		Producers do not comprehend design of product which is easily remembered by the consumers	1,09	0,109
		Producers have not able to increase credibility of the dairy products through sterile and hygienic dairy processing facilities of the livestock group	0,56	0,056
<i>Strengths</i>	0,3	The shift from one-way communication to two-way communication	1,13	0,339
		Having wide opportunity in business improvisation because of concession from the cooperative	1,09	0,327
		Producers recognize who belongs to market segmentation of dairy products (demography)	1,58	0,474
		Producers recognize market segmentation of dairy products based on social circles and lifestyle	1,67	0,501
		High involvement of family members MSMEs business	1,87	0,561
		Producers optimize production and promotion to aim for one market share which is considered to be potential	1,40	0,420
		Producers initiate diverse products	0,57	0,171
		Producers serve custom services for dairy products that consumers want	0,32	0,096
		Producers appreciate the strength of dairy products in comparison with other dairy products	1,35	0,405
		Producers have great intention in MSMEs business development in order to be independent	2,00	0,600
		The livestock groups want to cooperate with outside parties (not restrict the access)	1,28	0,384
		Producers comprehend superiorities and shortages of the product in comparison with other competitors	1,58	0,474

Based on Table 7, it shows that the highest value of total priority on opportunity of two factors is opportunity to cooperate between the livestock group and coffee shop as well the school environment with the value 0.489 and strength from great intention of the livestock group in business diversification through MSMEs by involving the family members, while the threat that must be faced is livestock products, which is not the primary product for community in Indonesia. Magnitude of the value of threats compared to opportunities shows a shifting trend of consumers to dairy products which is not the priority products of the consumers as they are not considered as primary foods, so that the price must be adjusted by the producers due to the decrease of purchasing power by the consumers, and milk is no longer primary foods that must be fulfilled because the price is relatively expensive. In order to design a business model, the

producers utilize 2 opportunities, 1 threat, and 1 strength, so that in creating business model, it requires a strategy to minimize threat as focus of the researcher to external factors.

Alternative Strategy Formulation by Expert Based on Priority

The purpose of alternative strategy formulation was to determine a strategy model which was agreed by the experts through FGD method, so that FGD activity was conducted twice, selecting priority and selecting alternative strategy. The second FGD resulted strategy model of creating business for the Livestock Group of *Sumber Abadi* that based on AHP strategy. The descriptions below are adaptive business strategies that can be adopted by the Livestock Group of *Sumber Abadi*.

1. Business Collaboration

In introducing local products to consumers, majority of consumers are more dominant to stereotype of local products than commercial products from dairy processing industries. Therefore, it requires cooperation with other business and first, it can be done by cooperate with the pasteurized dairy products as the main products due to the livestock groups have not possessed supporting materials to process other products. The pasteurized price offers tend to be cheaper compared to other products, so that the group first has a market share in starting a business.

2. Product Development

When consumers face high anxiety because of imbalance between the needs and purchasing power, they have difficulties to reach the dairy products. On one side, the consumers need milk as supplement during pandemic, but economy of the community is unstable so that supply and demand becomes imbalance, therefore, the livestock group should make a product design with affordable price and high accessibility for consumers. So that the livestock group should identify low-income segment to find out the consumers group who need cheaper pasteurized dairy products, as well substitute the sterilized milk, which is expensive in the market.

3. Market Optimization (Woman-Youth-Netizens)

The involvement of three actors in facing business uncertainty during pandemic offers big opportunity in creating adaptive and resilient business, namely woman, youth, and netizens. Whereas the woman role in MSME business, which was initiated by the livestock group, has opportunity for workforce efficiency during the processing, the youth play in the downstream system to reach the consumers through various digital media. While netizens as referral

marketing who will cooperate with the youth in optimizing business digital as optimization of Market size.

CONCLUSIONS

The farmers are motivated to increase business productivity and market the milk, but they do not have ability to identify the market segmentation due to lack of knowledge in marketing. Fluctuating quality and quantity of milk becomes dynamic of the dairy cows' farmers at the downstream. Formulating the alternative strategies by the experts through FGD method that strategies, which must be performed by the livestock group to optimize the sustainable market enterprises passes through 3 aspects, namely Business Collaboration, Product Development, and 3. Market Optimization (Woman-Youth-Netizen).

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