

ABSTRAK

Pengambilan keputusan yang secara subyektif dapat menimbulkan kesalahan dalam pemilihan *supplier*. Pada pemilihan *supplier*, Departemen OEM (*Original Equipment Manufacturing*) mengalami kesulitan dalam penentuan pemilihan *supplier*, karena banyaknya *supplier* yang mengajukan penawaran kerjasama. Oleh karena itu, diperlukan sebuah sistem pendukung keputusan pemilihan *supplier* sehingga departemen oem dapat menentukan *supplier* yang sesuai dalam pembelian produk, jasa dan material. Sistem pendukung keputusan ini menggunakan metode SAW (*Simple Additive Weighting*) dimana metode ini digunakan untuk mengatasi permasalahan yang ada, karena banyaknya alternatif dan kriteria yang harus dipertimbangkan dalam pemilihan *supplier* seperti legality, quality management, kapasitas produksi, quality production dan inovasi. Dari pengujian yang dilakukan dengan membandingkan perhitungan melalui *Microsoft Excel* dan program SAW berbasis web pada PT Avo Innovation Technology menggunakan 13 data *supplier* untuk menguji kinerja sistem. Disimpulkan dari pengujian tersebut persentase kinerja sistem 100%, sehingga sistem ini dapat diimplementasikan di perusahaan.

Kata kunci: Sistem Pendukung Keputusan, Pemilihan supplier, Simple Additive Weighting.

ABSTRAK

Subjective decision making can lead to errors in supplier selection. In the selection of suppliers, the OEM (Original Equipment Manufacturing) Department has difficulties in choosing suppliers because many suppliers have submitted offers of cooperation. Therefore, we need a supplier selection decision support system so that the OEM department can determine the appropriate supplier in purchasing products, services and materials. This decision support system uses the SAW (Simple Additive Weighting) method where this method is used to overcome existing problems because there are many alternatives and criteria that must be considered in supplier selection such as legality, quality management, production capacity, production quality and innovation. The tests were carried out by comparing the calculations through Microsoft Excel and the web-based SAW program at PT Avo Innovation Technology by using 13 data suppliers to test system performance. It was concluded from the test that the percentage of system performance was 100%, so that this system could be implemented in the company.

Keyword: Decision Support System, Supplier Selection, Simple Additive Weighting (SAW).