

ABSTRAK

KARINA NATASHA. Perbandingan Sistem Pendukung Keputusan Penerimaan Beasiswa Metode Weighted Product dan Simple Additive Weighting Berbasis Web. Skripsi. Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Negeri Jakarta. 2020. Di bawah bimbingan Drs. Mulyono, M.Kom dan Med Irzal, M.Kom.

Weighted Product dan Simple Additive Weighting merupakan metode yang dapat digunakan untuk menyelesaikan masalah *Multi-Attribute Decision Making*. Kedua metode tersebut menentukan nilai bobot di setiap atribut atau kriteria yang ditentukan dengan proses perangkingan yang akan menyeleksi alternatif terbaik dari sejumlah alternatif. Dalam skripsi ini, metode Weighted Product dan Simple Additive Weighting diterapkan untuk menghasilkan pendukung keputusan penerimaan beasiswa. Variabel penentu yang digunakan adalah penghasilan orang tua, uang kuliah tunggal, dan jumlah tanggungan. Sistem pendukung keputusan berbasis web dibuat sebagai alat simulasi untuk menghasilkan perangkingan dari metode Weighted Product dan Simple Additive Weighting. Berdasarkan uji coba yang dilakukan hasil perangkingan metode Simple Additive Weighting lebih baik daripada metode Weighted Product karena Simple Additive Weighting mampu meminimalisir preferensi alternatif yang sama.

Kata Kunci : Weighted Product, Simple Additive Weighting, Beasiswa

ABSTRACT

KARINA NATASHA. Comparison of Decision Support System for Scholarship Acceptance with Weighted Product and Simple Additive Weighting Methods Web Based. Thesis. Faculty of Mathematic and Science. State University of Jakarta. Under supervised by Drs. Mulyono, M. Kom and Med Irzal M.Kom.

Weighted Product and Simple Additive Weighting are methods that can be used to solve Multi-tribute Decision Making problems. These two methods determine the weight value in each attribute or criteria specified with the ranking process that will select the best alternative from a number of alternatives. In this thesis, Weighted Product and Simple Additive Weighting methods are applied to produce decision support for scholarship acceptance. The determining variables used are parent's income, single tuition fee, and number of family dependents. Decision support system web based are used as a simulation tool to produce the ranking results from Weighted Product and Simple Additive Weighting methods. Based on trial conducted the ranking of the Simple Additive Weighting method is better than the Weighted Product method because Simple Additive Weighting is able to minimize the same alternative preference values.

Keywords : Weighted Product, Simple Additive Weighting, Scholarship