

ABSTRACT

THESIS TITLE : DECISION SUPPORT SYSTEM FOR DETERMINING THE ACCEPTANCE OF VDMI (VAN DEVENTER-MAAS INDONESIA) SCHOLARSHIP AT UNIVERSITAS BUNG HATTA WITH THE SIMPLE ADDITIVE WEIGHTING (SAW) METHOD USING PHP PROGRAMMING LANGUAGE AND MYSQL DATABASE

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STUDY PROGRAM : INFORMATION SYSTEM

DEGREE GRANTED : STRATA 1 (S1)

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This research aims to develop a web-based Decision Support System (DSS) using the Simple Additive Weighting (SAW) method to optimize the scholarship admission process for the Van Deventer-Maas Indonesia (VDMI) scholarship at Universitas Bung Hatta. The system assists the selection committee in evaluating and determining scholarship recipients more effectively, efficiently, and objectively. The system is implemented using PHP and MySQL to enhance the accuracy of the admission process based on predetermined criteria, such as GPA, parental income, and the number of siblings. The SAW method is applied for data normalization and weight calculation to generate a systematic and transparent ranking. The results indicate that the system can identify and recommend scholarship recipients more quickly and accurately than manual methods, improving transparency and reducing human errors. However, the system still has limitations, such as the inability to import data from files, requiring admins to input data manually, and the absence of a filtering feature based on the selection year. Therefore, this study suggests further development to enhance the system's efficiency and flexibility, making it more beneficial for the university and prospective scholarship recipients.

Keywords: *Decision Support System, VDMI Scholarship, Simple Additive Weighting, PHP, MySQL.*

ABSTRAK

**JUDUL SKRIPSI : SISTEM PENDUKUNG KEPUTUSAN
PENENTUAN PENERIMAAN BEASISWA
VDMI (VAN DEVENTER-MAAS
INDONESIA) DI UNIVERSITAS BUNG
HATTA MENGGUNAKAN METODE
SIMPLE ADDITIVE WEIGHTING (SAW)
DENGAN BAHASA PEMROGRAMAN
PHP DAN DATABASE MYSQL**

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Penelitian ini bertujuan mengembangkan Sistem Pendukung Keputusan (SPK) berbasis web dengan metode Simple Additive Weighting (SAW) untuk mengoptimalkan seleksi penerimaan beasiswa Van Deventer-Maas Indonesia (VDMI) di Universitas Bung Hatta. Sistem ini membantu panitia seleksi menilai dan menentukan penerima beasiswa lebih efektif, efisien, dan objektif. Implementasi sistem dilakukan menggunakan PHP dan MySQL agar seleksi lebih akurat berdasarkan kriteria yang ditetapkan, seperti IPK, penghasilan orang tua, dan jumlah saudara. Metode SAW diterapkan untuk normalisasi data dan perhitungan bobot guna menghasilkan perankingan yang sistematis dan transparan. Hasil penelitian menunjukkan sistem dapat mengidentifikasi dan merekomendasikan penerima beasiswa lebih cepat dan akurat dibandingkan metode manual, serta meningkatkan transparansi dan mengurangi kesalahan manusia. Namun, sistem masih memiliki keterbatasan, seperti belum bisa mengimpor data dari file sehingga admin harus memasukkan data secara manual, serta belum adanya fitur pemfilteran berdasarkan tahun seleksi. Oleh karena itu, penelitian ini menyarankan pengembangan lebih lanjut untuk meningkatkan efisiensi dan fleksibilitas sistem agar lebih bermanfaat bagi universitas dan calon penerima beasiswa.

Kata Kunci : Sistem Pendukung Keputusan, Beasiswa VDMI, Simple Additive Weighting, PHP, MySQL.