

IMPROVING SUPPLY CHAIN PERFORMANCE USING THE SUPPLY CHAIN OPERATION REFERENCE DIGITAL STANDARD (SCOR DS) V14.0 RACETRACK MODEL AT PT CIPTA KRIDA BAHARI KALIMANTAN AREA.

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ABSTRACT

The purpose of this study is to improve the supply chain performance of PT Cipta Krida Bahari (CKB) in the Kalimantan area by applying the Supply Chain Operation Reference Digital Standard (SCOR DS) version 14.0 Racetrack model, with a particular focus on solving issues related to reliability and asset utilization. This study employed a quantitative descriptive method using a case study approach. Primary data were collected through direct observation, structured interviews with key supply chain managers, and an analysis of internal company reports. The SCOR DS v14.0 Racetrack model was used as a framework for diagnosing performance gaps and identifying targeted improvements across key attributes in five stages: engaging, defining, analyzing, planning, and launching. Performance measurement is carried out starting from level-2 then down to level-3 performance metrics. The results in level-2 performance metrics belonging to reliability show that there is one metric that does not meet the 100% target, namely RL.2.2, delivery performance to the original customer commit date of 89.94%. In level-3 performance metrics, of the two metrics, there is one metric that has gaps, namely RL.3.3 customer commit date achievement of 5.06%. With these gaps, the implications of this research suggest for improvement projects referring to the best practices in the SCOR guide, namely BP.017 Distribution Planning, BP.042 Procurement Terms & Conditions Review, BP.055 Freight Carrier Delivery Performance Evaluation, and Regular Reconciliation Meetings. This study contributes a novel application of SCOR DS v14.0 Racetrack in a logistics and freight forwarding company context, where the model has been rarely implemented, especially in emerging markets. It also provides a replicable case study for improving service reliability in complex geographical regions such as Kalimantan, Indonesia.

Keywords: Supply Chain Management (SCM), Performance Measurement, SCOR DS, SCOR Racetrack, Reliability

INTRODUCTION

Background

Companies engaged in the service sector and supply chain management (SCM) are considered crucial to ensure operational efficiency and customer satisfaction. Supply chain management (SCM) in service companies involves planning, managing, and controlling the flow of information, materials, and services from suppliers to customers. Service companies offer integrated logistics services, warehouse management, shore base management, project logistics, and energy-related industries. Companies that provide many services are certainly required to work optimally to achieve their targets and progress. Companies that can run effectively and efficiently are obtained from human resource management; this affects employee work productivity the most.

Supply Chain Management (SCM), or supply chain, is one of the components considered to influence an industry's performance. The SCM concept has become the center of attention since the 1980s. SCM is an integrated approach that includes the entire material management process and provides orientation to the process of providing, producing, and distributing products to consumers. The SCM function is also an indicator of a company's overall performance, which compares the actual results obtained with those planned.

In other words, the targets that have been targeted must be examined to what extent the achievements have

been achieved.

PT Cipta Krida Bahari (CKB) is a leading logistics company in Indonesia that provides integrated logistics services. Founded in 1997, CKB is a large business group that focuses on the energy and natural resources sector. Along with the development of the industry and the need for efficiency in the supply chain, this company is an integrated logistics service provider that focuses on industries in the energy sector. Its services are extensive, including integrated logistics services, logistics projects, warehouse management, industrial shipping, and coal logistics. Currently, CKB focuses on services to the energy industry, such as soil and gas, mining, heavy equipment, power generation, and construction.

PT CKB, especially the Kalimantan area, faces challenges in maintaining the performance supply chain: the problems that arise include delays in the distribution process of goods to customer locations (on-time delivery) for the delivery of goods in the form of heavy equipment spare parts during the 2024 period; it reached an average of 85% of the target of 95% each month that had been set by the company, where one of the causes was the unavailability of a trucking fleet or the vendor's delay in providing the fleet needed to support delivery to customers, then the fleet utilization target did not achieve a mobile crane 50 ton capacity for 200 hours every month, so that this can cause operational losses for the company, which ultimately leads to a decline in performance supply chain and the loss of customer trust in using CKB services.

Companies are required to make creative innovations in producing products or services as an implementation of competitive strategies, and companies can prepare and evaluate performance supply chain using the Supply Chain Operation Reference Digital Standard (SCOR DS). SCOR DS is a model that provides methods, diagnostics, and comparison tools (benchmarking) that can help organizations make significant and rapid improvements in processes. supply chain (ASCM, 2022). This model has a framework 5 that connects business processes, performance metrics, best practices, technology, and sustainability, becoming an integrated structure to support communication between partners' supply chains and increase the effectiveness of supply chain management. In addition, the SCOR model can measure performance. Supply chain management objectively based on actual data in the company's business processes. The SCOR DS method was used because SCOR is specifically designed for supply chain management, which is in accordance with the problems at PT CKB.

Many studies have been conducted by previous researchers regarding improving the performance supply chain with various case studies in manufacturing companies using various methods; however, until now, there has been little research in the logistics industry and freight forwarding, which uses the SCOR 14.0 model or SCOR DS (Digital Standard). This is one of the points of innovation in this research by applying the Racetrack model based on the SCOR Digital Standard to an integrated logistics company. From the problems experienced by PT CKB, performance measurements are carried out supply chain management using supply chain operations reference (SCOR), more specifically SCOR DS version 14.0 Racetrack. It is known that the problems of PT CKB in the Kalimantan area are dominated by problems in fulfilling services for customers related to reliability companies. Therefore, by measuring company performance, it is possible to determine the performance of the supply chain and use it.

LITERATURE REVIEW

Operational Management

Operational Management focuses on planning, organizing, controlling, and supervising activities and resources in the production and operation processes of a company. The goal is to create optimal efficiency, effectiveness, and added value in producing products or services that meet customer needs and expectations. Operational management is responsible for how a company manages production, distribution, and quality control processes. Operational management is defined as a discipline that manages the production process to produce products or services by maximizing the use of resources, such as labor, raw materials, technology, and information. According to Jay Heizer and Barry Render in their book *Operations Management* (2011), operational management is an activity that creates value in the form of goods and services through the transformation of input into output

desired by customers. Objectives of Operational Management The main objective of operational management is to increase efficiency and effectiveness in the production process so that the company can meet customer demand at minimal cost. According to Ambarwati (2021), the objectives of operational management include reducing production costs, improving product quality, reducing production time, completing the production process, reducing operational risks, and meeting customer satisfaction.

Supply Chain Management

According to Pujawan (2005), supply chain management is an integrated approach to managing the flow of products, information, and money that involves upstream to downstream parties, consisting of suppliers, factories, distribution networks, and logistics services to the hands of end consumers. According to Lu (2011), supply chain management is a group of interrelated company participation that adds value to the flow of change input from their source of origin to the final product or service demanded by the intended end consumer. A supply chain can be formed only if there is more than one participating company. According to Wirdianto (2008), supply chains are networks of companies that work together to create and distribute a product to the end user. The group of companies includes suppliers, factories, distributors, stores, retail, and supporting companies such as logistics services. To manage the supply chain (supply chain) an approach known as Supply Chain Management (SCM) is needed. According to Said (2006), the management of information and products from suppliers from the beginning to the end consumer is the goal of using an integrated systems approach in the supply chain.

According to Turban (2004), supply chain management consists of three parts:

1. The Upstream Supply Chain comprises all activities and relationships involving the company and its suppliers. This relationship can be extended to include an initial supplier. The main activity in this section was procurement.
2. The Internal Supply Chain comprises all activities used to transform raw materials (input) from suppliers to products (output) from the company. In an internal supply chain, activities include production and fabrication.
3. The Downstream Supply Chain involves the delivery of products from the company to the final consumer. In the downstream supply chain, activities include distribution, transportation, and after sales.

Hertz (2009) explains that performance has a reference, namely the results output, where are the output results, which are evaluated and can be compared with goals, standards, or past results relatively, so that performance measurement can be explained as a process that compares the actual results of a company with the planned results, which will show whether the results meet the targets or do not meet the targets set by the company.

Pujawan (2005) explains the performance measurement supply chain for the following purposes:

1. Monitoring and control of a company.
2. Communicate company objectives to other functions in the system. supply chain.
3. Knowing the position of a company relative to the goals to be achieved or the company's competitors.
4. Decide the direction the company will take to improve to create a competitive advantage.

Supply Chain Operation Reference Digital Standard (SCOR DS)

The Supply Chain Operation Reference Digital Standard (SCOR DS) is a model that provides methodology, diagnostic tools, and benchmarks that help companies make continuous supply chain improvements. ASCM is a global organization in the process of supply chain transformation, innovation, and leadership that develops supply chain talent and improves end to end supply chain performance. Starting from education and certification to benchmarking and best practices, ASCM sets industry standards. Model SCOR

The digital Standard (SCOR DS) is a product of ASCM (formerly APICS) after the merger of the Supply Chain Council and APICS in 2014. The SCOR model was established in 1996 and updated periodically to adapt to changes in supply chain business practices. SCOR remains a powerful tool for evaluating and comparing supply chain activities and performance. SCOR captures a consensus view of supply chain management. It provides a unique framework that links business processes, metrics, best practices, and technology into an integrated structure to support communication between supply chain partners and improve the effectiveness of supply chain management and related supply chain improvement activities. The SCOR model was developed to describe continuous business activities in all phases of customer demand fulfillment. The model itself contains several parts and is organized into seven main management processes: Orchestrate, Plan, Order, Source, Transform, Fulfill, and Return. This model describes the complex supply chain. This model successfully describes and provides a basis for supply chain improvement for global and specific projects.

SCOR Performance

SCOR Performance focuses on measuring and assessing the results of supply chain process implementation. A comprehensive approach to understanding, evaluating, and diagnosing supply chain performance comprises three elements: performance attributes, metrics, and process or practice maturity. These elements, which differ from the levels in the hierarchy of metrics and processes, describe different aspects or dimensions of performance.

1. Performance Attributes are strategic characteristics of supply chain performance that are used to prioritize and align supply chain performance with business strategy.
2. Metrics is a separate performance measure consisting of connected hierarchical levels.
3. Process or Practice Maturity is a reference tool based on objective and specific descriptions that can be used to evaluate how well supply chain processes and practices incorporate and implement accepted best-practice process models and leading practices.

SCOR recognizes three performance categories and eight performance attributes, where the attribute components consist of three products, namely Resilience, Economics and Sustainability, and then divides again into eight performance attributes: *Reliability, Responsiveness, Agility, Cost, Profit, Assets, Environmental, Social*. All performance attributes have at least one level-1 or strategic metric. This level-1 metric is used to measure how successful the organization is in achieving its desired position in a competitive market space.

SCOR Racetrack

SCOR Racetrack explains how to organize a SCOR improvement program using the SCOR process and its supporting methodologies. Racetrack obtained from word racing or runway. In addition to being an abbreviation of Supply Chain Operational Reference, SCOR in Racetrack is an abbreviation for *Set the Scope, Configure the Supply Chain, Optimize Project, and Ready for Implementation*.

One of the tools used by companies to improve the performance supply chain is the SCOR Racetrack Improvement Program. SCOR Racetrack The model describes how to develop a SCOR improvement program using the SCOR process and supporting methods (ASCM, 2022). The integration that occurs in the SCOR DS and SCOR racetrack, namely SCOR DS, is a set of methods that provide standards regarding processes, performance, best practices, and people. In carrying out an improvement program, SCOR uses Racetrack 30 to provide step-by-step guidance (for organizing) to carry out an improvement project. At this stage, the process metrics are used for the thread diagram of the manufacturing process. Then, for the next stage of analysis, performance metrics and process metrics are used to measure supply chain performance to determine root causes based on processes according to SCOR standards. Best practice will be used in the stage plan until launch, where it becomes an option for improvement projects because practice has been proven to have added value.

Conceptual Framework

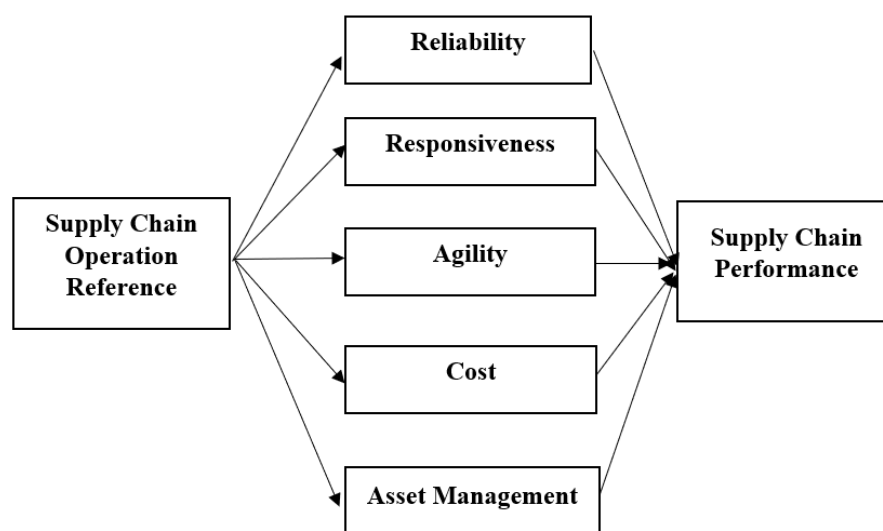


Figure 1. Conceptual Framework

METHOD**Research Design**

The research design begins with problem identification, problem formulation, literature study, data collection, data processing, analysis, and conclusions and suggestions are drawn. This research uses a quantitative descriptive approach that creates a picture of the events being studied descriptively and exploratively. This type of research collects, analyzes, and interprets information using a quantitative descriptive approach with a case study. This study included several PT employees. Cipta Krida Bahari in Balikpapan, who has relevant experience, such as Group Head and Division Head levels.

Research Subject

The subject of the research is performance improvement supply chain management at PT Cipta Krida Bahari, Pontianak and Balikpapan branches, the method used is Supply Chain Operation Reference Digital Standard (SCOR DS) 14.0 Racetrack. PT Cipta Krida Bahari is a company engaged in the field of integrated logistics service providers that focuses on industries in the energy sector, located in Jalan Sombor Baru, Muara Rapak Village, North Balikpapan District, East Kalimantan.

Research Variables

The SCOR DS approach was used as the independent variable, and supply chain performance as the dependent variable. *Definition of Variables* in this study, are the Supply Chain Operation Reference Digital Standard version 14.0 Racetrack supply chain reference model used to measure, analyze, and improve the performance of the supply chain with a process-based approach.

Operational Definition: Operational Indicators refer to KPI and SCOR DS:

1. Key Performance Indicator refers to Key Performance Indicators (KPI) in measuring supply chain performance. According to Badawy et al. (2016), key performance indicators (KPIs) are key elements that regulate an organization, measurable criteria (measurable), are considered a key parameter for determining the success of an organization, and have a challenging annual performance target figure setting.
2. SCOR Digital Standard V14.0 are consisted of Reliability, Responsiveness, Agility, Cost and Asset Management Efficiency

Data Collection Techniques

Primary data were obtained in the following manner . Observations were conducted by observing the company's condition directly to obtain a clear picture of existing problems. Interviews were conducted by asking questions to trusted sources who understood the company's conditions to obtain the required data. The questions are related to the problems experienced and the mitigation efforts that have been made, the process that occurred, and the assessment of the company. Secondary Data are obtained from report data stored in company documents. Secondary data are obtained indirectly, which is useful as support for conducting research.

Data Processing Techniques

Data processing in this study was carried out using the Supply Chain Operation Reference Digital Standard (SCOR DS) with the following stages: *Engage, Define, Analyze, Plan, Launch*

Data Analyze Techniques

Data description is a description of the research variables that have been obtained in the field and are arranged through a research flow starting from problem identification, literature study, data collection, data processing, and data analysis to drawing conclusions with the following steps:

1. Identify the background of the problems in the company, expectations, efforts made, general description, and organizational structure based on history, observation, and interviews.
2. Compile a business context summary supported by SWOT analysis to determine the company's position.
3. Compiling Supply Chain Definition Matrix obtained from quantitative data such as capacity, supplier, and demand.
4. Geographical mapping from the company was reviewed from the location of the supplier, warehouse, customer, and others.
5. Compiling the metrics data collection in detail, where the data were obtained through observation and

interviews.

6. Benchmarking can be performed on industry data, internal targets, or specific data to perform a detailed gap analysis supported by a thread diagram.
7. Identify the causes of gaps using fishbone diagram.
8. Compiling metric gaps details through a quantitative approach to further obtain alternatives performance improvement.
9. Identify performance issues into performance issue work sheets and perform grouping on similar issues or issues that have similar characteristics to obtain a list of project improvements.
10. Conduct opportunity analysis (opportunity analysis) which is converted into nominal rupiah to determine how big the impact is improvement against costs (cost), and determine the application (software) supporters.
11. Estimate in the form of recommendations regarding needs, infrastructure, and things that support the implementation of the planned improvement program.

RESULTS AND DISCUSSION

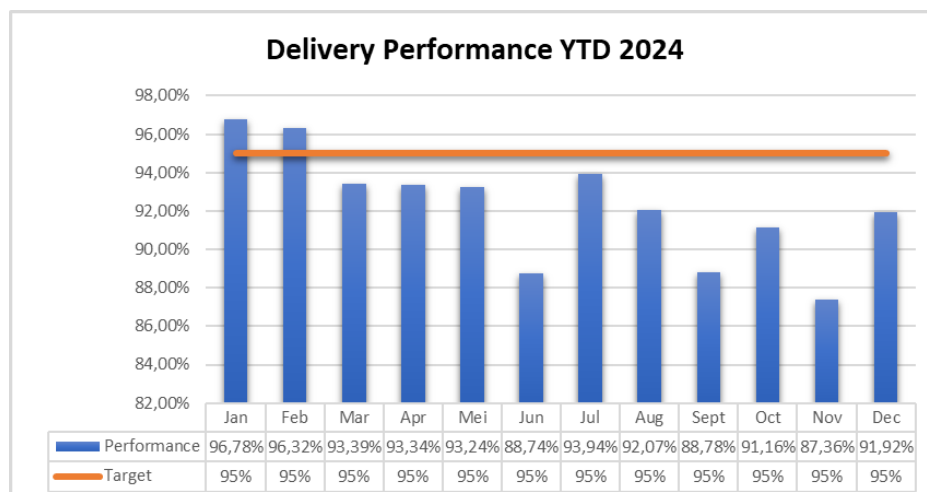
Engage

PT Cipta Krida Bahari (CKB) is a leading logistics company in Indonesia that provides integrated logistics services. CKB Logistics provides supply chain solutions to meet traditional and complex customer needs, with additional expertise in logistics solutions for the oil and gas, mining, heavy equipment, and construction industries. We have studied your operations to find the best solutions and help implement them to ensure optimal efficiency. CKB Logistics offers freight management, project logistics, warehouse management, bonded logistics centers, remote site/supply base services, port management, shipping, coal haulage, and stevedoring services. Our operations have the highest international standards, and we are ISO 9001:2015 and ISO 45001:2018 certified. CKB Logistics has an extensive national network and the ability to reach remote areas in Indonesia; our support for government policies for better transportation in Indonesia; a willingness to customize solutions for our customers; an entrepreneurial culture that has led us to invest and develop our fleet and centers in areas where others see risks; and a deep commitment to personal customer service and human resource development.

Define

The data obtained during the 2024 period for performance delivery show that there is a problem in the achievement of the distribution and delivery process of goods that is still below the company's target. This concerns the upper management to immediately take action and corrective steps from the operational division, so that in a short period of time, the performance of lead time delivery can improve to reach the target and even exceed the target that has been determined by the company.

Table 1. Delivery Performance



Source: Company Data Processing (2024)

Based on the graphic data related to delivery performance during the 2024 period with a target of 95% per month, where there were only two months in January and February that exceeded the target, while from March to December the average achievement was at 90% or below the target with a gap of 5%, which is a concern for management so that corrective steps must be taken to achieve the determined target and optimize the use of available fleet assets or vendor partners.

Analyze

The problems that followed were related to not achieving the targets. delivery performance or on time delivery This is caused by several factors, including delays in delivery from the city of origin, resulting in a domino effect of delays in transit and destination cities, and there is also the factor of the unavailability of trucking fleets due to lack of support from trucking partner vendors. This is closely related to order fulfillment for customers who have scheduled distribution deliveries to their locations; therefore, complaints often occur and have the potential to lose customer trust in using CKB logistics services. Based on the SCOR Digital Standard, the performance attributes that are appropriate for the problem are the attribute reliability (RL) with the appropriate level 1 metric, namely RL.1.1 Perfect Customer Order Fulfillment.

Attribute Reliability refers to the ability to perform tasks as required. Reliability focuses on the predictability of the process outcome. The level 1 performance metric reliability of the one selected is RL.1.1. Perfect Customer Order Fulfillment (PCOF) is the percentage of data that meets shipping performance expectations, including complete and accurate documentation and no shipping damage. Perfect order fulfillment was identified as 7R metrics, namely, right product, right quantity, right condition, right place, right time, right customer, and right cost (APICS, 2017). Table SCOR DS attributes and attribute selection for PT CKB Logistics problems.

Table 2. Attributes Performance Level 1 Metrics

Atribut	Level-1 Metrics
Reliability (RL)	RL.1.1 <i>Perfect Customer Order Fulfillment</i>
	RL.1.2 <i>Perfect Supplier Order Fulfillment</i>
	RL.1.3 <i>Perfect Return Order Fulfillment</i>
Responsiveness (RS)	RS.1.1 <i>Customer Order Fulfillment Cycle Time</i>
Agility (AG)	AG.1.1 <i>Supply Chain Agility</i>
Cost (CO)	CO.1.1 <i>Total Supply Chain Management Cost</i>
	CO.1.2 <i>Cost of Goods Sold (COGS)</i>
Profitability (PR)	PR.1.1 <i>Earnings Before Interest and Taxes (EBIT) as a Percent of Revenue</i>
	PR.1.2 <i>Effective Tax Rate</i>
Asset Management Efficiency (AM)	AM.1.1 <i>Cash-to-Cash Cycle Time</i>
	AM.1.2 <i>Return on Fixed Assets</i>
	AM.1.3 <i>Return on Working Capital</i>
Environmental (EV)	EV.1.1 <i>Materials Used</i>
	EV.1.2 <i>Energy Consumed</i>
	EV.1.3 <i>Water Consumed</i>
	EV.1.4 <i>GHG Emissions</i>
	EV.1.5 <i>Waste Generated</i>
Social (SC)	SC.1.1 <i>Diversity and Inclusion</i>
	SC.1.2 <i>Wage Level</i>
	SC.1.3 <i>Training</i>

Source: ASCM (2022)

The formula in table 3. is then used to calculate each level-2 performance metric on average for the period from January to December 2024. Know the description of level-2 performance metrics of RL.1.1. perfect customer order fulfillment (PCOF) on SCOR assessment tools, the next step will be benchmarking to determine the gap that occurs in the company's business processes. The data needs were adjusted to the actual data recorded by the company (historical data). Benchmarking starts by measuring the performance metrics from level-2 metrics. If exists at Level 2, it is translated into Level 3 metrics, which are owned by Level 2 performance metrics.

Table 3. Level-2 Performance Metrics Formula

No	Metrics	Formula	Characteristics
1.	RL.2.1 Percentage of Orders Delivered in Full to the Customer	$(\text{Total Number of Orders Delivered in Full} / \text{Total Number of Orders Delivered}) \times 100\%$	If percentage getting bigger, metric value getting bigger
2.	RL.2.2 Delivery Performance to Original Customer Commit Date	$(\text{Total Number of Orders Delivered to the Original Commitment Date} / \text{Total Number of Orders Delivered}) \times 100\%$	
3.	RL.2.3 Customer Order Documentation Accuracy	$(\text{Total Number of Orders Delivered with Accurate Documentation} / \text{Total Number of Orders Delivered}) \times 100\%$	
4.	RL.2.4 Customer Order Perfect Condition	$(\text{Number of Orders Delivered in Perfect Condition} / \text{Total Number of Orders Delivered}) \times 100\%$	

Source: (ASCM 2022)

Table 4. Performance Metrics Calculation Level-2

No.	Performance Metric	Average Numbers of Delivery Performance	Average Number of Orders Delivered	Actual (%)	Target (%)	Status
1	RL.2.1 – Percentage of Orders Delivered in Full to the Customer	21.464,00	21.464,00	100	100	✓
2	RL.2.2 – Delivery Performance to Original Customer Commit Date	21.464,00	19.338,00	89.94	95	✗
3	RL.2.3 – Customer Order Documentation Accuracy	21.464,00	21.464,00	100	100	✓
4	RL.2.4 – Customer Order Perfect Condition	21.464,00	21.464,00	100	98	✓

The calculation of the four level-2 RL.1.1 metrics above shows that there is a gap on metrics RL.2.2 Delivery Performance to Original Customer Commit Date. Therefore, in the next step, it will break down at the level-3 metrics level to recalculate performance, as in the level-2 performance metrics. Each RL.2.2 metric had two level-3 metrics. Level-3 Metrics Calculation RL.2.2 delivery performance to the original customer commit date. The RL.2.2 metric has two level-3 metrics, namely RL.3.3, customer commit date achievement, and RL.3.4, delivery customer location accuracy. The next step is to calculate the performance for level-3 metrics, as before.

Table 5. Performance Metrics Calculation Level-3

No.	Performance Metric	Actual (%)	Target (%)	Gaps
1.	RL.3.3 – Customer Commit Date Achievement	89.94	95	-5,06%
2.	RL.3.4 – Delivery Customer Location Accuracy	100	98	2%

As shown in the table above, RL.3.3 has a bad value of 89.94% or gaps of -5.06%, whereas other metrics reach above the target or a perfect value of 100%. Based on these results, RL.3.3 needs to be improved.

Table 6. Why-Problem Analysis

Problems	The percentage achievement of delivery performance by the operational team is below the company's internal target
Why?	Delay in arriving cargo freighter aircraft from Jakarta to Balikpapan which causes a domino effect on the next process
Why?	The truck fleet needed according to its capacity is not available, both assets and vendors
Why?	Delay in the packing process by suppliers
Why?	Employees who back up leave are exhausted due to increased volume of goods
Why?	The process of stowage of goods in the fleet is not proper so that there is still space that is not maximized
Cause?	There is no reconciliation meeting

On the result 5Why Analysis above shows that the factors causing the problem of percentage achievement delivery performance or Customer Commit Date Achievement, which is below the target set by the company, are caused by the delay in the arrival of the cargo freighter plane carrying goods from Jakarta to Balikpapan, so that a domino effect occurs in the next process, where there is a packing process that must be carried out to protect the goods from damage; this process is carried out by the packing vendor, and there needs to be a coordination meeting or reconciliation with the airfreight vendor and the packing vendor. Another factor causing delays in the delivery process is the process of arranging and storing goods on the fleet, which is not proper or effective, so that many spaces are not filled to the maximum with goods; as a result, there are many goods offloaded or not carried over, ultimately causing late delivery. Another factor is the unavailability of a fleet of trucks, such as Cold Diesel or Fuso, which is in accordance with the capacity of the goods, and must wait for the truck from the vendor, which is also only provided the next day, so the goods must be offloaded and waiting for delivery tomorrow.

Plan

This step is in the form of an analysis of the calculated and calculated data. benchmark. This analysis aims to determine the priority performance, which allows for improvements to be made, and the benefits we obtain when we do it project. The steps of the optimization project are as follows:

Table 7. Original Issues

Metrics Performance			Issue
Level-1	Level-2	Level-3	
RL.1.1 Perfect Customer Order Fulfillment	RL.2.2 Delivery Performance to Original Customer Commit Date	RL.3.3 Customer Commit Date Achievement	1. Unavailability of fleet due to full demand. 2. No reconciliation meeting yet 3. Improper stowage plan process

This stage is a grouping of metrics based on the process and similarity of problems. The causes of the gap in CKB Logistics are grouped into *Procurement Terms & Conditions Review*, *Freight Carrier Delivery Performance Evaluation* and *Distribution Planning*.

The project list is a proposal for improving the cause of this gap. The proposal for improvement in the SCOR Digital Standard has been formulated in the form of Best Practices (BP). In the RL.3.3 metrics Customer Commit Date Achievement, there were 22 best alternatives. After determining the root cause of each level-3 metric that has a gap of RL.3.1, RL.3.2, and RL.3.3, in this step, the best practice is selected, which roughly corresponds to the problems and metrics that have been analyzed previously so that they can be applied to improvement projects.

Table 8. Determination Best Practices and Its Implementation

<i>Practises</i>	Implementation	
	Done	Not Yet
<i>BP.017 Distribution Planning</i>		√
<i>BP.024 Supply Chain Optimization (SCO)</i>	√	
<i>BP.041 Transportation Optimization</i>	√	
<i>BP.042 Procurement Terms & Conditions Review</i>		√
<i>BP.055 Freight Carrier Delivery Performance Evaluation</i>		√
<i>BP.101 Purchasing and Procurement Strategy</i>	√	
<i>BP.115 Transportation Management System (TMS)</i>	√	
<i>BP.116 Expedited Logistics</i>	√	
<i>BP.118 Transportation Management Outsourcing</i>	√	
<i>BP.134 Supplier Evaluation</i>	√	

Source: (ASCM, 2022)

Based on Table 8, the best practices that are in accordance with logistics companies and freight forwarding obtained 10 points, seven of which were implemented in the CKB Logistics Balikpapan branch, while three others were not. This has become a concern for the management of improvement steps and improvements that must be implemented immediately. Next, to enter the implementation stage in SCOR Racetrack, the project proposed for the implementation stage, namely 3projectfrom the proposal best practices and one project from observations. The details are presented in Table 9.

Table 9. Project List

<i>Project #</i>	<i>Practises</i>
1	<i>BP.017 Distribution Planning</i>
2	<i>BP.042 Procurement Terms & Conditions Review</i>
3	<i>BP.055 Freight Carrier Delivery Performance Evaluation</i>
4	<i>Regular Reconciliation Meetings</i>

Launch

Ready for Implementation is the final stage of SCOR Racetrack before implementation is carried out on the compiled project. Based on the implementation project charter below, the estimated benefits obtained are determining strategies for fulfilling requests, knowing the policies and commitments implemented by the supplier, knowing the obstacles in each delivery and the follow-up strategy, as well as knowing the issues from both parties and designing sustainable strategies. Implementation of project It is hoped that this will be able to improve the lead-time delivery of goods to the customer's location at an agreed time.

Table 10. Implementation Project Charter

<i>Metrics</i>	<i>Case</i>	<i>Plan Improvement</i>	<i>Benefits</i>
RL.3.3	On Time Delivery Percentage Below the Target	BP.017 Distribution Planning	determine the best short-term strategy to meet demand and replenish storage locations.
		BP.042 Procurement Terms & Conditions Review	Know the policies and commitments implemented by the supplier
		BP.055 Freight Carrier Delivery Performance Evaluation	Knowing the bottlenecks in each delivery and the follow-up strategy
		Regular Reconciliation Meetings	Knowing the issues from both sides and designing a sustainable strategy

Based on the actual implementation, project improvement of 4 (four) project lists that have been prepared will produce achievements on time delivery from 89.94% to 95% according to the target or even exceeding it. In addition, the implementation of project improvement will also produce other benefits; if it is consistently run every project regularly or per period, then the results and benefits for the company's organizational performance and supply chain performance will increase. The results obtained are as follows: *improve the competence of field staff, reduce the number of delays in delivery of goods, strengthening partnership relations with supplier, obtain strategies for continuous improvement.*

Conclusion

Based on the objectives and research that has been conducted, the following are the conclusions obtained from the research on improving performance and supply chain management using SCOR DS at PT Cipta Krida Bahari Kalimantan Area, especially the Balikpapan branch. The research was conducted in the division of Integrated Logistics Services with the product of goods delivery services via land routes using trucks, with the problem of goods delivery not being in accordance with the agreed date or lead time that exceeds the target, and order fulfillment mentor the fulfillment of a trucking fleet that suits customer needs in bringing goods to their destination. Many orders cannot be sent according to the date agreed with the customer. Therefore, the focus of this research is performance attribute reliability. At level-2 and level-3, the metrics used in calculating performance in this study are as follows: RL.2.1 Percentage of Orders Delivered in Full to the Customer, RL.2.2 Delivery Performance to Original Customer Commit Date, RL.2.3 Customer Order Documentation Accuracy, RL.2.4 Customer Order Perfect Condition, RL.3.1 Delivery Item Accuracy to the Customer, RL.3.2 Delivery Quantity Accuracy to the Customer, RL.3.3 Customer Commit Date Achievement, RL.3.4 Delivery Customer Location Accuracy.

Performance measurement results supply chain management at level-2 performance metrics namely RL.2.1 percentage of orders delivered in full to the customer by 100%, RL.2.2 delivery performance to original customer commit date 89.94%, and RL.2.3 customer order documentation accuracy 100% and RL.2.4 customer order perfect condition by 100%. The company's target is 95%, which means that RL.2.2 did not meet the target, so the level-3 performance metrics were considered. As a result, the performance value of the RL.3.3 Customer Commit Date Achievement metric was 89.94%, and RL.3.4 delivery customer location accuracy by 100%. In RL.3.3, it has not meet the company's performance targets. Performance attribute reliability has a performance value of 89.94% with a gap of 5.06% of the target on time delivery company 95% gap, which reduces the performance of attribute reliability.

Suggestion

The researcher also suggests for companies, it is hoped that they will pay more attention to performance values that have gap by considering the proposed project. It is expected that this research will be a consideration for decision making in improving PT in Cipta Krida Bahari. For further research,

hoped that they could conduct research that includes the relationship between process metrics, performance, best practices, and people. In addition, further research can measure the performance against metrics other than reliability. Further research can look for more reference sources for the work supply chain operations reference digital standard (SCORDS).

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