

# Analysis of the Decision-Making Process as a Supplier of Fresh Vegetable and Fruit Raw Materials in Modern Retail Store

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**Abstract.** This research is entitled analysis of the decision-making process of business cooperation as a supplier of raw materials for fresh vegetables and fruits in supply chain management of modern retail stores. The decision-making process is important process for the entire business field especially for them that want to develop their business in marketing and modern retail. Analysis in the decision-making process in this collaboration from several stores are very helpful directly by businesspeople, the analysis object of this study is from several stores in Malang city such as Lai-lai, Hypermart and Superindo. The analytical method that used in this study is a descriptive qualitative approach with the analytical tool used is the triangulation method. The collaborative of decision-making process can be taken from 2 (two) aspects in food supply chain networking, namely chain management and value chain business processes. Based on the results of the research, it is known that the decision-making process of business cooperation is seen from chain management by sending product samples and providing organic certification which are as the main thing of cooperation agreements. Meanwhile, the value of chain business process contains activities carried out when a cooperation agreement has been entered into, starting from ordering, shipping, storing, checking, to repeat orders. Those are highly regulated with neat and scheduled details so that the management is more organized than traditional markets.

## 1 Introduction

Batu city is one of the cities located in East Java province which has various kinds of agricultural resources. This abundance of resources makes it difficult for local farmers in batu city to distribute their agricultural products, this causes several of the problems of their agricultural products to be damaged so that they cannot be sold and cause losses. Fruits and vegetables are kind of agricultural resources that are classified as easily damaged if not handles properly related to post-harvest storage [1]. In addition, some of the vegetables produced by the farmers are in the form of hydroponic vegetables and organic vegetables. Among them there are also types of exotic vegetables which have a higher selling price than conventional vegetables. Those all problems are make the farmers confused to distribute the agricultural products. Related for those several problems it can be found that there are also has opportunities such as to build other businesses in that kind of area called SAYYOURS as the business that was built in Malang city to be solved the problem of the distribution problem, this business was engaged in the distribution of raw materials for fresh vegetables and fruits with a sales system in both small quantities and large quantities (wholesale). SAYYOURS is currently located in the Karangploso area, this location is also located in the middle between Batu City and Malang City.

SAYYOURS is a start-up company or entrepreneur where Entrepreneur is one of the economic support systems that drives economic growth in Indonesia [2]. According to [3], business with digital transformation makes the easy way for the customers to order products or place orders about various other things easily and cheaply. No longer does everyone have to transact directly, but online transaction can be accessible to using various information technology media, from ordering payment, confirmation to the process of checking the delivery of goods, everything is done digitally. Therefore, the easiest way to do this is to make sales through online media, the online media makes it easier to reach a wider customer, especially customers from the upper middle class who are be target of exotic vegetables. SAYYOURS's own target customers are not only B2C (Business to Customer) but also B2B (Business to Business), such as resellers, suppliers, and food sellers who need fresh and quality vegetables or fruit. By selling online, SAYYOURS applies a PO (pre-order) sales system, or order directly.

The purpose of implementing this PO system is so that the products offered are always fresh because they have just harvested from the land and minimize damage or decrease in product quality. As for products that are ordered directly, SAYYOURS also provides several types of vegetables and fruits that can be purchased directly without doing a PO. Then because of the online sales system, most customers make payments using e-

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wallet/transfer. As a business that is engaged in selling groceries, raw materials for fresh vegetables and fruits online, SAYYOURS wants to develop this business so that it can be better known by the wider community. One form of development is to become a supplier of raw materials for fresh vegetables and fruits in retail stores. The choice to become a supplier at the modern retail store with the hope of increasing and reaching wider customers through offline sales. The reason for choosing a modern retail store is because most of the products offered by SAYYOURS are organic vegetables and some of them contain exotic vegetables. Where these products have a higher selling price than conventional vegetables which are usually sold in traditional markets. Therefore, judging from the types of products and prices offered, the more suitable target market is customers who usually shop at modern retail stores. In addition, by becoming a supplier of vegetables and fruit in modern retail stores, you can increase brand awareness and public trust with SAYYOURS. This is because products that can enter modern retail stores certainly have good quality so that they can and are worthy of being accepted by the store. However, to be able to enter the modern retail store, it is necessary to know and understand the processes and procedures in order to establish cooperation. Therefore, to develop the business, the formulation of the problem that will be taken by the author is "how to analyze the decision-making process of business cooperation as a supplier of raw materials for fresh vegetables and fruits in supply chain management in modern retail stores?".

## 2 Literature review

The author takes several theories from previous research to strengthen the topic taken. The theory is related to supply chain and decision making. According to [4], food supply chain networking has 4 aspects, namely: broccoli supply chain structure, target market, chain management, and chain business processes. Meanwhile, according to [5], supply chain consists of 4 types, namely: 1. One-way data exchange, 2. Two-way data exchange, 3. Cooperative collaboration and 4. Cognitive collaboration. Decision making is an activity of assessing and determining the choice of one alternative from several [6]. In the decision-making process, according to Kotler and Armstrong, they mention there are 8 stages of decision-making carried out by business customers. As a business that is engaged in selling groceries, raw materials for fresh vegetables and fruits online, SAYYOURS wants to develop this business so that it can be better known by the wider community. This is supported by regions that have potential resources that can help increase excellent economic growth. [7] in intention of development is to become a supplier of raw materials for fresh vegetables and fruits in retail stores. The choice to become a supplier at the modern retail store with the hope of increasing and reaching wider customers through offline sales.

The reason for choosing a modern retail store is because most of the products offered by SAYYOURS are organic vegetables and some of them contain exotic

vegetables. Where these products have a higher selling price than conventional vegetables which are usually sold in traditional markets. This is because products that can enter modern retail stores certainly have good quality so that they can and are worthy of being accepted by the store. However, to be able to enter the modern retail store, it is necessary to know and understand the processes and procedures in order to establish cooperation. Therefore, to develop the business, the formulation of the problem that will be taken by the author is "how to analyze the decision-making process of business cooperation as a supplier of raw materials for fresh vegetables and fruits in supply chain management in modern retail stores?". Framework for Thinking in order to develop business, SAYYOURS uses two ways, namely: by launching new product innovations and expanding the existing market. Issuing a new product where the product is the result of innovation from the initial product that has been sold and some are the wishes of some customers. Then to expand the market SAYYOURS develops sales distribution through modern retail stores in Malang City, namely Lai-lai, Hypermart, and Superindo. In expanding the market, of course, it is necessary to first establish cooperation with existing modern retail stores. Therefore, the author will conduct an analysis related to the process of taking business cooperation as a supplier of raw materials for fresh vegetables and fruits in related retail stores. As for what will be analyzed related to food supply chain networking which consists of chain management and value chain business processes which are then processed using the triangulation method. This following triangulation method such as in the Figure 1 will produce comparisons between existing modern retail stores:

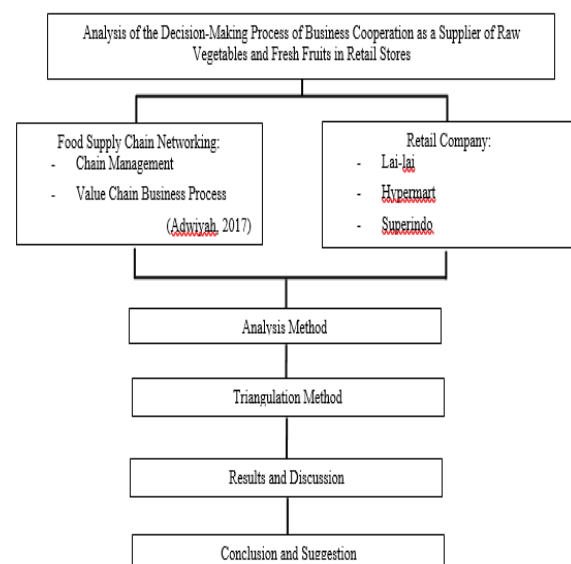


Fig. 1. Triangulation method.

## 3 Methodology

This study would be discussed about descriptive research design. Where the research design serves to

obtain information about the status of variable phenomena or situation conditions [8]. Then for the research method used is descriptive qualitative method so that it can describe the stages of modern retail store decision making when doing business cooperation with SAYYOURS. According to the qualitative research method is a research method used to examine the condition of natural objects, where the researcher acts as a key element [8]. Qualitative description method is a method of object analysis in a condition or an event, the aim is to systematically and actually describe the facts that exist in the field with existing theories [9]. Qualitative research according to [10] can be done in the form of brief descriptions, charts, relationships between categories, flow cards and the like; The data source used is primary data, where the data is data obtained directly [8]. Primary data is obtained directly from respondent subjects, for example through questionnaires, focus groups, or interviews with resource persons. The use of primary data was chosen because they wanted to know the opinions and feedback from respondents directly. This is done so that the data used is valid data in accordance with the conditions being experienced by the respondent. The data collection method used in this research is the interview method. The purpose of using these interviews is that the data obtained are in accordance with the conditions faced by the informants. The condition referred to here is the decision making related to business cooperation with suppliers carried out by the informant. Informants who will be intended to conduct this research are involved in supply chain management activities in the vegetable and fruit section of retail stores, especially those in the city of Malang. Then from the interview guide that will be used is semi-structured which will prepare questions beforehand and deepen the information by asking for further information. it is hoped that data can be obtained with more complete and in-depth information.

#### 4 Discussion

In carrying out this research, the author uses the interview method to obtain valid and in-depth data in order to get the right research results. Therefore, the informant who provided the data is one of the main keys in this research. The profiles of informants in this study are as follows in the following table of Table 1.

**Table 1.** Informant list.

No	Profession	Store	Gender	Age	Education
1	Vegetable and fruit employees	Lai-Lai	Male	25 years old	SMA
2	Division Manager Fresh	Hypermart	Female	40 years old	S1
3	assistant manager	Superindo	Male	28 years old	SMK

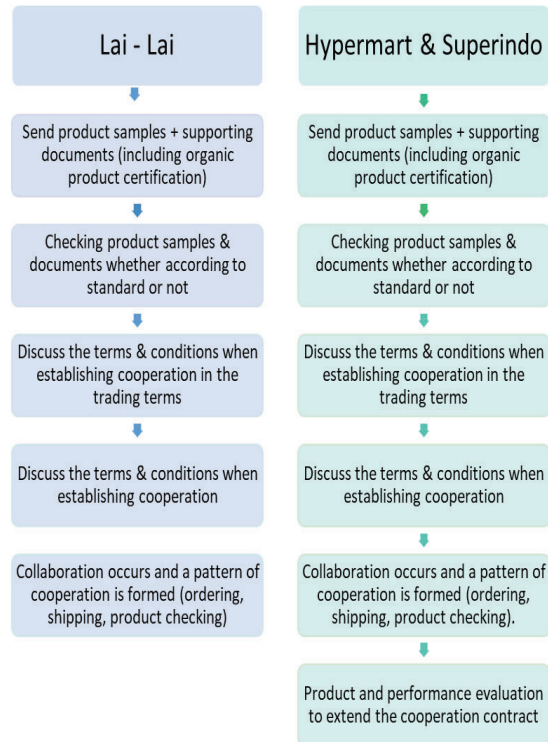
Some of stores that targeting are Lai-Lai, Hypermart and Superindo. The selection of these three stores is because they meet the needs of measurement and have quite a lot of and varied sales of vegetables and fruit. Then from the results of the research conducted, the author concludes that Lai-Lai is classified as a local market, while Hypermart and Superindo are classified as a national market. This can be seen from the large

scale of the store, where for Lai-Lai it is still located in Malang City, while for Hypermart and Superindo it has reached almost all parts of Indonesia. From the three flowchart images, there are some differences in certain parts.

In the chain management aspect, the stages are: 1. Partner selection, a modern retail store that is the location of the interview. The author asks suppliers who want to collaborate to send samples of the products to be sold as well as organic certificates if the product claimed by the supplier is an organic product. These two things can later be considered factors for establishing cooperation. But there is also a cooperation agreement that can be another factor for consideration. 2. Contractual agreement, 2 out of 3 informants use the cooperation contract system. For the purchase system, depending on each store, there are those that use a consignment system or break up purchase. The return system also depends on each store, if the buying system breaks then of course there will be no returns, while for consignment usually the product will be returned and there will be a payment deduction from the store. 3. Transaction System, the informant said that the payment for vegetables and fruit is about once every 2 weeks. However, informant 2 said that modern retail stores are related to using the Time of Payment (TOP) payment system. Then for determining the price of the product, all the informants said that it was determined by their side because the purchase price given was the wholesale price. 4. Policy Support, the informant said that the product sent will be received by the relevant warehouse department then the product is inspected and then the product to be sold will be placed according to the product display. Vegetable and fruit products will also be checked every day, considering the types of products that are not durable and easily damaged. The checks are carried out by employees in charge of the vegetable and fruit division. There is also a promotional cooperation system that can help suppliers to offer their products, but only 2 out of 3 informants apply this. And the promotion cooperation system is determined at the beginning of the work agreement.

Next on the value chain business process aspect: 1. Customer Order, 2 out of 3 informants / informants said that vegetables and fruit were delivered 2 times a week, but there were types of vegetables that were sent every day. While 1 other informant said that the delivery of vegetables and fruit can be done every day or depending on the order made. 2. Procurement, 2 of 3 informants said there is a provision for a minimum order where it is seen and determined from the previous level of sales. Other informants said that there is no minimum order, the number of products sent is determined by the supplier. As for the packaging, the three informants said that there were no special requirements, only that they were packaged neatly. 3. Manufacturing, the informant said that as a reference that the product can be accepted, it is by looking at the sample of the product sent and the completeness of proof of organic certificate for products that are claimed to be organic. 4. Replenishment, informant 1 said that repeat orders are made when the product runs out or when the supplier sees that the product stock will run out when sending. Informant 2

said that for repeat orders, it will be adjusted to the needs of the store whether the product is in high demand or not. Meanwhile, informant 3 said that repeat orders were made when the stock was about to run out and it would be notified to the supplier.



**Fig. 2.** Picture of business cooperation decision making process.

While in the Figure 2 that is a chart of the business cooperation decision-making process carried out at the three modern retail stores that became the research location when they wanted to become a supplier of fresh vegetables and fruits. From the picture, it can be seen that there are differences from the existence of a written cooperation agreement, namely the trading terms in the Hypermart and Superindo stores. Then because there are differences, the system for continuing cooperation also experiences differences. Where for Hypermart & Superindo is determined by the store when looking at the products offered and the sales results when they become a supplier at the store. Different from the two stores, for Lai - Lai the decision to continue the collaboration is determined by the supplier itself, so that if it is felt that the products offered are not very interested, the collaboration can be terminated. In Table 2, there are the results conclusion of this paper, to make the reader more easier to compare and evaluated.

**Table 2.** Conclusion of the results.

	FSCN	Lai-Lai	Hypermart	Superindo
<b>A Chain Management</b>	1. Partner selection	1. Bring samples of the products to be offered. 2. No need to fill in the cooperation agreement form. 3. Show proof of organic certificates for vegetables and fruits that are claimed to be organic. 4. Samples of products that meet the requirements and complete organic certificates will be considered for cooperation. 5. The decision to cooperate is determined by the owner. 6. The decision to establish cooperation is notified 1-2 days afterward.	1. Bring samples of the products to be offered. 2. Fill in the cooperation agreement form 3. Show proof of organic/pesticide-free certificates for vegetables and fruits that are claimed to be organic/pesticide-free. 4. Samples of products that meet the requirements and complete organic certificates will be considered for cooperation. 5. The decision to cooperate is determined by the buyer/merchandising division and the fresh division. Buyer/merchandising division to check product samples and complete documents. Fresh division to re-check whether the product is in accordance with the sample sent and in accordance with the needs of the store. 6. The agreement to establish cooperation occurs within a period of 2-11 months	1. Bring samples of the products to be offered. 2. Fill in the cooperation agreement form 3. Show proof of organic/pesticide-free certificates for vegetables and fruits that are claimed to be organic/pesticide-free. 4. Samples of products that meet the requirements, complete organic certificates, and appropriate prices will be considered for cooperation. 5. The decision to cooperate is determined by the buyer division. 6. The agreement to establish cooperation occurs within a period 2-11 months.
<b>2. Contractual Agreement</b>	1. There is no contract system. 2. Because there is no contract system, the supplier has the full decision to continue or stop the supply of vegetables and fruit. 3. The purchasing system uses a deposit/consignment system. 4. There is a return system, vegetables and fruit that are deposited if damaged will be returned or disposed of (according to the agreement). And the damaged product will be recorded and when the payment will be deducted by the damaged product.	1. The contract system is annual and will be improved after one year. 2. Contract extension is carried out when the sales turnover for 1 year is good and will be terminated when there is a lot of loss. 3. The purchasing system for vegetables and fruit uses a drop-out system. 4. There is no return system because it uses a broken purchase system.	1. The contract system is annual and will be improved after one year. And if it is felt that the supplier's performance is good, a contract extension will be carried out. 2. Contract extension is carried out when the product delivered is always of good quality and there are minimal product vacancies. 3. The purchasing system for vegetables and fruit uses a drop-out system. 4. There is no return system because it uses a broken purchase system.	
<b>3. Transaction System</b>	1. Payments are made every 2 weeks. 2. What is needed to take payment is a product receipt as proof of the number of product shipments. 3. Determination of product prices is determined by Lai-Lai himself because purchases use wholesale prices.	1. Using the TOP system (time of payment) so that each supplier is different depending on the type of product. For fruit can be 2 weeks. 2. All you need to take payment is PO and invoice 3. The determination of product prices is determined by Hypermart itself because it uses a drop-out system.	1. Using the TOP system (time of payment), which is for suppliers of vegetables and fruit every 2 weeks. 2. All you need to take payment is PO and invoice 3. The determination of product prices is determined by Superindo itself because it uses a drop-out system.	

4. Policy Support	<ol style="list-style-type: none"> <li>When the product arrives at Lai-Lai, it will be received by the warehouse for sorting. Then the products to be sold are arranged on vegetable and fruit displays.</li> <li>Checks are carried out regularly every day.</li> <li>Checks are carried out by employees of the vegetable and fruit division, and if there are vegetables and fruit that are damaged or unfit for sale, they will be immediately photographed to the supplier.</li> <li>No promotion cooperation system</li> </ol>	<ol style="list-style-type: none"> <li>The product arrives at <b>Hypermart</b>, it will be checked (QC) by the fresh division. The location for storing vegetables and fruit in the <b>Hypermart</b> warehouse also has a certificate issued by the agriculture office (so that it meets the standard). Supporting equipment at <b>Hypermart</b> is also calibrated every year to avoid depreciation. So that storage will be more secure.</li> <li>Checks are carried out regularly every day.</li> <li>Checking is carried out by the fresh division.</li> <li>Promotion cooperation is determined in the trading terms at the beginning of the work agreement.</li> </ol>	<ol style="list-style-type: none"> <li>When the product arrives at <b>Superindo</b>, it will be checked by the warehouse for sorting. Then the products to be sold are arranged according to the layout for displaying vegetables and fruit.</li> <li>Checks are carried out regularly every day.</li> <li>Checks are carried out by employees in charge of the vegetable and fruit section.</li> <li>Promotion cooperation is determined in the trading terms at the beginning of the work agreement.</li> </ol>
<b>B Value Chain Business Process</b>			
1. Customer Order	<ol style="list-style-type: none"> <li>Vegetables and fruit are delivered twice a week, but some types of vegetables are common every day.</li> </ol>	<ol style="list-style-type: none"> <li>Vegetables and fruit are delivered twice a week, but some types of vegetables are common every day.</li> </ol>	<ol style="list-style-type: none"> <li>Delivery of vegetables and fruits can be done every day depending on the PO system requested from <b>Superindo</b>.</li> </ol>
2. Procurement	<p>There is no minimum order, so adjust the supplier's wishes. The packaging is free if it is packed neatly.</p>	<ol style="list-style-type: none"> <li>The minimum order is determined from the previous year's sales history and adjusts to the condition of the customer's level of purchase.</li> <li>The packaging is free if it is packed neatly.</li> </ol>	<ol style="list-style-type: none"> <li>The minimum order is determined by the shop's ability to sell vegetables and fruit.</li> <li>The packaging is free if it is packed neatly.</li> </ol>
3. Manufacturing	<ol style="list-style-type: none"> <li>The reference for the product that will be accepted for supply is based on the sample of the product sent and the existence of a related product certificate (organic certificate).</li> </ol>	<ol style="list-style-type: none"> <li>The reference for the product that will be accepted for supply is based on the sample of the product sent and the existence of a related product certificate (organic certificate).</li> </ol>	<ol style="list-style-type: none"> <li>The reference for the product that will be accepted for supply is based on the sample of the product sent and the existence of a related product certificate (organic certificate).</li> </ol>
4. Replenishment	<ol style="list-style-type: none"> <li>Repeat orders will be made when the product sent is out of stock.</li> </ol>	<ol style="list-style-type: none"> <li>Repeat orders according to the needs of the store and sent according to the day the PO order is made automatically sent to the supplier via email.</li> </ol>	<ol style="list-style-type: none"> <li>Repeat orders will be made when the products in the store are running low/out and using the PO system which is usually done via email to the supplier.</li> </ol>

## 5 Conclusion

Based on the formulation of the problem, data analysis, and research results that have been described by the author above. Then the key can be as follows:

Food Based on supply chain networking, it can be seen from chain management that in establishing cooperation between fresh vegetable and fruit suppliers and modern retail stores, the first one needs to send product samples and show supporting documents (such as SOA) or other as products claimed by the supplier. In addition, for national retail stores, there will be contractual agreements concerning several things, such as: purchasing system, return system, timing of cooperation, payment system, promotion cooperation system and repeat order system. Based on the food supply chain network from the value chain business process, when it has collaborated with modern retail

stores, the vegetable and fruit sales system have the same pattern. There will be a delivery process, ordering, product inspection, and repeat orders. Where for delivery is usually done every day or for some products 2x a week. The minimum order for the local market is uncertain and can be determined by the supplier, in contrast to the national market looking at previous sales. Terms of products received are samples of products and products sent. As well as a repeat order system that is carried out when the product runs out or when it is time for PO. For suppliers when they want to collaborate with modern retail stores, the readiness of documents and products offered is an important consideration. Especially considering that stores that have a modern system need to consider the readiness of the number of products to be supplied, and for modern retail stores that have a modern system to consider continuing the cooperation contract in general is to look at the sales results while being a supplier in the store and see the quality of the products provided. Based on the results of the research and some of the terms and conditions of the three modern retail store collaborations and judging by the business conditions of SAYYOURS, the SAYYOURS business meets the criteria in establishing cooperation with three modern markets with several products.

From the results of research conducted, SAYYOURS can be developed and continued by trying to establish cooperation with modern retail stores. This can be done in an effort so that SAYYOURS can reach a wider range of customers and make the SAYYOURS name known to the public. In the early stages, you can try to become a supplier in Lai-Lai, this shop is the author's choice because there is no minimum delivery limit which is considered suitable for a business that is just beginning and does not yet have a steady harvest in large quantities. Indeed, the drawback is that there is no binding contract system, but it is decisive for the cooperation of the suppliers themselves. Then the next consideration is Hypermart and Superindo, this is because the system used is a buy-out system. Where this is of course an advantage for suppliers of vegetables and fruit products that are easily damaged. So that suppliers do not have to bother with products that have not been sold. However, what makes Hypermart and Superindo the next consideration is supplying large stores to suppliers because of large and consistent harvests so that they do not experience product problems. From the research that has been done, the author hopes that vegetable and fruit sellers will consider the option of collaborating with modern retail stores. That being a supplier in a modern retail store can also be done by vegetable and fruit sellers. Besides being able to increase sales, it can also be a means to increase brand awareness to the public. Apart from that, we can see that vegetables and fruit are the staple consumption of society which is very common in both traditional and modern markets. Sales of vegetables and fruits offline have experienced a decline and people prefer to shop online due to the Covid-19 pandemic. But it is undeniable that many people are now brave enough to go out and shop offline again.

## References

1. S. Hamidah, Sayuran dan buah serta manfaatnya bagi kesehatan disampaikan dalam pengajian jamaah langar mafaza kotagede Yogyakarta (Fakultas Teknik Universitas Negeri Yogyakarta, 2015)
2. M. Murniati, G. Maski, I. Noor, M. Ekawaty, *Entrepreneurship in the tourism industry: implication on sustainable economic development*, in Environmental, Social, and Governance Perspectives on Economic Development in Asia (Emerald Publishing Limited, 2021)
3. M. Danuri, *Development and transformation of digital technology*, Infokam **XV**, II, pp. 116-123 (2019)
4. R. Adwiyah, *Aplikasi manajemen rantai pasokan (MRP) pada produk hortikultura (brokoli organik) ke ritel modern*, J. Manajemen dan Bisnis (Performa) **13**, 2, pp. 127-137 (2017)
5. A. S. Tanutomo, *Analisa kinerja supply chain collaboration pada rumah buah*, Agora **3**, 1, pp. 293-3 (2015)
6. Z. Hayati, *Teori-teori pengambilan keputusan* (2019)
7. Murniati, *Identification of tourism potential and investment strategy-a case study of Banyuwangi regency*, Studies of Applied Economics **39**, 12 (2021)
8. I. Nurdin, S. Hartanti, *Metodologi penelitian sosial* (Media Sahabat Cendekia, 2020)
9. M. Murniati, H. Putra, *Partisipasi masyarakat dalam musyawarah perencanaan pembangunan (MUSRENBANG) di kecamatan Siulak*, AGREGATE **1**, 1, pp. 23-37 (2018)
10. Hardani, H. Andriani, J. Ustiawanty, E. F. Utami, R. R. Istiqomah, R. A. Fardani, D. J. Sukmana, N. H. Auliya, *Metode penelitian kualitatif dan kuantitatif* (CV. Pustaka Ilmu Grup, 2017)