

ABSTRAK

PT Tri Wahyu Energi merupakan perusahaan yang bergerak di bidang distribusi bahan bakar minyak (BBM) solar industri. Proses *monitoring* pemesanan dan penentuan pelanggan prioritas yang masih dilakukan secara manual menyebabkan pengelolaan data menjadi kurang efektif serta pengambilan keputusan yang cenderung subjektif. Penelitian ini bertujuan untuk membangun Sistem *Monitoring* Pemesanan dan Sistem Pendukung Keputusan (SPK) dalam pemilihan pelanggan prioritas menggunakan metode *Analytical Hierarchy Process* (AHP) dan *Technique for Order Preference by Similarity to Ideal Solution* (TOPSIS). Metode AHP digunakan untuk menentukan bobot kriteria, sedangkan TOPSIS digunakan untuk melakukan perankingan pelanggan berdasarkan nilai preferensi. Sistem dikembangkan menggunakan *framework* Laravel dan *database* MySQL. Hasil penelitian menunjukkan bahwa sistem mampu membantu proses *monitoring* pemesanan secara terintegrasi serta menghasilkan rekomendasi pelanggan prioritas secara lebih objektif, cepat, dan akurat.

Kata Kunci: *Monitoring* Pemesanan, Sistem Pendukung Keputusan, AHP, TOPSIS, Pelanggan Prioritas.

ABSTRACT

PT Tri Wahyu Energi is a company engaged in the distribution of industrial diesel fuel. The manual process of order monitoring and priority customer selection causes data management to be less effective and decision-making to be subjective. This study aims to develop an Order Monitoring System and a Decision Support System (DSS) for selecting priority customers using the Analytical Hierarchy Process (AHP) and Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) methods. The AHP method is used to determine the weight of each criterion, while TOPSIS is used to rank customers based on preference values. The system was developed using the Laravel framework and MySQL database. The results show that the system is able to support integrated order monitoring and provide recommendations for priority customers in a more objective, efficient, and accurate manner.

Keywords: Order Monitoring System, Decision Support System, AHP, TOPSIS, Priority Customers.