

## ABSTRACT

### **RIZKI MAHENDRA, DECISION SUPPORT SYSTEM TO DETERMINE STUDENTS WHO ARE ENTITLED TO RECEIVE SCHOOL OPERATIONAL ASSISTANCE FUNDS AT SMA NEGERI 8 SAROLANGUN USING THE TECHNIQUE FOR ORDER PREFERENCE BY SIMILARITY TO IDEAL SOLUTION (TOPSIS) METHOD**

The development of Information and Communication Technology (ICT) brings many benefits in various areas of life, one of which is education. In the world of education, identifying and giving recognition to outstanding students is very important. Model students have a big role in creating a positive learning environment and motivating other students. The problems that are currently occurring at SMAN 8 Sarolangun in determining the acceptance of students who are entitled to receive school operational assistance that are currently occurring are inaccurate or incomplete data, unclear criteria, and still not achieving eligibility assessment standards in order to be able and obliged to receive operational assistance for the school, due to the closeness factor with related parties and internal parties from SMA Negeri 8 Sarolangun. In this research, a more accurate SPK method was applied, namely the Technique For Order Preference by Similarity to Ideal Solution (TOPSIS) method, namely a decision making method that can choose options. best with the shortest distance from solutions other than positive ideal and negative ideal solutions. Technique for Order Preference By Similarity To Ideal Solution (Topsis) is a multi-criteria decision making method based on the principle that the alternative chosen has the closest distance to the positive ideal solution and the farthest distance from the negative ideal solution. Makes it easier for the Sarolangun 8 State High School in determining students who are entitled to receive school operational assistance funds. Development of a decision support system in determining students who are entitled to receive school operational assistance funds using the TOPSIS method has been built. With this, the SMA has been helped and increased effectiveness in decision making. The decision support system was designed using the TOPSIS method. This method uses several alternatives and criteria that will be used as references, as well as preference weights, then an assessment and ranking is carried out which have been sorted from highest to lowest based on the calculated weighted sum results.

**Keywords** : *Decision Making Systems, Optimization, School Management, Methods TOPSIS.*

## ABSTRAK

### **RIZKI MAHENDRA, SISTEM PENDUKUNG KEPUTUSAN UNTUK MENENTUKAN SISWA YANG BERHAK MENERIMA DANA BANTUAN OPERASIONAL SEKOLAH PADA SMA NEGERI 8 SAROLANGUN MENGGUNAKAN METODE TECHNIQUE FOR ORDER PREFERENCE BY SIMILARITY TO IDEAL SOLUTION (TOPSIS)**

Perkembangan Teknologi Informasi dan Komunikasi (TIK) membawa begitu banyak manfaat diberbagai bidang kehidupan, salah satunya bidang pendidikan. Dalam dunia pendidikan, mengidentifikasi dan memberikan pengakuan kepada siswa berprestasi sangat penting. Siswa teladan memiliki peran besar dalam menciptakan lingkungan belajar yang positif dan memotivasi siswa lainnya. Adapun permasalahan yang terjadi saat ini di SMAN 8 Sarolangun dalam melakukan penentuan penerimaan siswa yang berhak menerima bantuan operasional sekolah yang terjadi saat ini adalah data yang tidak akurat atau tidak lengkap, kriteria yang tidak jelas, masih belum tercapainya standar penilaian kelayakan agar dapat dan wajib menerima bantuan operasional sekolah tersebut, dikarenakan faktor kedekatan dengan pihak terkait maupun pihak internal dari SMA Negeri 8 Sarolangun. Pada penelitian ini diterapkan metode SPK yang lebih akurat yaitu Metode Technique For Order Preference by Similarity to Ideal Solution (TOPSIS), yaitu metode pengambilan keputusan yang dapat memilih opsi terbaik dengan jarak terpendek dari solusi selain ideal positif dan solusi ideal negatif. Technique for Order Preference By Similarity To Ideal Solution (Topsis) adalah metode pengambilan keputusan multi kriteria yang didasarkan pada prinsip bahwa alternatif yang dipilih memiliki jarak terdekat ke solusi ideal positif dan jarak terjauh dari solusi ideal negatif. mempermudah pihak sekolah sma negeri 8 sarolangun dalam menentukan siswa yang berhak menerima dana bantuan operasional sekolah. Pembangunan sistem pendukung keputusan dalam menentukan siswa yang berhak menerima dana bantuan operasional sekolah dengan menggunakan metode TOPSIS telah dibangun. Dengan ini pihak SMA telah terbantu dan meningkatkan efektifitas dalam pengambilan keputusan. Sistem pendukung keputusan dirancang dengan metode TOPSIS. Pada metode ini menggunakan beberapa alternatif dan kriteria yang akan dijadikan acuan, serta bobot preferensi, kemudian dilakukan penilaian dan perangkingan yang telah diurutkan dari yang tertinggi hingga yang terendah berdasarkan hasil penjumlahan terbobot yang telah terhitung.

**Kata Kunci : Sistem Pengambilan Keputusan, Optimalisasi, Manajemen Sekolah, Metode TOPSIS.**

