

ABSTRAK

PT Petrokopindo Cipta Selaras adalah perusahaan yang bergerak di industri jasa. Keberhasilan operasional dan perdagangan perusahaan bergantung pada dukungan yang memadai. Penelitian ini bertujuan untuk memilih *supplier* oli terbaik bagi PT Petrokopindo Cipta Selaras menggunakan metode *Analytical Hierarchy Process* (AHP) dan *Technique for Order Preference by Similarity to Ideal Solution* (TOPSIS). Penggunaan metode *Analytical Hierarchy Process* (AHP) dan *Technique for Order Preference by Similarity to Ideal Solution* (TOPSIS) mampu mendukung pengambilan keputusan secara objektif dan terstruktur. Penentuan kriteria dan sub kriteria didasarkan pada studi literatur serta hasil diskusi dengan pihak internal perusahaan, sehingga diperoleh lima kriteria utama, yaitu harga, kualitas, pelayanan, pengiriman, dan fleksibilitas. Metode *Analytical Hierarchy Process* (AHP) digunakan untuk menghitung bobot prioritas masing-masing kriteria dan sub kriteria, sedangkan metode *Technique for Order Preference by Similarity to Ideal Solution* (TOPSIS) digunakan untuk menentukan peringkat setiap alternatif *supplier*. Hasil analisis menunjukkan bahwa kualitas merupakan kriteria paling berpengaruh dengan bobot tertinggi sebesar 0,52, dan sub kriteria kesesuaian spesifikasi menjadi faktor penentu utama. Berdasarkan hasil perhitungan *Technique for Order Preference by Similarity to Ideal Solution* (TOPSIS), Shell menempati peringkat tertinggi dengan nilai preferensi sebesar 0,7040, sehingga ditetapkan sebagai *supplier* terbaik.

Kata kunci : *Supplier, Analytical Hierarchy Process, Technique for Order Preference by Similarity to Ideal Solution*

ABSTRACT

PT Petrokopindo Cipta Selaras is a company engaged in the service industry. The success of the company's operations and trade depends on adequate support. This research aims to choose the best oil supplier for PT Petrokopindo Cipta Selaras using the Analytical Hierarchy Process (AHP) and Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) methods. The use of Analytical Hierarchy Process (AHP) and Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) methods can support objective and structured decision making. The determination of criteria and sub-criteria is based on literature studies and discussions with internal company parties, so that five main criteria are obtained, namely price, quality, service, delivery, and flexibility. The Analytical Hierarchy Process (AHP) method is used to calculate the priority weight of each criterion and sub-criteria, while the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) method is used to rank each supplier alternative. The results of the analysis show that quality is the most influential criterion with the highest weight of 0.52, and the sub-criterion of specification conformity is the main determining factor. Based on the results of the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) calculation, Shell ranks the highest with a preference value of 0.7040, so it is determined as s

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