

AN ANALYSIS OF SUPPLY CHAIN MANAGEMENT PERFORMANCE OF JENANG RAW MATERIALS IN PONOROGO

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ABSTRACT

The success of creating sticky rice jenang is due to a good cooperative relationship between supply chain actors. MSME Jenang Teguh Raharjo faces problems in supply chain performance which then has an impact on the production process, so it is necessary to conduct an assessment of supply chain performance. This study aims to identify the state of supply chain management, analyze the supply chain performance of glutinous rice flour at MSME Jenang Teguh Raharjo using SCOR (Supply Chain Operations Reference) and develop supply chain strategy improvements. This study uses descriptive and quantitative data analysis, carried out at MSME Jenang Teguh Raharjo in February 2021. The respondent determination technique used is non-probability sampling technique and the respondent determination method used is purposive sampling. Data analysis technique with SCOR method. The results showed that there were four members of the glutinous rice flour supply chain. Activities that occur are cooperation to supply the needs of glutinous rice flour as raw material for jenang. Based on the results of the calculation, it can be analyzed that the supply chain performance is not optimal. The average reliability generated is 96% in the Excellent category, the average responsiveness of the three suppliers is in the Good category and the Agility average is 100% in the Excellent category. The recommended repair solution is that suppliers carry out safety stock, Re Order Point, product quality control, production control, make delivery schedules and make improvements to the preparation process.

Keywords: supply chain; SCOR; glutinous rice flour

INTRODUCTION

The success of creating quality sticky rice is of course due to the existence of a good coordination and cooperation relationship between supply chain actors. The supply chain is a mechanism for increasing company productivity in the supply chain through optimizing the location, time and flow of material quantities (Pongoh, 2016). The supply chain has a complex structure and involves many parties, both internal and external to the company, starting from suppliers to final consumers. This will cause problems if the company does not know how far the supply chain performance has been achieved (Alim *et al.*, 2018). Good management of an agro-industry can be seen from the performance of its supply chain, if the supply chain system is problematic, it will have an impact on market competition for the final product. MSME Jenang Teguh Raharjo, in this case, is facing problems in supply chain performance which then will have an impact on the production process of MSME Jenang Teguh Raharjo. The problem of procuring raw materials faced by MSME Jenang Teguh certainly needs to be assessed regarding supply chain performance. Measurement of problems in supply chain performance aims to improve strategies for smooth production processes.

Determination of the strategy is carried out by measuring the level of supply chain performance which aims to find out how far the influence of the performance of supply chain actors for sticky rice raw materials in MSME Jenang Teguh Raharjo.

The supply chain performance is measured using the Supply Chain Operation Reference (SCOR) method. The SCOR (Supply Chain Operation Reference) model is one of the models used to measure supply chain performance which includes all activities related to all networks that make up a supply chain. This model is a systematic method that combines three main elements, namely business techniques, namely capturing complex processes in the present and defining processes expected in the future, benchmarking is an activity to compare technical performance data with companies operating in the same field as a reference for improving chain performance. supply chain, and the last is best practice as the third element in SCOR useful for measuring achievements and improving ineffective supply chain processes, these three elements are included in a cross-functional framework in supply chain management as a reference for improving performance company supply chain (Ishak, 2019).

According to Katumzi (2011) Supply chain performance analysis is carried out to evaluate supply chain activities, adjust objectives and determine improvement steps at the strategic, operational and tactical levels to be carried out. The success of a company depends on how effectively the supply chain is used (Tarasewicz, 2016). Therefore, it is important to measure the supply chain performance of the sticky rice jenang raw material at MSME Jenang Teguh Raharjo to help find improvement steps that can increase the competitiveness of each supply chain member.

METHOD

This research uses a quantitative approach method. Quantitative analysis in this study is also used to explain the performance of the glutinous rice flour supply chain at Jenang Teguh Raharjo SMEs, so it will be known which supply chain actors are efficient and inefficient. The results that indicate a less efficient situation will be carried out with improvement solutions so that supply chain performance becomes more efficient.

The time of the study was carried out in February 2021. The location determination in this study used a purposive method at the MSME Jenang Teguh Raharjo, which is located on Jalan Wibisono, Kepatihan Village, Ponorogo District, Ponorogo Regency, the location chosen according to the characteristics of the study, namely regarding supply chain performance.

The respondent determination technique used is a non-probability sampling technique, namely by not providing equal opportunities for members of the population to become respondents. The respondent determination method used is purposive sampling, because this study determines respondents with several considerations from which supplier most often supplies glutinous rice flour in 2020. According to Herdiansyah (2015) purposive sampling is a method in non-probability sampling technique to determine the subject according to the purpose of the study.

Research on supply chain performance has a different number of respondents from each actor. First, the respondents for glutinous flour suppliers were determined to be 3 suppliers from 4 suppliers, namely Sabar Jaya supplier, Selamat supplier and Jaya Baru supplier. The determination of 3 suppliers as respondents is seen from transaction activities in 2020 which show only 3 suppliers from 4 suppliers. Second, the owner and Management Representative of MSME Jenang Teguh Raharjo, namely Mr. Rudi Hartono who was appointed as a respondent from MSME Jenang Teguh Raharjo. The reason for determining Mr. Rudi Hartono as a respondent is because Mr. Rudi Hartono

is directly involved in supervising the process of procurement of goods to production so that he knows for sure the course of procurement of raw materials, production and payment processes, so Mr. Rudi Hartono will be very helpful in obtaining research data. The total number of respondents in this study were 4 people who were determined for specific reasons.

This study uses data collection techniques in two ways, namely data collection techniques with interviews and documentation. The data obtained have the type of secondary data and primary data. Primary data is data obtained directly from respondents. Primary data is data collected through the first party to data collectors who usually can be through interviews, traces and others (Arikunto, 2013). Primary data obtained in this study include data from questionnaires to respondents and data from interviews. The following are ways to collect primary data:

1. Interview

This method is used when the number of respondents is small or when the researcher wants more accurate data from the respondents. Interviews were conducted in depth to the respondents. In-depth interviews are conducted directly with parties who are considered to be able to provide information (informants) and are competent in accordance with the problems in the research (Saktisyahputra, 2019). The questions that will be asked in the interview are arranged according to the research topic.

2. Observation

Observation is an unlimited data collection technique by direct observation. Data collection techniques by way of observation is done by observing everything that is in the field regarding worker behavior, work processes, agro-industry conditions, product transportation activities and raw material receipts, as well as natural phenomena that occur during the data collection process.

Secondary data is indirect data that can be obtained from related institutions or agencies, documents, libraries and other people's research results. According to Lubis (2017) secondary data is data about general conditions at the research site, secondary data is collected through documentation studies, namely information whose sources are non-human (non-human source of information), this information is in the form of documents and records that are already available so that it is relatively easy to obtain it. This study uses secondary data collection techniques by means of documentation. The data obtained in the form of organizational structure data, history and general description of MSME Jenang Teguh Raharjo, the number of workers, the number of suppliers and data on the amount of glutinous flour supply during 2020.

This study uses two data analyzes, namely descriptive and quantitative in helping the success of the research. Quantitative data analysis technique is a statistical data analysis technique to answer the proposed problem formulation (Sugiyono, 2013). The research objective is to determine the supply chain performance using SCOR (Supply Chain Operations Reference) which consists of reliability, responsiveness, flexibility in MSME Jenang Teguh Raharjo described descriptively by requiring some direct observation data and document collection from respondents. The collected supply chain mechanism data is then analyzed with existing indicators. Quantitative analysis is carried out by processing data or information about supply chain performance in the form of numbers, so that later it can be known which conditions are efficient or inefficient.

The data analysis technique in this study was carried out using the Supply Chain Operation Reference (SCOR) method which is the best method in evaluating supply chain performance, where SCOR can specifically be used to measure the performance of a supply chain. The performance attributes measured are supply chain reliability, supply chain responsiveness, supply chain agility (flexibility) (Alim et al., 2018).

This data analysis was used to answer the research objectives as follows:

Objective 1: Identify the state of supply chain management in MSME Jenang Teguh Raharjo using descriptive analysis method.

To answer the first objective, a descriptive analysis method was used as described above. The data collected was analyzed, described entities or links and described supply chain problems based on the performance of the glutinous flour supply chain management in MSME Jenang Teguh Raharjo.

Objective 2: To analyze the performance of the glutinous rice flour supply chain at MSME Jenang Teguh Raharjo using SCOR (Supply Chain Operations Reference).

According to Alim et al (2018) To answer the second objective, the SCOR (Supply Chain Operations Reference) model is used. SCOR is a model used to measure the performance of the supply chain. The steps that can be taken to measure SCM performance are as follows:

a) SCOR Mapping

At this stage, mapping is carried out through material flow design that describes the condition of supply chain flow at MSME Jenang Teguh Raharjo. The material flow design maps from the process plan (planning), source (procurement), make (production), deliver (delivery), and return (return). The material flow design is able to explain the types of processes and process categories that exist in SCOR level 1.

b) Calculation of Performance Attributes

Calculation of performance attributes is done by determining performance metrics based on the measured attributes. The measured performance attributes are external performance attributes, namely supply chain reliability, supply chain responsiveness, supply chain agility (flexibility), while internal performance attributes are not calculated due to data limitations. Attribute parameters use the following performance metrics:

1. Supply Chain Reliability

This stage uses Perfect Order Fulfillment (POF) which is the percentage of orders that have been sent completely requested by MSMEs and the goods sent do not have quality problems. POF is determined by:

$$POF = \frac{\text{Total pesanan tepung ketan} - \text{Jumlah pesanan yang bermasalah}}{\text{Total pesanan tepung ketan}} \times 100\%$$

2. Supply Chain Responsiveness

This stage uses the Order Fulfillment Cycle Time (OFCT) which is the determination of the number of days needed in the process from the receipt of the order until the product is received to MSMEs. The amount of value in OFCT can be measured from the average number of days needed in the product delivery process to MSMEs, starting from MSMEs ordering products until the product is received into the hands of MSMEs..

3. Supply Chain Agility (Flexibility)

At this stage using the method: Upside Supply Chain Adaptability (USCA). It is an adjustment of the upstream supply chain or can be defined as a maximum increase in the percentage of the number of products whose delivery is continuous and can be achieved by considering the source, make and deliver components..

$$USCA = \frac{\text{Jumlah pesanan tepung ketan yang terpenuhi}}{\text{Jumlah peningkatan pesanan tepung ketan}} \times 100\%$$

Objective 3: Develop supply chain strategy improvements in MSME Jenang Teguh Raharjo by using Inefficiency Analysis and Best Practice Analysis.

The next stage, the results of supply chain performance calculations will be analyzed using Inefficiency Analysis to find out problems in the supply chain of glutinous rice flour raw materials at MSME Jenang Teguh Raharjo. This efficiency analysis is carried out based on the performance calculation metrics from suppliers to MSME Jenang Teguh Raharjo. From the calculations carried out, it can be seen the existing problems. After the inefficiency analysis has been carried out, then the best practice analysis is carried out. Best practice analysis is a desired condition in order to realize better supply chain management. This condition is adjusted to the improvement efforts needed in an effort to overcome the existing problems based on the results of the inefficiency analysis. Best practice analysis refers to efforts to improve supply chain performance linked to performance metrics. The best practice process is carried out by comparing the company's internal targets. Each process in the SCOR Model is recommended to find the best practice process that is suitable for implementation (Georgise et al., 2013).

RESULTS AND DISCUSSION

3.1 Description of MSME Supply Chain Management Jenang Teguh Raharjo.

The research location is at the MSME Jenang Teguh Raharjo which is located at Jl. Wibisono No. 90, Krajan, Kepatihan, Kec. Ponorogo, Ponorogo Regency, East Java 63416. Teguh Raharjo jenang is a typical jenang from Ponorogo Regency which is often in demand by consumers, both local consumers and tourists. Jenang dodol, which has been established since the 1950s, has become a prima donna among the public because it has a distinctive taste and is able to compete with other jenang products in Ponorogo.

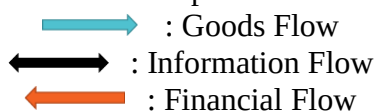
The vision of the MSME jenang Teguh Raharjo is to become an industry that is able to provide benefits to the surrounding environment, just as the employees in the industry are the surrounding community. The mission of MSME Jenang Teguh Raharjo is to be profit-oriented in order to keep a business growing. MSME Jenang Teguh Raharjo has supply chain members whose activities involve several parties, starting from the raw material procurement process to the production process in the industry. The ongoing distribution process includes contractual ties to chain members, but sometimes there is only a buy-and-break relationship. The contractual ties that have been formed are long-term and occur between the MSME Jenang Teguh Raharjo and the glutinous rice flour suppliers. The Jenang Teguh Raharjo MSME supply chain model can be seen in Picture 1.



Picture 1. MSME Jenang Teguh Raharjo's Supply Chain Model

Source: (MSME Jenang Teguh Raharjo, 2021)

Description :



MSME Jenang Teguh Raharjo in carrying out its production process implements a supply chain

which involves various stages of the chain, but in this study the supply chain flow limitation used is between glutinous flour suppliers and MSME Jenang Teguh Raharjo. The supply chain in Jenang Teguh Raharjo SMEs involves the flow of goods or services, financial flows and information flows. The supply chain flow applied is:

1. The flow of goods or services is the flow from suppliers to MSME Jenang Teguh Raharjo. The flow of goods in the jenang industry starts from MSME Jenang Teguh Raharjo ordering glutinous rice flour to suppliers of glutinous flour in a certain amount and will be sent according to the time requested by MSME Jenang Teguh Raharjo. The following is data on demand for goods from MSME Jenang Teguh Raharjo to the three glutinous flour suppliers in 2020

Table 1. Data on Demand for Glutinous Flour MSME Jenang Teguh Raharjo

Bulan	Sabar Jaya	Selamet	Jaya Baru
Januari	400 Kg	275 Kg	150 Kg
February	390 Kg	250 Kg	150 Kg
Maret	390 Kg	250 Kg	125 Kg
April	390 Kg	225 Kg	140 Kg
Mei	375 Kg	235 Kg	135 Kg
Juni	400 Kg	250 Kg	145 Kg
July	415 Kg	285 Kg	175 Kg
Agustus	400 Kg	250 Kg	150 Kg
September	375 Kg	250 Kg	145 Kg
Oktober	375 Kg	225 Kg	125 Kg
November	390 Kg	240 Kg	125 Kg
Desember	410 Kg	275 Kg	160 Kg
Total	4710 Kg	3010 Kg	1725 Kg

Sumber: (UMKM Jenang Teguh Raharjo, 2021)

2. The flow of information that occurs between glutinous flour suppliers and MSME Jenang Teguh Raharjo is two-way. The flow of information started from MSME Jenang Teguh Raharjo providing information to suppliers regarding the quantity of glutinous flour raw materials ordered, the time required and the criteria for glutinous flour to be ordered. The supplier will provide information regarding the amount of glutinous rice flour that can be fulfilled, the delivery time and the amount of money that must be paid by MSME Jenang Teguh Raharjo to the supplier.

3. The financial flow in the glutinous flour supply chain paid by MSME Jenang Teguh Raharjo is reversed. The financial flow that occurred started from MSME Jenang Teguh Raharjo who made payments for raw materials for glutinous rice flour to suppliers according to the number of products ordered with a cash system according to the agreed price..

3.2 Performance Analysis of Glutinous Flour Supply Chain Management at MSME Jenang Teguh Raharjo

The predefined metrics will then be calculated for their performance. All values obtained based on calculations are conditions in the performance of MSME supply chain management Jenang Teguh Raharjo. The resulting value will then be used as an indicator of industrial performance so that it can be seen what performance needs improvement. Benchmarking is an evaluation process used to evaluate various processes in the industry in order to achieve best practice. The process of benchmarking is the process of achieving effectiveness carried out by an industry in improving the industry itself. The size of the difference between the actual condition of the industry and the benchmark condition regarding the target industry itself is explained by the gap in performance metrics. With the gap, it can be seen that the performance has not been achieved so that performance can be improved according to the target.

Table 2. Benchmark Performance of Glutinous Flour Suppliers to MSMEs Jenang Teguh Raharjo.

Pemasok	Atribut kinerja	Metrik SCOR	Aktual	Target UMKM	Gap	Pencapaian
Sabar Jaya	Supply Chain Reliability	Perfect Order Fulfillment	98%	100%	2%	98%
	Supply Chain Responsiveness	Order Fulfillment Cycle Time	12 hari	12 hari	-	100%
	Supply Chain Agility (Flexibility)	Upside Supply Chain Adaptability (USCA)	100%	100%	-	100%
Selamet	Supply Chain Reliability	Perfect Order Fulfillment	97%	100%	3%	97%
	Supply Chain Responsiveness	Order fulfillment cycle time	14 hari	12 hari	2 hari	85.7%
	Supply Chain Agility (Flexibility)	Upside Supply Chain Adaptability (USCA)	100%	100%	-	100%
Jaya Baru	Supply Chain Reliability	Perfect Order Fulfillment	95%	100%	5%	95%
	Supply Chain Responsiveness	Order Fulfillment Cycle Time	14 hari	12 hari	2 hari	85.7%
	Supply Chain Agility (Flexibility)	Upside Supply Chain Adaptability (USCA)	100%	100%	-	100%
Rata-rata	Reliability	Perfect Order Fulfillment	96%			
	Responsiveness	Order Fulfillment Cycle Time	13.3 hari			
	Agility (Flexibility)	Upside Supply Chain Adaptability	100%			

Sumber: (Data Primer Diolah, 2021)

To measure and analyze the achievement of supply chain management performance, indicators of performance achievement are used. Performance indicators are quantitative or qualitative measures that are used to describe the level of achievement of a predetermined target or goal (Kristiyanti, 2012). The table of performance achievement indicators used in this study is as follows:

Table 3. Supply Chain Performance Indicator Level

Parameter kinerja	Indikator kinerja supply chain
<40%	Sangat kurang (<i>Poor</i>)
40% - 50%	Kurang (<i>Marginal</i>)
50% - 70%	Sedang (<i>Average</i>)
70% - 90%	Baik (<i>Good</i>)
>90%	Sangat baik (<i>Excellent</i>)

Sumber: (Ishak, 2019)

Based on the results of the calculation of the Supply Chain Reliability performance attribute with the Perfect Order Fulfillment metric, it shows that of the three glutinous flour suppliers, they are able to fulfill orders with a value of 98% from Sabar Jaya, 97% from Selamat and 95% from Jaya Baru. The resulting average reliability shows that suppliers are able to fulfill orders for glutinous rice flour by 96% from MSME Jenang Teguh Raharjo with this achievement already in the Excellent category. These results have been very good in fulfilling orders for glutinous flour even though it is not in accordance with the Jenang Teguh Raharjo MSME target of 100%. Regarding the difference from Jenang Teguh Raharjo SMEs, this is due to the presence of sticky glutinous flour so that it does not meet the criteria to be used as raw materials.

The value of the calculation of the Supply Chain Responsiveness performance attribute with the Order Fulfillment Cycle Time metric shows that from the three suppliers in preparing orders until the delivery process each takes a different time. Sabar Jaya takes 12 days to process, while Selamat and Jaya Baru take 14 days to process. Targets and agreements between MSME Jenang Teguh Raharjo and suppliers from preparation to delivery can be completed within 12 days. The average value for Order Fulfillment Cycle Time from the three suppliers is in the Good category. This is quite good in the performance of suppliers in meeting the needs of glutinous flour orders even though the value is not 100% perfect according to the expectations of MSME Jenang Teguh Raharjo. So that the Order Fulfillment Cycle Time metric is needed to improve in achieving the effectiveness of the order fulfillment process, especially for the two suppliers, namely Selamat and Jaya Baru. Based on the results of interviews that have been carried out, it is known that the delay was due to the production process being quite slow considering the human resources owned and the limitations of production machines.

The Upside Supply Chain Adaptability (USCA) value is the percentage of the maximum increase in the number of products sent and can be maintained for 30 days, this is related to the maximum number of shipments of goods to the buyer. The average Agility (Flexibility) produced shows that suppliers are able to fulfill orders for glutinous rice flour by 100% from MSME Jenang Teguh Raharjo with this achievement already in the Excellent category. This is because the suppliers still have sufficient stock of glutinous rice flour in their warehouses to meet the increasing demand for products from MSME Jenang Teguh Raharjo.

Inefficiency analysis is an analysis used to see the problems that exist in the supply chain. This study uses inefficiency analysis in analyzing existing supply chain problems. The metrics used in this inefficiency analysis are based on the metrics used in the performance of the glutinous rice flour supplier to MSME Jenang Teguh Raharjo. These problems occur in the quality of the goods that are not appropriate and the delivery is not on time. The inefficiency of glutinous flour suppliers is shown in Table 4.

Table 4. Jenang Teguh Raharjo's MSME Inefficiency from Suppliers to MSME Jenang Teguh Raharjo

Pemasok	Inefisiensi	Penyebab	Simbol
Sabar Jaya	Kualitas barang yang belum sesuai dan belum konsisten	Tidak dilakukan pengawasan mutu.	M2a
	Kualitas barang yang belum sesuai dan belum konsisten	Kurangnya pengawasan proses produksi.	M2b
Selamet	Pengiriman barang yang kurang tepat waktu	Kurangnya proses persiapan pesanan	D3b
	Kualitas barang yang belum sesuai dan belum konsisten	Tidak dilakukan pengawasan mutu.	M2c
Jaya Baru	Pengiriman barang yang kurang tepat waktu	Kurangnya proses persiapan pesanan	D3c

Sumber: (Data Primer Diolah, 2021)

Based on the table, it can be explained that the causes of the inefficiency of the supply chain flow are as follows:

1. Sabar Jaya

The quality of the goods has not been consistent with the expected standards. The hope of the MSME Jenang Teguh Raharjo, the supplier of Sabar Jaya, is consistent in the quality of the goods provided.

2. Selamet

The quality of the goods is still not appropriate and not consistent as expected by MSME Jenang Teguh Raharjo. This is because there is no control over the production process. Raw materials that have been received are then directly processed to be processed into glutinous rice flour.

In addition, the process of delivering goods that are not on time or not in accordance with the agreement occurs due to several factors faced by Selamet suppliers, including the process of preparing orders that are not maximized and limited human resources.

3. Jaya Baru

Jaya Baru suppliers produce quality goods that are not consistent and there are still product defects. The main factor of the problem is the lack of product quality control from Jaya Baru suppliers.

There was a delay in the process of sending goods from Jaya Baru suppliers to MSME Jenang Teguh Raharjo because the preparation process had not been maximized.

3.3. Improvement of Supply Chain Management Performance Strategy

According to Alim et al (2018) Best practice analysis is an analysis that is used to provide improvements to existing problems based on inefficiency analysis carried out on the flow of glutinous rice flour raw materials in MSME Jennag Teguh Raharjo. Improvements to be provided are adjusted based on the results of the inefficiency analysis. Best practice analysis on MSME Jenang Teguh Raharjo comes from three suppliers, namely from Sabar Jaya supplier to MSME Jenang Teguh Raharjo, Selamet supplier to MSME Jenang Teguh Raharjo and Jaya Baru supplier to MSME Jenang Teguh Raharjo. Here are the best practices from the three suppliers:

1. Sabar Jaya

a. Plan

The plan process can be carried out by ensuring that the inventory items remain in a safe condition, the quality of the materials in accordance with industry standards and controlling

and ensuring the stock is at the safety stock limit. Safety stock is very necessary to anticipate if there is a fluctuating product demand as long as there is no raw material supply back.

b. Source

The source process obtained suggestions for improvement to solve existing inefficiency problems, namely by making improvements to existing warehouse facilities. The expansion of the warehouse is needed to be able to accommodate both raw materials and finished products safely and in large quantities to anticipate the increase in demand. In addition, paying attention to warehouse conditions is also necessary by maintaining cleanliness so that it does not have an impact on product quality.

c. Make

Best practice that can be applied to overcome the inefficiency of glutinous rice flour that is not suitable, such as smelling, still rough and lumpy, can be done by controlling product quality. In this product quality control, a sorting process can be added by sifting after the milling process. (Sateria et al., 2019).

d. Delivery

The best practice that is used and needed to overcome the problem of shipping goods is to evaluate delivery performance and delivery scheduling. Evaluation of delivery performance is seen from the part of the timeliness of delivery, whether it is correct or not. Creating and recording the delivery schedule requested by MSME Jenang Teguh Raharjo is very important to make so that the delivery can arrive on time according to the request.

2. Selamat

a. Plan

To avoid a shortage of raw material supply from the suppliers themselves, it is necessary to have an additional material supply system. This additional supply capacity can be done with safety stock which is also part of the additional planned items. The function of this stock is as a reserve or safety stock to overcome fluctuations or orders in a short time (Gaspersz, 2005).

b. Source

Suggestions for improvement in the source process are obtained, namely by adding more employees, especially in the delivery of goods. The success of a business also involves employees or human capital because the employees themselves for a business are able to generate added value (Putra & Indrawati, 2015). In addition, it is necessary to consider adding a glutinous rice flour production machine. It can be seen that using one production machine has not been effective and this has an impact on delayed deliveries. So that the addition of production machines is highly recommended in order to be able to improve the production process and accelerate the production process in the future.

c. Make

Suggestions for improving the make process that can be done is by monitoring each production process. If there are problems or non-compliance with standards, it is necessary to make improvements. Supervision of the production process is intended to ensure that all processes are carried out in accordance with industrial procedures, so that if there is still unsuitable glutinous rice flour, a sifting process can be added. Sifting is carried out after the milling process, where in the grinding process not all the glutinous rice grains are processed optimally so that to equalize the standard of fineness of a flour, sieving is required after the milling process.

d. Delivery

The best practice needed to overcome the problem of untimely delivery of goods is to evaluate delivery performance and delivery scheduling. Evaluation of delivery performance is seen from the part of the timeliness of delivery, whether it is correct or not. In addition, an important point from the inefficiency of the problem of sending goods from suppliers is by improving the order preparation process that is carried out, such as considering adding production machines and adding employees, especially delivery drivers. Because the less than optimal preparation process will have an impact on the delay in the delivery of goods.

3. Jaya Baru

a. Plan

To minimize the shortage of production materials, it is necessary to plan the supply of raw materials. Planning a request for raw materials can be done by determining the Re Order Point (ROP) to control inventory and determine procurement orders (Artawan, 2015). Control that can be done with ROP is to control and pay attention to stock at the safety stock limit. This safety stock is very necessary to anticipate fluctuating demand before there is a supply of raw materials.

b. Source

Suggestions for improvement in the source process are with suppliers considering adding production machines. Considering that there is only one production machine that is used, it hampers the delivery of goods which are delayed due to a lack of dexterity in the production process.

c. Make

Best practice that can be applied to overcome the inefficiency of glutinous rice flour that is not in accordance with quality, can be done by monitoring product quality, especially supervision of the production process to ensure the process of making glutinous rice flour is in accordance with industrial procedures. In addition, the make process can be added to the sieving process. The sifting process of glutinous rice flour can be carried out after the grinding process with the aim of uniforming the degree of smoothness of glutinous rice flour according to industrial quality.

d. Delivery

Best practice that can be applied to overcome inefficiencies in the delivery process is to evaluate delivery performance and delivery scheduling. Then it is also necessary to improve the order preparation process by adding the required production machines. It can be seen that using only one production machine can hinder the delivery process. So that the addition of these production machines needs to be considered so that the preparation process to the delivery process can run effectively and efficiently.

CONCLUSION

Based on the results of research that has been done at MSME Jenang Teguh Raharjo, it can be concluded that:

1. Supply chain management found in MSMEs Jeang Teguh Raharjo, it is known that there are four members of the supply chain, namely suppliers from Sabar Jaya, suppliers from Selamat, suppliers from Jaya Baru and MSME Jenang Teguh Raharjo itself. The activity that occurred was a collaboration to supply the needs of glutinous rice flour as a raw material for

processed jenang in MSME Jenang Teguh Raharjo.

2. Based on the results of the calculations that have been carried out, it can be analyzed that the supply chain performance contained in the Jenang Teguh Raharjo SMEs with glutinous flour suppliers has not been maximized.
3. The recommended repair solution is, suppliers carry out safety stock and Re Order Point (ROP), carry out product quality control, especially in production supervision and add to the glutinous flour sieving process, schedule delivery of glutinous rice flour, and also improve the preparation process by adding machines production and drivers so that the delivery process can be carried out effectively and efficiently.

BIBLIOGRAPHY

- Alim, S., Retnoningsih, D., & Koestiono, D. (2018). Kinerja Manajemen Rantai Pasok Keripik Apel Pada Industri Kecil di Kota Batu. *Habitat*, 29(1), 38–49. <https://doi.org/10.21776/ub.habitat.2018.029.1.5>
- Arikunto, S. (2013). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Rineka Cipta.
- Artawan, I. W. (2015). Analisis Ketepatan Waktu Dalam Pemesanan Bahan Baku Dengan Metode Re Order Point (ROP) Pada Rumah Makan Janggar Ulam Di Kecamatan Ubud. *Jurnal Pendidikan Ekonomi Undiksha*, 5(1), 1–11.
- Gaspersz, V. (2005). *Production Planning and Inventory Control*. PT Gramedia Pustaka Utama.
- Ishak, A. A. A. (2019). Pengukuran Capaian Kinerja Supply Chain : Studi Kasus pada PT Eastern Pearl Flour Mills Makassar. *Journal of Applied Accounting and Taxation*, 4(2), 184–202.
- Katumzi, T. M. (2011). Obstacles to Process Integration along the Supply Chain: Manufacturing Firms Perspective. *International Journal of Business and Management*, 6(5), 105–113. <https://doi.org/10.5539/ijbm.v6n5p105>
- Pongoh, M. (2016). Analisis Penerapan Manajemen Rantai Pasokan Pabrik Gula Aren Masarang. *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 4(3), 695–704.
- Putra, I., & Indrawati, A. (2015). Pengaruh Kepemimpinan Transformasional, Motivasi Dan Disiplin Kerja Terhadap Kinerja Karyawan Pada Cv. Agung Motor I Di Kabupaten Tabanan. *E-Jurnal Manajemen Universitas Udayana*, 4(10), 254346.
- Saktisyahputra. (2019). Pemanfaatan Website WWW.Pulokambing.Com Sebagai Media Rumah Kreatif Bersatu Nusantara (RKBN) Pulokambing Dalam Pemberdayaan Masyarakat. *Jurnal Komunitas : Jurnal Pengabdian Kepada Masyarakat*, 1(2), 9–15. <https://doi.org/10.31334/jks.v2i1.287>
- Sateria, A., Yudo, E., Zulfitriyanto, Sugiyanto, Melati, R., Saputra, B. E., & Naufal, I. (2019). Rancang Bangun Mesin Pengayak Pasri Untuk Meningkatkan Produktivitas Pengayakan Pasir Pada Pekerja Bangunan. *Jurnal Teknologi Manufaktur*, 11(01).
- Tarasewicz, R. (2016). Integrated Approach to Supply Chain Performance Measurement - Results of the Study on Polish Market. *Transportation Research Procedia*, 14, 1433–1442. <https://doi.org/10.1016/j.trpro.2016.05.216>