

ANALISIS PENGUKURAN KINERJA RANTAI PASOK DENGAN MENGGUNAKAN PENDEKATAN *GREEN SUPPLY CHAIN OPERATIONS REFERENCE* (SCOR) DI PT XYZ

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ABSTRAK

PT XYZ merupakan perusahaan manufaktur tekstil non-woven yang belum memiliki sistem pengukuran kinerja rantai pasok secara terintegrasi, sehingga menimbulkan berbagai permasalahan operasional seperti keterlambatan pengiriman, pengembalian produk, serta kendala dalam pengadaan bahan baku. Penelitian ini bertujuan untuk mengevaluasi performansi rantai pasok PT XYZ berdasarkan pendekatan *Green Supply Chain Operations Reference* (Green SCOR). Metode penelitian dilakukan melalui beberapa tahapan, yaitu: (1) menentukan indikator performansi berbasis Green SCOR melalui validasi *Content Validity Index* (CVI); (2) membobotkan indikator menggunakan *Analytic Hierarchy Process* (AHP); (3) mengukur nilai performansi rantai pasok menggunakan metode *Objective Matrix* (OMAX); dan (4) menentukan indikator prioritas perbaikan berdasarkan klasifikasi menggunakan *Traffic Light System* (TLS). Setelah melalui proses validasi, terdapat 22 indikator Green SCOR yang digunakan dalam penelitian ini untuk mengukur kinerja rantai pasok. Selain indikator konvensional, penelitian ini juga memasukkan indikator berbasis keberlanjutan (*green*) untuk menilai aspek ramah lingkungan dalam proses rantai pasok. Tiga indikator *green* yang digunakan dalam penelitian ini adalah *Recycled Material Usage*, *Reusable Material*, dan *Truck Load Optimization Rate*. Sebagai temuan baru, indikator '*Recycled Material Usage*' diusulkan untuk mengukur perbandingan jumlah bahan baku daur ulang terhadap total bahan baku yang digunakan, karena indikator serupa belum ditemukan dalam literatur yang relevan dengan kondisi PT XYZ. Hasil penelitian menunjukkan bahwa nilai total kinerja rantai pasok PT XYZ dengan *scoring system* OMAX tahun 2024 adalah 5,678, yang berada pada kategori kuning berdasarkan TLS. Indikator prioritas yang perlu segera diperbaiki meliputi *Time to Revise Production Schedule*, *Purchase Order Cycle Time*, *Material Efficiency*, *Ship Product Cycle Time*, dan *Return Rate from Customer*. Perbaikan pada indikator-indikator tersebut diharapkan dapat meningkatkan efisiensi operasional dan memperbaiki kinerja rantai pasok secara keseluruhan.

Kata Kunci: Pengukuran Kinerja, Rantai Pasok, *Green Supply Chain Operations Reference* (SCOR).

PERFORMANCE MEASUREMENT ANALYSIS OF SUPPLY CHAIN USING GREEN SUPPLY CHAIN OPERATIONS REFERENCE (SCOR) MODEL AT PT XYZ

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ABSTRACT

PT XYZ is a non-woven textile manufacturing company that has not yet implemented an integrated system for measuring supply chain performance, resulting in various operational challenges such as delivery delays, product returns, and procurement issues. This study aims to evaluate the supply chain performance of PT XYZ using the Green Supply Chain Operations Reference (Green SCOR) framework. The research was conducted through several stages: (1) identifying performance indicators based on the Green SCOR model through validation using the Content Validity Index (CVI); (2) assigning weights to the indicators using the Analytic Hierarchy Process (AHP); (3) assessing performance scores using the Objective Matrix (OMAX) method; and (4) determining priority indicators for improvement using the Traffic Light System (TLS) classification. Following the validation process, 22 Green SCOR indicators were selected to measure the supply chain performance. In addition to conventional indicators, this study incorporated environmentally focused (green) indicators to assess sustainability aspects within the supply chain operations. The three green indicators included in the final analysis are Recycled Material Usage, Reusable Material, and Truck Load Optimization Rate. Among them, the Recycled Material Usage indicator was specifically proposed by the researcher to reflect the actual practice of using recycled raw materials at PT XYZ. This indicator was validated and considered relevant for assessing environmental performance, especially given the lack of similar indicators in previous literature that aligns with the company's context. The results show that the total supply chain performance score of PT XYZ using the OMAX scoring system in 2024 was 5,678, which falls within the yellow category based on the TLS. Priority indicators identified for immediate improvement include Time to Revise Production Schedule, Purchase Order Cycle Time, Material Efficiency, Ship Product Cycle Time, and Return Rate from Customer. Improving these indicators is expected to enhance operational efficiency and overall supply chain performance.

Keywords: Performance Measurement, Supply Chain, Green Supply Chain Operations Reference (SCOR).