

INTISARI

PEMILIHAN *SUPPLIER* TERBAIK BIJIH NIKEL PT. XYZ DENGAN *ANALYTICAL HIERARCHY PROCESS* (AHP)

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Manajemen rantai pasok merupakan salah satu hal yang penting bagi perusahaan, salah satunya melalui proses pembelian atau pengadaan. Pemilihan *supplier* menjadi kunci utama dalam proses pembelian, sehingga tujuan perusahaan yang telah direncanakan dapat tercapai. *Supplier* merupakan pihak eksternal perusahaan, sehingga diperlukan kriteria untuk melakukan proses evaluasi. Pemilihan *supplier* yang baik dapat menjadi nilai tambah bagi perusahaan. PT. XYZ merupakan salah satu perusahaan *trader* (perdagangan jual beli) bahan mentah bijih nikel. Perusahaan melakukan kegiatan transaksi pembelian bahan mentah bijih nikel dari *supplier* atau pihak penambang bijih nikel untuk melakukan penjualan kepada pihak pabrik pengolahan. Perusahaan sangat bergantung kepada pihak penambang bijih nikel dalam mendapatkan bahan mentah bijih nikel, hal ini karena perusahaan belum mendapatkan lahan areal penambangan bijih nikel, sehingga masih sangat bergantung kepada pihak *supplier*. PT. XYZ dianggap perlu melakukan penilaian terhadap kriteria *supplier* yang dibutuhkan dalam penentuan keputusan strategis jangka panjang bagi perusahaan.

Terdapat beberapa metode yang umum dalam mengevaluasi kriteria *supplier*. Berdasarkan beberapa studi literatur berkaitan dengan tujuan yang ingin dicapai, peneliti memutuskan menggunakan metode *Analytical Hierarchy Process* (AHP). Metode AHP sesuai untuk mengevaluasi kriteria *supplier* PT. XYZ karena dapat memecahkan permasalahan yang kompleks pada proses pemilihan *supplier*, sehingga *supplier* yang paling baik dapat ditemukan sesuai kriteria yang dibutuhkan perusahaan. Berdasarkan panduan pengisian AHP dengan *user*, disepakati tujuh kriteria dalam melakukan evaluasi *supplier*, yaitu (1) kualitas barang, (2) mekanisme pembayaran, (3) harga, (4) lokasi geografis, (5) reputasi, (6) garansi, (7) kecepatan pengiriman.

Berdasarkan hasil perhitungan AHP diperoleh bobot untuk masing-masing kriteria yaitu kualitas barang (0,388), mekanisme pembayaran (0,173), harga (0,172), lokasi geografis (0,093), reputasi (0,091), garansi (0,044), kecepatan pengiriman (0,040).

Berdasarkan hasil perhitungan bobot prioritas antar *supplier* didapatkan peringkat *supplier* terbaik perusahaan dalam kegiatan pembelian bahan mentah bijih nikel PT. XYZ yaitu *supplier* B pada peringkat 1 dengan kriteria mekanisme pembayaran, reputasi, garansi dan kecepatan pengiriman yang lebih baik dari dua *supplier* lain.

Kata kunci: manajemen rantai pasok, pemilihan *supplier*, kriteria *supplier*, *analytical hierarchy process* (AHP).

ABSTRACT

*SELECTION OF THE BEST SUPPLIER FOR NICKEL ORE PT. XYZ
WITH ANALYTICAL HIERARCHY PROCESS (AHP)*

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Supply chain management is one of the important things for the company, one of which is through the purchasing or procurement process. Supplier selection is the main key in the purchasing process so that the company's planned goals can be achieved. Suppliers are external parties of the company, so criteria are needed to carry out the evaluation process. The selection of a good supplier can be an added value for the company. PT. XYZ is one of the trading companies for buying and selling nickel commodities. The company carry out transaction activities to purchase nickel raw materials from suppliers or nickel miners to make sales to smelters. The company is very dependent on nickel miners in obtaining nickel raw materials, this is because the company does not yet have nickel mining area land, so it is still very dependent on suppliers. PT. XYZ is considered necessary to assess the supplier criteria needed in determining long-term strategic decisions for the company.

There are several common methods of evaluating supplier criteria. Based on several literature studies related to the goals to be achieved, the researcher decided to use the Analytical Hierarchy Process (AHP) method. The AHP method is suitable for evaluating the criteria of PT. XYZ because it can solve complex problems in the supplier selection process, so that the best suppliers can be found according to the criteria needed by the company. Based on the AHP filling guidelines with users, seven criteria were agreed upon in evaluating suppliers, namely (1) quality of goods, (2) payment mechanisms, (3) prices, (4) geographical location, (5) reputation, (6) warranty, (7) speed of delivery.

Based on the results of the AHP calculation, weights were obtained for each criterion, namely the quality of goods (0,388), payment mechanism (0,173), price (0,172), geographical location (0,093), reputation (0,091), warranty (0,044), speed of delivery (0.040).

Based on the results of the calculation of priority weights between suppliers, the company's best supplier rating in PT. XYZ nickel purchasing activities were obtained, namely supplier B as rank 1 with criteria payment mechanisms, reputation, warranty and speed of delivery are better than other suppliers.

Keywords: *supply chain management, supplier selection, supplier selection, analytical hierarchy process (AHP).*