

**IMPLEMENTASI METODE *SIMPLE ADDITIVE WEIGHTING* (SAW)
DAN *TECHNIQUE FOR ORDER PREFERENCE BY SIMILARITY TO
IDEAL SOLUTION* (TOPSIS) PADA APLIKASI PENENTUAN PREDIKAT
KELULUSAN PESERTA UJIAN KENAIKAN TINGKAT (UKT) (STUDI
KASUS: BKC CABANG KABUPATEN BANDUNG)**

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ABSTRAK

Aplikasi penentuan predikat kelulusan peserta UKT Bandung Karate Club merupakan suatu SPK yang dibuat untuk membantu proses pemberian predikat kelulusan peserta UKT. Penelitian ini dilakukan untuk menguji keakuratan dan *response time* metode terhadap rekomendasi predikat kelulusan UKT guna mengatasi berbagai kesalahan yang timbul oleh proses manualisasi.

Output penelitian yang utama dapat membantu seluruh admin, pelatih dan penguji selama proses UKT terkhusus penentuan predikat peserta secara akurat, efektif dan efisien dengan perbandingan metode dari algoritma FMADM antara metode SAW dan TOPSIS. Menggunakan metode pengembangan sistem *prototype*. Dan metode pengumpulan data studi lapangan (wawancara dan observasi) serta studi pustaka.

Hasil penelitian berdasarkan 120 data *primer*, SAW memiliki nilai akurasi 72,5% dengan *response time* 1,200 detik. Serta TOPSIS dengan nilai akurasi 36,7% dan *response time* 0,077 detik. Sehingga dapat disimpulkan metode yang paling tepat digunakan pada penelitian ini adalah SAW.

Kata Kunci: BKC(Bandung Karate Club), UKT(Ujian Kenaikan Tingkat), SAW(*Simple Additive Weighting*), FMADM(*Fuzzy Multiple Attributed Decision Making*), TOPSIS(*Technique For Order Preference By Similarity To Ideal Solution*), Perbandingan, SPK(Sistem Pendukung Keputusan).

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ABSTRACT

The application for determining the predicate of graduation for Bandung Karate Club participants is an SPK made to assist the process of awarding the graduation of UKT participants. This research was conducted to test the accuracy and response time of the method against the recommendation of the title of UKT graduation in order to overcome various errors arising from the process of manualization.

The main research output can help all administrators, trainers and testers during the UKT process specifically determine the predicate of participants accurately, effectively and efficiently by comparing the methods of the FMADM algorithm between the SAW and TOPSIS methods. Using the prototype system development method. And methods of data collection are field studies (interviews and observations) and literature studies.

The results of the study based on 120 primary data, SAW has a 72,5% accuracy value with a response time of 1,200 seconds. And TOPSIS with an accuracy value of 36,7% and response time 0.077 seconds. So that it can be concluded that the most appropriate method used in this study is SAW.

Keywords: *BKC(Bandung Karate Club), UKT(Level Increase Test), SAW(Simple Additive Weighting), FMADM(Fuzzy Multiple Attributed Decision Making), TOPSIS(Technique for Order Preference By Similarity To Ideal Solution), Comparison, SPK(Decision Support System).*