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POLICY STRATEGY OF SUPPLY CHAIN PLANNING AT TEACHING FACTORY OUTLET: AGRIMART POLIJE IN POLITEKNIK NEGERI JEMBER INDONESIA AS A CASE STUDY

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ABSTRACT

Teaching Factory (TEFA) is a development of the production unit, namely the application of partner industrial systems to existing production/practice units in vocational schools. Agrimart Polije is one of the TEFA in Politeknik Negeri Jember Indonesia which focuses on marketing services (retail business) of agricultural products. The purpose of this research is to produce a supply chain management planning and strategy that can be applied to Agrimart Polije. This research was quantitative descriptive research. The research design deployed was case study to intensively or deeply from the research target group. The analytical method used consisted of Force Field Analysis (FFA), which was used to determine the policy strategies of supply chain planning at Agrimart Polije. Based on the results of the FFA, it is known that the main driving factor has 1.73 in TNB score. It's the availability of agricultural products that produced by several TEFA at Politeknik Negeri Jember, making it easier for Agrimart Polije to find suppliers. While the inhibiting factor has 1,57 in TNB score. The obstacle is about the production and sales of TEFA's products are still fluctuating. Therefore, Agrimart Polije which will be engaged in marketing services or retail business must be more responsive in understanding consumer desires, because retail position is the position closest to consumers in a supply chain management system.

KEY WORDS

FFA, supply chain, strategies, teaching factory.

Teaching Factory (TEFA) is a development of the production unit, namely the application of partner industrial systems to existing production/practice units in vocational schools. Agrimart Polije is one of the TEFA in Politeknik Negeri Jember Indonesia which focuses on marketing services (retail business) of agricultural products. It is a development of a production unit by implementing a partner industry system on campus (Anonymous, 2021). Agrimart Polije is one of the TEFA in Politeknik Negeri Jember Indonesia which focuses on marketing services (retail business) of agricultural products. Agrimart Polije is under the Department of Agribusiness Management which is engaged in retail/product marketing services. It is still a pioneer that will soon be established so it is necessary to know about the supply chain. According to Malika (2022) there are twelve TEFA in Politeknik Negeri Jember that produce agricultural sector products, including Coffee and Bakery, Fish Canning, Beverage Packaging, Seed Center, Smart Green House, Nursery and Cut Flowers (Highlands), Livestock Feed, Garden Innovation, Feedlot and Dairy Cattle, Coffee Products Processing, Orchid and Ornamental Plant Flower Tissue Culture, and Polije Healthy Rice. Agrimart Polije is the intermediary of the twelve TEFAs with consumers. After knowing the supply chain of TEFA Agrimart, it is also necessary to analyze the supporting and inhibiting factors of the supply chain. The final result of this research is to know the main policy strategies of supply chain that can be applied in developing the Agrimart Polije.



METHODS OF RESEARCH

This research was quantitative descriptive research. The research design deployed was case study to intensively or deeply from the research target group. The first step of this research is to conduct in-depth interviews with experts who are resource persons in this study. The resource persons in this study were the manager of the Agribusiness Management Department, the Head of the Jember State Polytechnic, the Teaching Factory Leader at the Jember State Polytechnic, industrial partners in agriculture and retail, and the Student Association of the Department at the Jember State Polytechnic. From the results of this interview, it was obtained what factors were the drivers and obstacles of the Polije agrimart supply chain.

The analytical method used consisted of Force Field Analysis (FFA), which was used to determine the policy strategies of supply chain planning at Agrimart Polije. Furthermore, by analyzing the driving factors and inhibiting factors of supply chain planning at Agrimart Polije. According to Stewart in Sianipar (2003) in Malika et al. (2022), the most effective strategy is eliminating or minimizing key obstacles and optimizing or mobilizing key drivers towards the performance to be achieved. This is included in the strategic focus approach, meaning that the selected key strengths will be focused towards the development that has been determined. The stages in conducting FFA analysis are as follows: (a) Identifying problems based on the phenomena that occur; (b) Analyze the problem by identifying various driving forces in Supply Chain Planning at Agrimart Polije; (c) Provide an assessment of the priority scale of each driving and inhibiting factors. So that by knowing the driving factors and inhibiting factors at Agrimart Polije will produce a policy strategy of supply chain planning that can be used as a guideline for operational activities.

In the analysis of the strength field, each identified factor will be very decisive as a factor in the success of the goal. There are several aspects that need to be considered in assessing each factor, namely, (a) the urgency of the factor to the goal, consisting of the Urgency Value (NU) and Factor Weight (BF); (b) factor support for goals, consisting of Support Value (ND) and Support Weight Value (NBD); (c) the relationship between factors to the goal, consisting of Linkage Value (NK); (d) Average Correlation value (NRK), and Associated Weight Value (NBK) [1]. The NU, ND, and NK assessments use a value scale between 1-5 with the following information: (a) the number 5 means that the urgency value is very high; (b) number 4 means the high urgency value; (c) number 3 means that the urgency value is quite high; (d) number 2 means that the value of urgency is lacking; (e) the number 1 means that the urgency value is very low. Determining the Urgency Value (NU) aspect of each driving and inhibiting factor can be done using a comparison technique. The comparison technique is done by comparing one factor to another.

RESULTS AND DISCUSSION

The driving factors are the factors that strengthen the Agrimart Polije supply chain. Based on the results of the in-dept interview, five driving factors were obtained, namely:

- There are many Tefa in the Jember State Polytechnic that can be suppliers:

The supplier is one of the keys to the Agrimart Polije's supply chain. Without a supplier, it will certainly be very difficult to determine the products to be marketed by Agrimart Polije. In addition, with a supplier, the needs of it will be easily met. there are twelve TEFA in Politeknik Negeri Jember that produce agricultural sector products, including Coffee and Bakery, Fish Canning, Beverage Packaging, Seed Center, Smart Green House, Nursery and Cut Flowers (Highlands), Livestock Feed, Garden Innovation, Feedlot and Dairy Cattle, Coffee Products Processing, Orchid and Ornamental Plant Flower Tissue Culture, and Polije Healthy Rice.. Probowati (2011) states that there are keys to success in choosing suppliers, namely a fast and easy to contact process, delivery service, complete suppliers, strategic locations and wide parking, short distribution channels, and the cheapest prices. Agrimart's choice is to make other TEFA's in Polije have fulfilled the majority of elements in supplier selection. This is certainly a very strong factor in Agrimart's supply chain.



- Leadership support in pioneering TEFA development:

In the development of TEFA, of course, the support from the leadership is a factor that drives the Agrimart Polije's supply chain. Leaders can support the legality of the establishment of TEFA Agrimart. Fitriani (2017) mentions that to protect the company, it is very important for the legality of the company in a business activity. This is because legality is an identity that legitimizes a business being recognized by the community. In addition, what is no less important than the leadership support in the development of Agrimart Polije is related to funding. Adawiyah (2013)) states that financial factors are the main supporting factors of business development.

- There are SOPs in the production process of TEFA products:

SOP is a guide for the implementation of production. All activities carried out in TEFA must comply with procedures in order to produce outputs that have good quality. Mahandaru dan Latuperissa (2013) mention that the existence of SOPs is needed to maintain consistency and guarantee business processes. SOPs are standard rules for good quality.

- The majority of the people of Jember make a living as farmers who can become the target market:

Supply chain management is defined as a business network that starts from the beginning of production to fulfillment of demands from consumers. Marimin et al. (2013) and Ilham et al. (2015) state that the management of the entire production process, distribution to marketing is faced with products that are in accordance with the wishes of producers. The existence of Agrimart certainly requires the existence of potential customers or target markets for the products. The majority of TEFA Polije products that will be marketed at TEFA Agrimart are agricultural and livestock products. So with the large number of residents in Jember Regency as farmers, they really support the TEFA Agrimart Polije supply chain. The existence of TEFA Agrimart Polije creates a mutualistic relationship with farmers in Jember Regency. TEFA Agrimart provides the needs of farmers such as seeds and seeds for agricultural and livestock products.

- Local government regulations in the development of entrepreneurship:

The existence of government policies to promote entrepreneurship can spur the development of agrimart. The government in this case the Ministry of Industry and Commission VII DPR RI recently held technical guidance aimed at developing new entrepreneurs. This of course can increase the independent economy in Jember Regency (Pemkab Jember, 2022).

The inhibiting factors are the factors that weaken the TEFA Agrimart Polije supply chain. Based on the results of the in-dept interview, five inhibiting factors were obtained, namely:

- The production and sales of products are still tend to fluctuate:

TEFA in Polije producing products is still very volatile. There is a TEFA that already refers to consumer demand and also has a production target, namely TEFA Coffee and Bakery. However, there is also TEFA in Polije whose production is still based on the capacity of the equipment used, such as TEFA Canning fish. In addition, there is also TEFA whose production is based on available raw materials such as TEFA for packaged drinks. TEFA beverage packaging produces water based on the raw materials ordered. Sales are still volatile, meaning that there are no consumers who consistently order products from TEFA Polije. This means that Octaviani (2019) has not mentioned that sales fluctuations have an impact on profitability. This illustrates that TEFA in Polije has not yet set a monthly profit target to support business progress.

- Some TEFA products in polije are still not standardized:

TEFA products in Polije are still not standardized. Until now, the products at Polije that have been standardized are products from TEFA Coffee and Bakery. The TEFA already has certification from BPOM and Halal. In addition, TEFA that are currently in the certification process include fish canning TEFA and packaged beverage TEFA. TEFA fish canning is in the process of issuing a certificate of processing feasibility and halal. Likewise, TEFA for packaged drinks is still in the process of issuing halal certification.



- The majority of TEFA still have not implemented supply and demand in determining the amount of production:

There is a TEFA that already refers to consumer demand and also has a production target, namely TEFA Coffee and Bakery. However, there is also TEFA in Polije whose production is still based on the capacity of the equipment used, such as TEFA Canning fish. This causes the accumulation of products from TEFA because sales of these products are also still fluctuating. In addition, there is also TEFA whose production is based on available raw materials such as TEFA for packaged drinks. TEFA bottled drinks produce water based on the raw materials ordered, which is 1 tank or 5,000 liters. This is a reference for drinking water production, where the production is not based on consumer demand.

- The number of similar competitors:

The products marketed by TEFA Agrimart are general products that are widely marketed, such as bread, sardines, vegetables, fruit, seeds, eggs and milk. This is certainly a bottleneck in TEFA Agrimart's supply chain.

- Human resources that have not been fully identified by the industry:

The human resources at TEFA do not yet fully have certifications related to the TEFA production process. This is a bottleneck in Agrimart's TEFA supply chain. Ardiana et al., (2010) states that HR competence has an influence on performance. So that with not fully TEFA human resources who have industrial certification, it can reduce the quality of the product.

Based on the results of in-depth interviews with experts, there are five driving and inhibiting factors in the supply chain of Tefa Agrimart pioneers, including those shown in the following table.

Table 1 – Driving and Inhibiting Factors of Agrimart Polije's Supply Chain

Driving Factor	TNB	Inhibiting Factor	TNB
D1 There are many Tefa in the Jember State Polytechnic that can be suppliers	1,73	H1 Production and sales of Tefa products in Polije still tend to fluctuate	1,57
D2 Leadership support in the development of pioneering Tefa	1,40	H2 Some Tefa products in Polije still not standardized	1,50
D3 The existence of SOPs in the production process of Tefa's products	1,57	H3 The majority of Tefa still have not applied the concept of supply and demand in determining the amount of production	1,22
D4 The majority of the people of Jember make a living as farmers who can become farmers target market	0,56	H4 The number of competitors for similar products	0,58
D5 Local government regulations in entrepreneurship development	0,62	H5 HR that is not fully certified by the industry	0,56

Source: Primary data processed, 2022.

Based on the results of the FFA analysis regarding the assessment of the driving and inhibiting factors, it can be seen the value of the Total Weight Value (TNB) of each factor. Based on the TNB value, it can be determined the Key Success Factors (FKK) in the development of the Tefa Agrimart supply chain according to the largest TNB value (Figure 1). It is known that the main driving factor has 1.73 in TNB score. It's the availability of agricultural products that produced by several TEFA at Politeknik Negeri Jember, making it easier for Agrimart Polije to find suppliers. While the inhibiting factor has 1,57 in TNB score. The obstacle is about the production and sales of TEFA's products are still fluctuating.

Therefore, Agrimart Polije which will be engaged in marketing services or retail business must be more responsive in understanding consumer desires, because retail position is the position closest to consumers in a supply chain management system. In the future, because the supply chain also has a dynamic nature, it is necessary to carry out further studies by considering environmental and social aspects. This is in accordance with what was stated by Pova et al (2018), that in modeling a sustainable supply chain require formalization and deeper identification of environmental and social aspects.

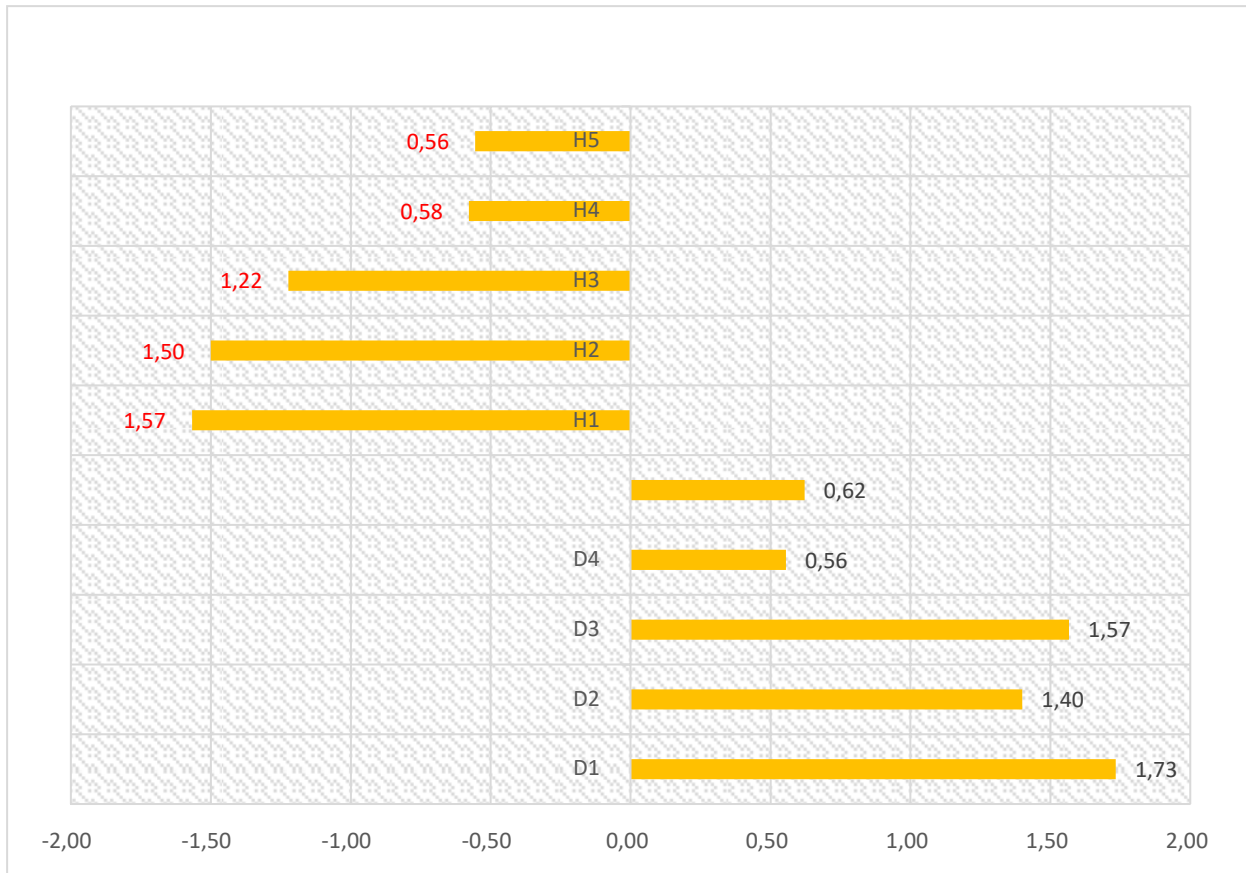


Figure 1 – Strength Field of Tefa Agrimart Supply Supply Chain Development
(Source: Primary data processed, 2022)

CONCLUSION

The main driving factor is the large number of Tefa in the Jember State Polytechnic that can be a supplier for Tefa Agrimart with a TNB score of 1.73, while the inhibiting factor is the production and sales of Tefa products in Polije on average still tend to fluctuate with a TNB value of 1, 57. Therefore, Agrimart Polije which will be engaged in marketing services or retail business must be more responsive in understanding consumer desires, because retail position is the position closest to consumers in a supply chain management system.

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