

## **ABSTRACT**

*Companies are faced with the challenge of increasing the competitiveness of their supply chains, while plastic bottle packaging companies in general have not carried out comprehensive performance measurements in their supply chains. The purpose of this study is to select and determine the importance of Key Performance Indicators (KPI) and to measure performance in the plastic packaging industry using the SCOR and AHP models. In the initial stage 45 KPIs were identified, from the results of expert validation, 29 KPIs were approved which were distributed on the dimensions of reliability, responsiveness, flexibility, cost, and assets. At level 1 hierarchy, the highest level of importance is generated in the dimensions of reliability (A1), asset management (E1), responsiveness (B1), cost (D1), and flexibility (C1) with weights of 0.262, 0.209, 0.191, 0.175, and 0.163. The largest KPI distribution on the reliability dimension is 32%, followed by the cost dimension at 16%, responsiveness at 12%, flexibility and asset management have the same distribution, namely 4%. Based on the results of the weighting using the AHP method, a supply chain performance measurement framework is recommended in the case of the plastic packaging industry. The results of measuring the supply chain performance of plastic packaging companies get the value of each dimension as follows: Reliability is worth 92%, Responsiveness is worth 66%, Flexibility is worth 89%, Cost is 73% and Asset management cost is 82%. The total value of the SCOR dimension for plastic packaging companies is 81%. According to the scale of the performance monitoring system, it is in the Good category.*

**Keywords:** AHP, plastic packaging industry, supply chain performance, SCOR



## ABSTRAK

Perusahaan dihadapkan pada tantangan untuk meningkatkan daya saing rantai pasoknya, sementara perusahaan kemasan plastik botol pada umumnya belum melakukan pengukuran kinerja yang komprehensif dalam rantai pasoknya. Tujuan dari penelitian ini adalah menseleksi dan menentukan tingkat kepentingan *Key Performance Indicator* (KPI) dan melakukan pengukuran kinerja di bidang industri kemasan plastik menggunakan model SCOR dan AHP. Pada tahap awal diidentifikasi 45 KPI, dari hasil validasi pakar disetujui 29 KPI yang terdistribusi pada dimensi *reliability*, *responsiveness*, *flexibility*, *cost*, dan *Asset*. Pada hirarki level 1 tingkat kepentingan terbesar berturut-turut adalah dihasilkan pada dimensi *reliability* (A1), *asset management* (E1), *responsiveness* (B1), *cost* (D1), dan *flexibility* (C1) dengan bobot berturut-turut sebesar 0,262, 0,209, 0,191, 0,175, dan 0,163. Sebaran KPI terbesar pada dimensi *reliability* yaitu 32%, disusul dimensi *cost* sebesar 16%, *responsiveness* sebesar 12%, *flexibility* dan *asset management* memiliki sebaran yang sama yaitu 4%. Berdasarkan hasil pembobotan dengan metode AHP direkomendasikan *framework* pengukuran kinerja rantai pasok pada kasus industri kemasan plastik. Hasil Pengukuran kinerja rantai pasok perusahaan kemasan plastik didapat nilai masing-masing dimensi sebagai berikut: *Reliability* bernilai 92%, *Responsiveness* bernilai 66%, *Flexibility* bernilai 89%, *Cost* bernilai 73% dan *Asset management cost* bernilai 82%. Dengan total nilai dimensi SCOR untuk perusahaan kemasan plastik adalah 81%. Menurut skala sistem monitoring kinerja masuk ke dalam kategori *Good*.

**Kata kunci:** AHP, industri kemasan plastik, kinerja rantai pasok, SCOR.

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