


Supply Chain Management Of Foam Waste Products At Pt. Putra Medal Sakti

Cantika¹, Elis Dwiana Ratnamurni²

^{1,2}Faculty of Economics and Business, Jenderal Achmad Yani University

Article Info	ABSTRACT
Keywords: Supply Chain Management, Material Flow, Information Flow, Supply Chain Operation Reference (SCOR).	This research aims to analyze the performance of Supply Chain Management at PT. Putra Medal Sakti with SCOR model tools. The method used in this research is a qualitative approach with descriptive methods. From this research it is concluded that in the evaluation section of supply chain management at PT. Putra Medal Sakti, several flows that occurred at PT. Putra Medal Sakti cannot be fulfilled. Supply chain management is not running as well as it should because there are still discrepancies between implementation and planning. Then to measure supply chain management performance at PT. Putra Medal Sakti using the Supply Chain Operation Reference (SCOR) method. Based on the results of performance measurements using the Supply Chain Operation Reference (SCOR) method, the supply chain condition of PT. Putra Medal Sakti has not run as well as it should. This is shown by the perfect order fulfillment value of 74%, order fulfillment cycle time of 3 days, and cash to cash cycle time of 9 days, which is no better than the benchmark data and has a parity value.
This is an open access article under the CC BY-NC license 	Corresponding Author: Cantika, Elis Dwiana Ratna Murni Jenderal Achmad Yani University, Cimahi cantikaad108@gmail.com

INTRODUCTION

The manufacturing industry produces the majority of B3 waste. The Ministry of Environment and Forestry (KLHK) released data last year showing that 2,897 industries in the manufacturing sector produced B3 waste. (Kompas.com, 2022). Foam waste can become a serious problem if not treated immediately. Foam can cause many problems, such as reducing the effectiveness of chemicals in chemical reactions as well as changing the flow of fluids and blocking the transfer of oxygen from the air. (Greenchem, 2023)

According to Solhart Handal (2023) foam is a versatile and lightweight material used in various industries, including the automotive sector, household equipment, and the health sector. Foam is a versatile material that comes in many different types, each with its own advantages and uses. It is very important to choose environmentally friendly foam to protect the environment. A derivative product called foam is made by mixing PPG (propylene glycol) or polyether polyol with catalysts and additives.

PT. Putra Medal Sakti is a manufacturing company engaged in foam waste management which has been established since 2011, with sales distribution in various regions on the island of Java. In the supply chain flow, PT. Putra Medal Sakti operates as a foam waste collector where various types of foam products are managed. To manage this foam product, PT. Putra Medal Sakti collaborates with various parties, from suppliers, delivery

services, to all company employees. PT. Putra Medal Sakti's operational activities include handling foam waste and distributing foam goods as raw materials to distributors, most of whom are doll craftsmen, automotive companies, and mattress manufacturers who sell finished mattresses to consumers. There are various types of foam products available at distributors, including roll foam, sheet foam, mattress foam, block foam and tricor foam.

PT. Putra Medal Sakti faced several problems in raw material supply management, which resulted in production instability and difficulty fulfilling orders from consumers. One of the main problems is the lack of main suppliers to support the needs if there is demand for foam products from distributors to the company. This causes difficulties in maintaining consistent raw material supplies. As a result, production is irregular and cannot fulfill orders on time, often resulting in mismatches between demand and orders. This problem also results in a difference between production quantities and demand.

Distributor PT. Putra Medal Sakti is usually a doll craftsman and a company that produces mattresses and sells them in finished form to consumers. After becoming a partner, PT. Putra Medal Sakti provides services in the form of returning products if they do not match your request. According to the results of an interview with Mr Heri as head of operations of PT. Putra Medal Sakti on October 6 2023, problems with product availability were found in the product return service due to misinformation between consumers and the company. The following is data on demand for mattress foam waste products.

Table 1. Request Data PT. Putra Medal Sakti

NO	Foam Type	Year	Number of Foam Requests
1	Foam Roll	2021	5000kg
		2022	7000kg
		2023	4000kg
2	Foam Sheet	2021	7000kg
		2022	9000kg
		2023	12000kg
3	Mattress Foam	2021	3000kg
		2022	5000kg
		2023	2000kg
4	Foam Block	2021	10000kg
		2022	7000kg
		2023	8000kg
5	Tricort Foam	2021	10000kg
		2022	23000kg
		2023	24000kg

Source: PT. Putra Medal Sakti, Data Will Be Processed Again in 2023

The data above is a request for foam orders from several distributors to sell various necessities made from foam waste, such as mattresses, doll crafts and automotives. There are several types of foam waste from January 1 2021 to October 15 2023, 22 With these conditions, PT. Putra Medal Sakti was unable to fulfill orders requested from several distributors. This occurs due to a lack of coordination between suppliers and PT. Putra Medal Sakti regarding the availability of available foam products.

The most problematic thing is that the tricort foam product occurs because demand has increased over the last 3 years, resulting in no product availability and product vacancies at PT. Putra Medal Sakti, this happened because there was less effective scheduling in the form of demand and acceptance planning to avoid discrepancies in the number of requests for foam at PT. Son of Medal Sakti. So there was a delay in sending foam waste from several suppliers to PT. Putra Medal Sakti, which resulted in PT. Putra Medal Sakti was also hampered in the delivery of foam to several distributors, therefore material flow was hampered and satisfaction decreased because they had to wait for the type of foam ordered to be available again.

Regarding financial flows, delays in payments often occur from distributors. Based on data from PT. Putra Medal Sakti, you can see sales from PT. This son of Medal Sakti experienced quite significant ups and downs. Transactions are carried out with the distributor, PT. Putra Medal Sakti – Supplier. Where the payment methods used are cash and current account. Long-term efficacy must be determined because there is miscommunication in the supply chain, especially a lack of coordination of product availability with suppliers, which results in a flow of information to PT. Son of the Sakti Medal.

Apart from that, the problem is the same as the supplier in the PT partnership relationship. Putra Medal Sakti works with many distributors, and the parties rely on the trust they have created rather than being bound by contracts or internal transactions. As a result, there is no guarantee or assurance that a distributor will not cancel an order at any time. Performance measurement can determine how well a company has met its performance targets. SCOR covers the entirety of supply chain management, including operational procedures including market interactions, customer interactions, and physical transactions. Based on the problem identification above, the aim of this research is to determine the performance of Supply Chain Management at PT. Putra Medal Sakti.

METHOD

The method used in this research is a qualitative approach with descriptive methods. According to Zuchri (2021) qualitative research methods are research methods used to research the natural conditions of objects where the researcher is the main instrument in qualitative research methods, which focus on understanding the natural conditions of objects through triangulation data collection techniques, inductive data analysis, and the results obtained. prioritize meaning over generalization. Data collection techniques in this research were carried out using observation, interviews and documentation. In data analysis activities, activities consist of data reduction, data display, and drawing conclusions or verification data. In this research, validity and reliability tests are needed to measure the validity and accuracy of the measuring instrument used. In this research, validity and reliability tests use a triangulation process. There are three triangulations, namely source triangulation, technique triangulation, and time triangulation.

This research uses qualitative methods, so it does not require a population, but Spradley calls it "social situation" or a social situation which consists of three elements, namely: PT. Putra Medal Sakti as place, Mr. Heri as Head of Operations, Mrs. Ratna as Admin and Finance Department and Mr. Gunawan as logistics supervisor (actors) and Supply Chain Management

as activities that interact synergistically. The researcher will not end the data collection phase before the researcher is sure that what has been collected from various different sources and is focused on the social situation being studied is able to answer the problem formulation of the research, so that the accuracy and credibility are not doubted by anyone. The sampling technique used was non-probability sampling with purposive sampling data collection techniques.

RESULTS AND DISCUSSION

PT position. Putra Medal Sakti in this supply chain is the second stream, namely acting as a collector where the foam waste obtained from suppliers is managed by PT. Putra Medal Sakti, then PT. Putra Medal Sakti distributes to distributors according to distributor requests. There are several types of PT foam products. Putra Medal Sakti, namely roll foam, sheet foam, mattress foam, block foam and tricort foam. Based on product demand data at PT. Putra Medal Sakti, which was explained in the previous chapter, is known to have had the highest demand for foam waste products ordered over the last 3 years, namely Tricort foam waste, amounting to 57,000kg. According to the results of an interview with Mr. Heri as head of operations, the most problematic problem was the delay in the smooth delivery of Tricort type foam waste.

Parts involved in the supply chain management of PT Trikort foam waste products PT Putra Medal Sakti

Table 2. Parts Involved In Supply Chain Management

Part	Information
Supplier (Chain 1)	There are four suppliers owned by PT. Putra Medal Sakti to meet the supply needs of waste foam products, including PT Inoac Polytechno Indonesia, with the product supplied being foam roll sheet blocks. PT. Sky Foam with the product supplied is a sheet roll block. PT. Grantec Jaya Indonesia, the product supplied is foam mattress. Pt Quantum Tosan Internasional with the product supplied is sheet foam.
Manufacture (Chain 2)	At this manufacturing stage PT. Putra Medal Sakti is a place where there is a supply of foam waste and a place to manage foam waste such as measuring, cutting, shipping according to order requests so that it becomes raw material and then distributed according to request to distributors to be produced into finished goods so that they reach the final consumer.
Distributor (Chain 3)	At this stage the raw materials have been obtained by the distributor from PT. Putra Medal Sakti is processed back into finished goods and then reaches the final consumer.
Final Consumer (Chain 4)	Sent using operational trucks provided by PT. Putra Medal Sakti itself to the distributor, then the distributor returns to manage and produce the foam until it reaches the final consumer.

Mechanism of Material Flow, Information Flow and Financial Flow of PT. Son of Medal Sakti

1. Material Flow

Information flow is a flow that flows from two directions, namely from upstream to downstream and from downstream to upstream. Material flow at PT. Putra Medal Sakti starts

from the supplier, after the supplier is selected and the foam waste is received, the foam waste management process is carried out according to the order which includes assessing the quality of the foam waste, measuring and cutting the foam waste according to the distributor's order. Furthermore, after the management process is complete, the foam waste is ready to be sent to the distributor.

2. Information Flow

Information flow is a flow that flows from two directions, namely from upstream to downstream and from downstream to upstream. The flow of information starts from the supplier, after the supplier is selected and the foam waste is received, the foam waste management process is carried out according to the order which includes assessing the quality of the foam waste, measuring and cutting the foam waste according to the distributor's order. Furthermore, after the management process is complete, the foam waste is ready to be sent to the distributor.

3. Financial Flows

Financial flows are flows that flow from downstream to upstream. Financial flow at PT. Putra Medal Sakti comes from end consumers, distributors and PT. Son of the Magic Medal, the last giver. Financial flows from final consumers consist of cash payments made by consumers to distributors. Next, the distributor pays to PT. Putra Sakti Medal in cash. Next PT. Putra Medal Sakti makes cash payments to suppliers.

Material Flow Activity Planning

Based on the results of the interview, it was said that there were several plans carried out by PT. Putra Medal Sakti in material flow activities. These plans include the following:

a. Objectives of Material Flow Activities

The following are p regarding the objectives of the material flow implemented by PT. Putra Medal Sakti: 1. Increase the quality and number of requests; 2. Maintain the continuity of company activities; 3. Get profit or profit

b. Factors Considered in Material Flow Activities

Factors considered in material flow activities at PT. Putra Medal Sakti is as follows: 1. Quality of raw materials; 2. Entrepreneurship; 3. Product availability; 4. Nature of work

c. Procedures for Carrying Out Material Activities

According to Mr. Heri as the operational head of PT. Putra Medal Sakti said that material flow activities at PT. Putra Medal Sakti is as follows:

1. The supplier receives request messages regarding the products and components ordered by PT. Son of Medal Sakti.
2. The supplier provides a budget letter containing a price list according to what PT ordered. Son of Medal Sakti.
3. PT. Putra Medal Sakti makes payments according to the set price.
4. After payment has been made by PT. Putra Medal Sakti, the supplier delivers foam waste according to the time specified by PT. Putra Medal Sakti corresponds to the estimated travel time.
5. After the waste arrives and is received by the logistics department. Then, the quality of the foam waste is checked.

6. After checking, the logistics department contacts the production department to confirm that the waste is ready to be managed according to the distributor's order.
7. The production department is ready to continue and the foam waste will be managed according to the order and ready to be sent to the distributor.

Information Flow Planning

Information flow planning is an important factor in operational activities to obtain information between supply chain actors in the form of planning and monitoring.

a. Information Flow Activity Objectives

Based on the results of interviews with Heri as head of operations, it is clear what the purpose of information flow activities in the PT foam waste product supply chain is. Putra Medal Sakti will communicate information to all aspects of the supply chain to produce valid and accurate data.

b. Factors Considered in Information Flow Activities

1. Internal Communication

a. Vertical communication

Vertical communication can be from top to bottom or vice versa.

c. Horizontal Communication

Horizontal communication is the exchange of information between colleagues in the same work unit. Horizontal communication occurs between people who have the same duties and responsibilities.

2. External Communication

The external environment is an important component in a company. External communication refers to communication between directors/owners of PT. Putra Medal Sakti as well as company contacts and partners. The information presented includes the following:

a. Communication from the Organization to Outside Parties

b. Communication from Outside Parties to the Organization

d. Procedures for Carrying Out Information Flow Activities

Information flow procedures in the PT supply chain. Putra Medal Sakti as follows:

1. Simultaneous Information Dissemination

Simultaneous dissemination of information occurs when messages are delivered and received at the same time

2. Sequential Information Dissemination

In sequential information dissemination, each person who receives the initial message from the director/owner interprets it and then communicates the results to the next person.

Financial Flow Planning

a. Objectives of Financial Flow Activities

The purpose of financial flow activities from PT. Putra Medal Sakti, namely the achievement of all financial flow mechanisms so that the company can receive money, and also transparency carried out by all parties related to PT. Son of Medal Sakti.

b. Factors Considered in Financial Flow Activities

Factors considered in PT's financial flow activities. Putra Medal Sakti, namely: 1. Payment System/Mechanism; 2. Payment Time; 3. Price Transparency; 4. Contractual Agreement

c. Procedures For Carrying Out Financial Flow Activities

a. Supplier Transactions-PT. Son of Medal Sakti

1. PT. Putra Medal Sakti places orders for foam waste from suppliers
2. Supplier provides payment information to PT. Son of Medal Sakti
3. Payment information is received by the company admin and submitted to the owner/director of PT. Son of Medal Sakti
4. Owner/director of PT. Putra Medal Sakti made the payment
5. Supplier receives payment made by PT. Son of Medal Sakti
6. Payment is complete and the admin records the transactions made

b. Transaction PT. Putra Medal Sakti-Distributor

1. The distributor places an order for foam waste from PT. Son of Medal Sakti
2. PT Admin. Putra Medal Sakti receives order information and conveys it to the distribution department
3. PT Admin. Putra Medal Sakti conveyed information regarding the amount of payment and the mechanism that must be carried out
4. Distributor makes payment
5. Payment is received by PT admin. Putra Medal Sakti and conveyed this information to the owner/director of PT. Son of Medal Sakti
6. Payment is completed and transactions are recorded by the PT admin. Son of Medal Sakti

Implementation of Supply Chain Management PT. Son of Medal Sakti

Implementation of Material Flow Activities

a. Implementation of Material Flow Activity Objectives

Based on an interview with Mr Heri as the operational head of PT. Putra Medal Sakti, he stated that the implementation of the objectives of material flow activities in the PT chain. Putra Medal Sakti as follows: 1. Increase the quality and number of requests.; 2. Maintain the continuity of company activities. ; 3. Get profit or profit.

b. Implementation of Factors Considered in Material Flow Activities

Based on the results of an interview with Mr Heri as the operational head of PT. Putra Medal Sakti, implementation of factors considered in material flow activities at PT. Putra Medal Sakti is as follows: 1. Quality of raw materials; 2. Entrepreneurship; 3. Product availability; 4. Nature of work

c. Implementation of Material Flow Activity Procedures

Based on the results of the interview with Mr Heri, the operational head of PT. Putra Medal Sakti, he stated that the implementation of procedures for material flow activities in the PT supply chain. Putra Medal Sakti as follows:

1. Notification from the operational department of the need to purchase foam waste
2. Orders for foam waste are made directly by the owner/director
3. The owner/director asks the supplier for the availability of raw materials

4. If foam waste is available, the supplier provides an invoice regarding payment for the foam waste order.
5. After payment is completed, the supplier sends the foam waste
6. Foam waste arrives and is stored in the foam waste storage
7. Foam waste enters the management area
8. Foam waste is managed

Implementation of Information Flow Activities

a. Implementation of Information Flow Activity Objectives

In implementing the objectives of information flow activities implemented by PT. Putra Medal Sakti has complied with what was planned, where the message conveyed by him will be received by all company members or business partners of PT. Son of Medal Sakti. Apart from that, the relationship between PT. Putra Medal Sakti and several business partners are running well where the owner/director always takes the time to say hello via cellphone.

b. Implementation of Factors Considered in Information Flow Activities

Implementation of the factors considered in information flow activities at PT. Putra Medal Sakti is as follows:

1. Internal Communication

a) Vertical Communication

Application of vertical communication at PT. Putra Medal Sakti takes place regardless of rank or organizational structure. In the field, anyone can communicate with each other and provide information.

b) Horizontal Communication

Communication between fellow PT employees. Putra Medal Sakti is not yet functioning properly because there are still various incidents beyond the control of the supervisor or owner, resulting in product problems.

2. External Communication

a) Communication from the Organization to Outside Parties

b) In its implementation, PT. Putra Medal Sakti communicates with external parties, especially its commercial partners. According to conversations with the owner/director of PT. Medali's son, Sakti often communicates via the WhatsApp application.

c) Communication from Outside Parties to the Organization

d) External parties communicate with the organization through feedback from PT suppliers and distributors. Son of the Sakti Medal. During installation, the company administrator receives all ongoing communications first. The administrator will then notify the owner/director of PT. Son of the Sakti Medal.

c. Implementation of Procedures in Carrying Out Information Flow Activities

Implementation of PT information flow activity procedures. Putra Medal Sakti as follows:

1. Simultaneous Dissemination of Information

In implementing this simultaneous information, information is distributed simultaneously, and the message is received directly by all PT members. Son of Medal Sakti.

2. Sequential Distribution of Information

In applying information sequentially, the previously intended message delivery technique includes an increased form of dissemination, namely each member of the organization who receives the initial message applies the message he received before passing it on to other members. However, at PT. Putra Medal Sakti, information can be immediately disseminated regardless of who receives it first and last.

d. Implementation of Financial Flow Activity Objectives

Implementation of the objectives of financial flow activities carried out by PT. Putra Medal Sakti is in accordance with what was done at the planning stage. Where companies are very open about the price transparency they apply. PT. Putra Medal Sakti has also succeeded in ensuring that every member of its supply chain can channel financial flows starting from consumers to distributors, distributors to PT. Putra Medal Sakti, and from PT. Putra Medal Sakti to supplier.

e. Implementation of Factors Considered in Financial Flow Activities

Implementation of factors considered in PT flow activities. Putra Medal Sakti is as follows: 1. Payment System/Mechanism; 2. Payment Time; 3. Price transparency; 4. Contractual agreements

f. Implementation of Procedures in Carrying Out Financial Flow Activities

a. Supplier Transactions-PT. Son of Medal Sakti

1. PT. Putra Medal Sakti places orders for foam waste from suppliers
2. Supplier provides payment information to PT. Son of Medal Sakti
3. Payment information is received by the company admin and submitted to the owner/director of PT. Son of Medal Sakti
4. Owner/director of PT. Putra Medal Sakti made the payment
5. Supplier receives payment made by PT. Son of Medal Sakti
6. Payment is complete and the admin records the transactions made

b. PT transactions. Putra Medal Sakti-Distributor

1. The distributor places an order for foam waste from PT. Son of Medal Sakti
2. PT Admin. Putra Medal Sakti receives order information and conveys it to the distribution department
3. PT Admin. Putra Medal Sakti conveyed information regarding the amount of payment and the mechanism that must be carried out
4. Distributor makes payment
5. Payment is received by PT admin. Putra Medal Sakti and conveyed this information to the owner/director of PT. Son of Medal Sakti
6. Payment is completed and transactions are recorded by the PT admin. Son of Medal Sakti

Evaluation of PT's Supply Chain Management. Son of Medal Sakti

Evaluation is carried out to compare whether implementation has been in accordance with what was planned.

Table 3. Evaluation of PT's Supply Chain Management. Son of Medal Sakti

Item	Planning	Implementation	Evaluation	Evaluation
Material Flow Activity Objectives				
Material Flow Activities	Increase the quality and number of requests	The process is carried out more often according to order fulfillment, while there is only a small stock of goods.	It is not in accordance with	Add orders for foam waste to suppliers for stock in the PT warehouse. Putra Medal Sakti must increase the supply of Trikort foam waste in its warehouse so as not to leave stock empty
	Maintain continuity of company activities	Through income from product sales, the company can continue to operate according to plan.	In accordance	-
	Obtain profit or profit	By looking for new distributors to offer types of waste to be re-managed in order to increase profits. And always maintain good relationships with distributors who are currently collaborating, to obtain sustainable sales profits and get regular customers.	In accordance	-
Faktor-faktor yang Dipertimbangkan dalam Aktivitas Aliran Material				
	Quality of raw materials	PT. Putra Medal Sakti does not apply the quality of raw materials, raw materials are purchased based on the lowest price offered by each supplier. Moreover, raw materials are always purchased from different suppliers.	It is not in accordance with	Applying quality standards in purchasing raw materials and companies need to determine which suppliers provide the highest quality raw materials among the many existing suppliers.
	Entrepreneurship	The company is able to run the company by making a profit and avoiding losses	In accordance	-

Item	Planning	Implementation	Evaluation	Evaluation
Material Flow Activities	Product availability	There is a vacancy in the type of foam waste product requested due to increasing demand	It is not in accordance with	There is a vacancy in the type of foam waste product requested due to increasing demand
	Nature of Work	Employees have the ability to carry out the process of distributing and managing foam waste	In accordance	-
Material Flow Activity Procedures				
Material Flow	Suppliers receive request messages regarding the products and components ordered by PT. Son of Medal Sakti.	Suppliers receive request messages regarding the products and components ordered by PT. Son of Medal Sakti.	In accordance	-
	The supplier provides a budget letter containing a price list according to what PT ordered. Son of Medal Sakti.	The supplier provides a budget letter containing a price list according to what PT ordered. Son of Medal Sakti.	In accordance	-
	PT. Putra Medal Sakti makes payments according to the set price.	PT. Putra Medal Sakti makes payments according to the set price.	In accordance	-
	After payment is made by PT. Putra Medal Sakti, the supplier delivers foam waste according to the time specified by PT. Putra Medal Sakti corresponds to the estimated travel time.	After payment is made by PT. Putra Medal Sakti, the supplier delivers foam waste according to the time specified by PT. Putra Medal Sakti corresponds to the estimated travel time.	In accordance	-
	After the waste arrives and is received by the logistics department. Then, the quality of the foam waste is checked.	After the waste arrives and is received by the logistics department. Then, the quality of the foam waste is checked.	In accordance	-
	After checking, the logistics department contacts the production department to confirm that the waste is ready to be managed according to the distributor's order	After checking, the logistics department contacts the production department to confirm that the waste is ready to be managed according to the distributor's order.	In accordance	-

Item	Planning	Implementation	Evaluation	Evaluation
	The production department is ready to continue and the foam waste will be managed according to the order and ready to be sent to the distributor.	The production department is ready to continue and the foam waste will be managed according to the order and ready to be sent to the distributor.	In accordance	-
Information Flow	Information Flow Activity Objectives			
	Share information with all supply chain elements to produce accurate information	Maintain communication with every part of the company so as to produce valid and accurate information	In accordance	-
	Factors to Consider in Information Flow Activities			
	Internal Communications			
	Vertical communication	Communication occurs regardless of position or structure. However, information exchange from top to bottom and vice versa is actively occurring.	In accordance	
	Horizontal communication	Employees cannot advise or notify each other when they are not supervised by supervision or the owner, so that negligence often occurs in their work which causes product defects. Coordination has not gone well.	It is not in accordance with	Each individual employee coordinates with each other and reminds each other about discipline in work even though they are not being supervised by supervisors or owners. Or PT. Putra Medal Sakti provides a special place for employees to rest.
	External Communications			
Communication from the organization to outside parties	Owner/director of PT. Putra Medal Sakti often visits several of their business partners to maintain the good relationships they have established	In accordance	-	
Communication from outside parties to the organization	The communication that occurs is in the form of feedback conveyed by suppliers and distributors to PT. Son of Medal Sakti. The information provided is in the form of information on shipping foam waste,	In accordance		

Item	Planning	Implementation	Evaluation	Evaluation
		information regarding foam waste problems, information regarding prices, as well as complaints if problems occur with foam waste products.		-
Information flow activity procedures				
Simultaneous dissemination of information				
	The owner/director provides information to all company members	Information is directly conveyed by the owner/director to all company members.	In accordance	-
	The owner/director holds a face-to-face meeting which is attended by all company members.	It has a special time where every Friday a face-to-face activity is held which is attended by all company members in order to get used to clean Fridays as well as convey other important information.	In accordance	-
	The owner/director provides information personally via short message	The owner/director provides personal information via short message	In accordance	-
Sequential dissemination of information				
	The owner/director provides information to supervision	In its implementation, non-fixed information must be conveyed first by the owner/director to the owner. Information can be conveyed to anyone.	It is not in accordance with	In its implementation, non-fixed information must be conveyed first by the owner/director to the owner. Information can be conveyed to anyone.
	Employees receive messages from supervision	Not all employees can receive any information due to the many channels.	It is not in accordance with	It is best for the owner/director to convey information evenly to all members of the PT. Son of Medal Sakti
Financial Flow Activity Objectives				
	Achieving all financial flow mechanisms so that companies can receive money, and also transparency	PT. Putra Medal Sakti is very open about the price transparency they apply as well as PT. Putra Medal Sakti can ensure that every member of its supply chain can channel financial flows starting from	In accordance	

Item	Planning	Implementation	Evaluation	Evaluation
Financial Flow		consumers to distributors, distributors to PT. Putra Medal Sakti, PT. Putra Medal Sakti to Supplier.		-
	Factors considered in financial flow activities			
	Payment system/mechanism	The payment system/mechanism used by PT. Putra Medal Sakti uses a current account to make transactions. Both to suppliers and distributors. This is done so that the financial system managed by PT. Putra Medal Sakti is easier and safer.	In accordance	-
	Payment time	PT. Putra Medal Sakti determines the payment time determined according to mutual agreement between each party.	In accordance	-
	Price transparency	Price transparency does not occur across all members of the chain.	It is not in accordance with	Price transparency does not occur across all members of the chain.
	Contractual agreement	There is no contractual agreement between PT. Putra Medal Sakti with their business partners. The agreement runs based on the trust of each company owner	It is not in accordance with	Implementing contractual agreements to avoid violations of agreements in transactions, and the contractual agreements that are built are mutually beneficial to both parties.
	Financial Flow Activity Procedures			
	Supplier Transactions-PT. Son of Medal Sakti			
	PT. Putra Medal Sakti places orders for foam waste from suppliers	PT. Putra Medal Sakti places orders for foam waste from suppliers	In accordance	
	Supplier provides payment information to PT. Son of Medal Sakti	Supplier provides payment information to PT. Son of Medal Sakti	In accordance	
	Payment information is received by the company admin and submitted to the owner/director of PT. Son of Medal Sakti	Payment information is received by the company admin and submitted to the owner/director of PT. Son of Medal Sakti	In accordance	

Item	Planning	Implementation	Evaluation	Evaluation
	Owner/director of PT. Putra Medal Sakti made the payment	Owner/director of PT. Putra Medal Sakti made the payment	In accordance	
	Owner/director of PT. Putra Medal Sakti made the payment	Supplier receives payments made by PT. Son of Medal Sakti	In accordance	
	Payment is complete and the admin records the transactions made	Payment is complete and the admin records the transactions made	In accordance	
	Transaction PT. Putra Medal Sakti-Distributor			
	Distributors place orders for foam waste from PT. Son of Medal Sakti	Distributors place orders for foam waste from PT. Son of Medal Sakti	In accordance	
	PT admin. Putra Medal Sakti receives order information and conveys it to the distribution department	PT admin. Putra Medal Sakti receives order information and conveys it to the distribution department	In accordance	
	PT admin. Putra Medal Sakti receives order information and conveys it to the distribution department	PT admin. Putra Medal Sakti conveyed information regarding the amount of payment and the mechanism that must be carried out	In accordance	
	Distributor makes payment	Distributors do not make payments immediately but there are negotiations regarding payment first, if agreed the payment will continue if not the distributor cancels the order.	In accordance	
	Distributors do not make payments immediately but there are negotiations regarding payment first, if agreed the payment will continue if not the distributor cancels the order.	Payment received by PT admin. Putra Medal Sakti and conveyed this information to the owner/director of PT. Son of Medal Sakti	In accordance	
	Payment is completed and transactions are recorded by the PT admin. Son of Medal Sakti	Payment is completed and transactions are recorded by the PT admin. Son of Medal Sakti	In accordance	

Payment is completed and transactions are recorded by the PT admin. Son of Medal Sakti

Measuring supply chain performance at PT. Putra Medal Sakti uses the SCOR (Supply Chain Operation Reference) method approach which includes five core processes, namely plan, source, make, deliver and return. Description of the five core processes at PT. Putra Medal Sakti includes:

1. Plan
This activity includes Ciblack production planning which includes planning activities in material flow activities, information flow, and financial flow.
2. Source
In this activity, the process of procuring foam waste is in managing foam waste to meet market needs.
3. Make
This activity includes the process of transforming products from raw materials into finished products or what is usually referred to as the production process.
4. Deliver
This activity includes product marketing activities to consumers, starting from the order request process, price quotation, delivery and payment from the consumer.
5. Returns
Return is a return for a defective product. Return PT. Putra Medal Sakti, if the distributor wants to return waste foam products, can do so at any time and bring defective goods to exchange for better goods.

Attributes and Metrics for Measuring Supply Chain Performance Using SCOR cards

Table 4. Five Dimensions of SCOR

Performance Attributes	Definition
<i>Reliability</i>	Ability to carry out work as expected
<i>Responsiveness</i>	Speed in carrying out work is measured in the order fulfillment cycle time
<i>Flexibility</i>	Ability to respond to external changes in order to remain competitive in the market
<i>Costs</i>	The costs of running supply chain processes include labor costs, material costs, transportation costs, and storage costs
<i>Assets</i>	Ability to utilize assets productively

Source: Isaac (2019)

However, in this research the metrics measured are only limited to perfect order fulfillment, order fulfillment cycle time, cost of goods sold, and cash to cash cycle time. Because the available supporting data can only be measured in these four metrics. The following is a measurement of supply chain performance at PT. Putra Medal Sakti based on the four performance metrics above:

Perfect Order Fulfillment (POF)

Is the fulfillment of orders or accurate delivery of products according to quantity, quality and place of delivery.

Table 5.

Years	Order	Foam Delay (KG)	Information
2021	24.000kg	6000kg	75%

2022	23.000kg	5000kg	78%
2023	10.000kg	3000kg	70%
Total	57.000kg	14.000kg	75%
Average			74%

Order Fulfillment Cycle Time (OFCT)

This is the amount of time (days) required from the time the order is received until the product is received at the customer's location.

Table 6.

Customer	Location	Setup	Production	Delivery	Amount
		(Days)	(Days)	(Hour)	(Days)
Moro Seneng Shop, Purbalingga	Purbalingga	1	2	10 hour	3,41
Pa Nono, Cirebon	Cirebon	1	2	6 hour	3,25
Total					6,7
Average					3

Upside Supply Chain Flexibility (USCF)

It is the sum of the cycles of searching for goods, the cycle of making, and the cycle of sending unexpected customer requests, the company is able to fulfill the order.

Table 7.

Metrics	Source	Make	Return	Deliver	Jumlah
	(Days)	(Days)	(Days)	(Hour)	(Days)
USCF	2	1	2	3	5.125
					5

Cost of Goods Sold (COGS)

The COGS amount is kept confidential by the company because it includes costs related to the cost of goods sold and is directly related to revenue. So, in this measurement, the company was unable to provide the data that researchers were looking for, so the measurement of this metric was not completed.

Cash to Cash Cycle Time (CTCCT)

This is the amount of time (days) required to measure the speed of the supply chain and convert inventory into money.

Table 8.

Metric	Daily Inventory	Average Receivables	Average debt	Total
CTCCT	5 Days	7 Days	3 Days	9 Days

Supply Chain Performance Calculation Results Using the SCOR Method

Table 9.

Attribute Performance	Metric	Data Actual
Reliability	Perfect Order Fulfillment (POF)	74%
Responsiveness	Order Fulfillment Cycle Time (OFCT)	3 days
Flexibility	Upside Supply Chain Flexibility (USCF)	5 days
Cost	Cost Of Goods Sold (COGS)	-
Asset	Cash to Cash Cycle Time (CTCCT)	9 days

The results of the SCOR analysis by looking at several assessment indicators, PT. Putra Medal Sakti was able to fulfill perfect order fulfillment of 74%. Then the order fulfillment cycle time is 3 days, for the cost of goods sold no results were obtained because no measurements

were taken, and for cash to cash cycle time it was days. The following is a table of comparison results of performance attributes and SCOR benchmarking in supply chain management:

Table 10. Comparison of Performance Attributes and SCOR Benchmarking at PT. Son of Medal Sakti

Attribute	Metric	Data	Benchmark		
			Parity	Advantage	Superior
Performance		Actual			
<i>Reliability</i>	POF	74%	65,7%	78,5%	92,4%
<i>Responsiveness</i>	OFCT	3 days	5 days	3 days	1 days
<i>flexibility</i>	USFC	5	7 days	5 days	3 days
<i>Cost</i>	COGS	-	-	-	-
<i>Asset</i>	CTCCT	9 days	9 days	6 days	4 days

Source: Data Processing Results, 2021

Based on the results from the table above, it can be seen that the results of measuring company performance on the reliability attribute, with the perfect order fulfillment indicator having a value of 74%. This means that the company in fulfilling requested orders has performed quite well and is in an Advantage position, so it really needs to improve supply chain performance in terms of delivery speed and reliability.

Next, the performance value of PT. Putra Medal Sakti's Responsiveness attribute, which is measured by the order fulfillment cycle time indicator, obtains actual data of 3 days, so it is in an advantageous position, meaning that the responsiveness performance is quite good but it must be improved further to achieve superior performance, one of which is by improving the function. coordination between upstream and downstream members.

Then, measuring the performance of PT. Putra Medal Sakti with the Flexibility attribute on the Upside Supply Chain Flexibility indicator obtains actual data of 5 days for the delivery process when demand spikes by 20% of capacity. This means that the company's performance in responding to changes in order volume is at an advantage level, so this performance must be improved to achieve superior performance.

Then, measuring performance on asset attributes using the cash to cash cycle time indicator obtained actual data of 9 days. So it is in a parity position. This shows the company's inability to convert product inventory into cash. Apart from that, this can happen because PT. Putra Medal Sakti does not have a supply of waste foam so consumers have to wait if they have to buy waste foam products.

CONCLUSION

In the evaluation section of supply chain management at PT. Putra Medal Sakti, several flows that occurred at PT. Putra Medal Sakti cannot be fulfilled. Supply chain management is not running as well as it should because there are still discrepancies between implementation and planning. Then to measure supply chain management performance at PT. Putra Medal Sakti using the Supply Chain Operation Reference (SCOR) method. Based on the results of performance measurements using the Supply Chain Operation Reference (SCOR) method, the supply chain condition of PT. Medal Sakti's son is not good enough. This is indicated by the values of perfect order fulfillment, order fulfillment cycle time, and cash to cash cycle time which are no better than the benchmark data and have parity values. Then to achieve the goal

you need tips from PT. Putra Medal Sakti to ensure the quality of raw materials and determine which supplier is the most consistent among existing suppliers in its ability to supply quality raw materials. So that the raw materials obtained can be of high quality which will have an impact on foam waste management

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