# INTISARI

Pengukuran kinerja rantai pasok (*Supply Chain Performance*/SCP) merupakan aspek penting dalam manajemen rantai pasok, karena mendukung evaluasi dan pengambilan keputusan yang strategis untuk meningkatkan efisiensi dan efektivitas operasional. Penelitian ini bertujuan untuk mengukur mengevaluasi SCP UMKM dan memvisualisasikan hasil pengukuran dalam sebuah *dashboard* monitoring dan evaluasi yang interaktif dan real-time.

Metode yang digunakan dalam penelitian adalah kombinasi *Supply Chain Operation Reference* (SCOR) Model Tipe 12 sebagai kerangka pengukuran kinerja dan 2 (dua) metode *Multi Criteria Decision Making* yakni: *Analytic Hierarchy Process* (AHP) untuk pembobotan prioritas *Key Performance Indicator* (KPI) dan *Technique for Order of Preference by Similarity to Ideal Solution* (TOPSIS) untuk penghitungan kinerja rantai pasok UMKM berdasarkan kedekatan relatif terhadap solusi ideal.

Hasil pengukuran terhadap 28 KPI dari 50 UMKM menunjukkan bahwa rata-rata SCP UMKM berada pada kategori *Average* dengan nilai 57,94%. Beberapa KPI prioritas untuk perbaikan adalah: 1). *Forecast Accuracy* (PRL1) dengan bobot 28,8%, namun 60% UMKM memiliki kinerja di bawah rata-rata. 2). *Raw Material Planning Accuracy* (PRL2) pada proses bisnis Plan dengan bobot 5,8%, di mana 66% UMKM berkinerja di bawah rata-rata. 3). KPI terkait *Sourcing Cost* (13,7%) dan *Production Cost* (7%), yang masing-masing memiliki 44% dan 66% UMKM berkinerja di bawah rata-rata. 4). KPI terkait dengan control kualitas yakni *Perfect Condition* (4%) dengan bobot cukup tinggi 4,4% terdapat 12 UMKM (24%) yang berkinerja dibawah rata-rata, serta 5). KPI terkait waktu pengiriman seperti *Delivery Cycle Time by Supplier* (4%) dan *Delivery Cycle Time by Company* (2%), dengan lebih dari 50% UMKM memiliki kinerja di bawah rata-rata. Rekomendasi perbaikan meliputi penggunaan metode peramalan berbasis data historis, adopsi otomatisasi proses bisnis, penerapan teknologi digital seperti ERP atau SCM Software, peningkatan kolaborasi dengan mitra bisnis, serta penguatan kapasitas tenaga kerja pada pengelolaan rantai pasok UMKM.

Penelitian ini memberikan kontribusi pada penerapan metode pengukuran SCP berbasis integrasi Model SCOR, AHP, dan TOPSIS yang terbukti dari hasil analisis sensitivitas memiliki output yang relative konsisten. *Dashboard* SCP yang dirancang menggunakan *Pivot Table* berbasis Microsoft Excel yang diharapkan dapat mempermudah pengambil kebijakan dalam mengidentifikasi permasalahan pada proses bisnis dan memberikan rekomendasi perbaikan secara efisien dan terukur.

Kata kunci: Pengukuran Kinerja Rantai Pasok, Model SCOR, AHP, TOPSIS, *Dashboard*

# ABSTRACT

Supply chain performance (SCP) measurement is an important aspect of supply chain management, as it supports strategic evaluation and decision-making to improve operational efficiency and effectiveness. This research aims to measure and evaluate the SCP of MSMEs and visualize the measurement results in an interactive and real-time monitoring and evaluation dashboard.

The method used in the research is a combination of Supply Chain Operation Reference (SCOR) Model Type 12 as a performance measurement framework and 2 (two) Multi Criteria Decision Making methods, namely: Analytic Hierarchy Process (AHP) for Key Performance Indicator (KPI) priority weighting and Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS) for MSME supply chain performance calculation based on relative closeness to the ideal solution.

The measurement results of 28 KPIs from 50 MSMEs show that the average SCP of MSMEs is in the Average category with a value of 57.94%. Some priority KPIs for improvement are: 1). Forecast Accuracy (PRL1) with a weight of 28.8%, but 60% of MSMEs have below-average performance. 2). Raw Material Planning Accuracy (PRL2) in the Plan business process has a weight of 5.8%, whereas 66% of MSMEs perform below average. 3). KPIs related to Sourcing Cost (13.7%) and Production Cost (7%), which have 44% and 66% of MSMEs performing below average, respectively. 4). KPIs related to quality control, namely Perfect Condition (4%) with a fairly high weight of 4.4%, there are 12 MSMEs (24%) that perform below average, and 5). KPIs related to delivery time such as Delivery Cycle Time by Supplier (4%) and Delivery Cycle Time by Company (2%), with more than 50% of MSMEs having below-average performance. Recommendations for improvement include the use of historical data-based forecasting methods, adoption of business process automation, application of digital technology such as ERP or SCM Software, increased collaboration with business partners, and strengthening labour capacity in the management of MSME supply chains.

This research contributes to the application of SCP measurement methods based on the integration of the SCOR Model, AHP, and TOPSIS which is proven from the results of sensitivity analysis that have relatively consistent outputs. The SCP dashboard designed using Microsoft Excel-based Pivot Table is expected to facilitate policymakers in identifying problems in business processes and providing recommendations for improvement efficiently and measurably.

Keywords: Supply Chain Performance Measurement, SCOR Model, AHP, TOPSIS, Dashboard