"EVALUASI SUPPLIER PT. XYZ MENGGUNAKAN METODE ANALYTICAL NETWORK PROCESS (ANP) DAN TECHNIQUE FOR OTHERS PREFERENCE BY SIMILARITY TO IDEAL SOLUTION (TOPSIS)"

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ABSTRAK

Pengadaan merupakan sebuah kegiatan yang bertujuan untuk mendapatkan barang yang digunakan untuk mendapatkan barang yang digunakan untuk kepentingan perusahaan yang didapatkan dari *supplier* untuk mempermudah produksi yang sedang dilakukan perusahaan. PT. XYZ merupakan salah satu perusahaan tambang terkemuka di Indonesia yang memproduksi biji bauksit. Perusahaan ini belum memiliki standar evaluasi terhadap *supplier* yang ada khususnya pada produk *linning kit brake* yang menjadi salah satu komponen penting pada unit *dump truck*. Dalam penelitian ini digunakan metode *Analytical Network Process* (ANP) yang digunakan sebagai pembobotan kriteria serta subkriteria evaluasi *supplier* serta pengujian dari tingkat konsistensi pada kepentingan setiap kriteria pada perbandingan berpasangan, sedangkan metode *Technique For Others Preferences by Similarity to Ideal Solution* (TOPSIS) yang digunakan untuk melakukan pemeringkatan berdasarkan *supplier* yang telah melakukan kerja sama pengadaan produk pada perusahaan. Berdasarkan hasil penelitian, terdapat 4 Kriteria yaitu kriteria Biaya, Kualitas, Pengiriman serta Responsivitas. Kriteria biaya memiliki bobot tertinggi pada subkriteria harga dan bobot terendah pada metode pembelian. Kriteria kualitas memiliki bobot tertinggi pada Kesesuaian produk dengan spesifikasi serta bobot terendah pada subkriteria kehandalan produk. Kriteria Pengiriman memiliki bobot tertinggi pada subkriteria kesesuaian barang yang diterima serta bobot terendah pada subkriteria ketepatan waktu pengiriman. Kriteria Responsivitas memiliki bobot tertinggi pada subkriteria penanganan pemesanan serta bobot terendah pada subkriteria kebijakan garansi dan klaim. Pada pemeringkatan *supplier* terbaik berdasarkan pembobotan didapatkan supplier D memiliki nilai preferensi tertinggi yaitu 0,72, supplier A dengan nilai 0,36, Supplier B dengan nilai 0,33 serta supplier C dengan nilai preferensi sebesar 0,31.

Kata Kunci: *Supplier, Analytical Network Process* (ANP)*, Technique For Others Preferences by Similarity to Ideal Solution* (TOPSIS), *Cut-Off Point.*

"SUPPLIER EVALUATION OF PT. XYZ USING ANALYTICAL NETWORK PROCESS (ANP) METHOD AND TECHNIQUE FOR OTHERS PREFERENCE BY SIMILARITY TO IDEAL SOLUTION (TOPSIS)"

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ABSTRACT

Procurement is an activity that aims to obtain goods that are used to obtain goods that are used for the benefit of the company obtained from *suppliers* to facilitate the production that is being carried out by the company. PT. XYZ is one of the leading mining companies in Indonesia that produces bauxite ore. This company does not yet have an evaluation standard for existing *suppliers* , especially forproduct, *the brake lining kit* which is one of the important components in theunit *dump truck*. In this study, the *Analytical Network Process* (ANP) method was used which was used as the weighting of the criteria and sub-criteria forevaluation *supplier* and testing of the level of consistency in the importance of each criterion in pairwise comparisons, while the *Technique For Others Preferences by Similarity to Ideal Solution* (TOPSIS) method was used to perform a rating based on *suppliers* who have collaborated on product procurement with the company. Based on the results of the study, there are 4 criteria, namely the criteria of Cost, Quality of Delivery and Responsiveness. The cost criteria has the highest weight on the price sub-criteria and the lowest weight on the purchase method. The quality criteria has the highest weight on product conformity with specifications and the lowest weight on product reliability sub-criteria. The delivery criteria have the highest weight on the sub-criteria for the suitability of the goods received and the lowest weight on the sub-criteria for the timeliness of delivery. Responsiveness criteria have the highest weight on the sub-criteria for handling orders and the lowest weight on the sub-criteria of warranty and claims policies. In the ranking of the *suppliers* bestbased on weighting, supplier D has the highest preference value, namely 0.72, supplier A with a value of 0.36, Supplier B with a value of 0.33 and supplier C with a preference value of 0.31.

Keywords: *Supplier, Analytical Network Process* (ANP)*, Technique For Others Preferences by Similarity to Ideal Solution* (TOPSIS), *Cut-Off Point.*