

**PERBANDINGAN METODE *WEIGHTED PRODUCT* (WP),  
*WEIGHTED SUM MODEL* (WSM) DAN *MULTI ATTRIBUTE  
UTILITY THEORY* (MAUT) DALAM SISTEM PENDUKUNG  
KEPUTUSAN PENERIMAAN TENAGA KERJA**

**ABSTRAK**

Salah satu cara yang digunakan untuk memperoleh tenaga kerja yang berkualitas adalah melakukan penerimaan calon tenaga kerja dengan cara yang terstruktur. Penerimaan calon tenaga kerja yang terstruktur dapat diperoleh dengan cara melakukan penilaian dari beberapa aspek, misalnya tes tertulis dan wawancara. Perhitungan dari aspek tersebut biasanya dilakukan secara pembobotan manual berdasarkan nilai rata-rata. Penelitian ini mengimplementasikan metode *Weighted Product* (WP), metode *Weighted Sum Model* (WSM) dan metode *Multi Attribute Utility Theory* (MAUT) untuk menghitung pembobotan, kemudian dibandingkan dengan hasil perbandingan manual oleh perusahaan "X". Hasil perbandingan dari penelitian ini ditinjau dari beberapa segi. Dari segi akurasi dan *error*, metode MAUT memiliki akurasi sebesar 82,2% dan *error* 17,8%, metode WSM memiliki nilai akurasi sebesar 81,77% dan *error* 18,23%, metode WP memiliki akurasi sebesar 80,57% dan *error* 19,43%. Dari segi kecepatan *compile*, metode WSM memerlukan waktu selama 1.001003027 detik, metode MAUT selama 1.004904032 detik dan metode WP selama 1.010123014 detik. Dari segi kompleksitas algoritma, metode WP, WSM dan MAUT memiliki kompleksitas 3.

**Kata Kunci:** Sistem Pendukung Keputusan (SPK), penerimaan tenaga kerja, metode *Weighted Product* (WP), metode *Weighted Sum Model* (WSM), metode *Multi Attribute Utility Theory* (MAUT).

# COMPARISON OF WEIGHTED PRODUCT (WP), WEIGHTED SUM MODEL (WSM) AND MULTI ATTRIBUTE UTILITY THEORY (MAUT) METHOD FOR RECRUITMENT DECISION SUPPORT SYSTEM

## ABSTRACT

One of the ways in which a qualified worker is employed is to recruit prospective workers in a structured way. Acceptance of a structured candidate can be obtained by assessing several aspects, such as written tests and interviews. Calculations of these aspects are usually done by manual weighting based on average values. This research implements Weighted Product (WP) method, Weighted Sum Model (WSM) method and Multi Attribute Utility Theory (MAUT) method to calculate weighting, then compared with manual ranking result by company "X". The comparative results of this study are reviewed in several ways. In terms of accuracy and error, MAUT method has an accuracy of 82.2% and error 17.8%, WSM method has an accuracy of 81.77% and error 18.23%, WP method has an accuracy of 80.57% and error 19.43%. In terms of compile speed, WSM method takes 1.001003027 seconds, MAUT method for 1.004904032 sec and WP method for 1.010123014 seconds. In terms of algorithm complexity, WP, WSM and MAUT methods have complexity of 3.

**Keywords:** Decision Support System (DSS), recruitment, Weighted Product (WP) method, Weighted Sum Model (WSM) method, Multi Attribute Utility Theory (MAUT) method.