ABSTRAK

Dinas Perindustrian Provinsi Sumatera Selatan menghadapi tantangan dalam menentukan prioritas penerima bantuan Industri Kecil Menengah (IKM) secara objektif karena proses seleksi yang masih dilakukan secara manual rentan terhadap subjektivitas dan sulit dipertanggungjawabkan. Penelitian ini bertujuan merancang dan mengimplementasikan Sistem Pendukung Keputusan berbasis metode *Multi-Objective Optimization on the Basis of Ratio Analysis* (MOORA) untuk menentukan prioritas penerima bantuan IKM. Sistem dikembangkan menggunakan metode *Waterfall* dan melibatkan empat peran pengguna, yaitu Admin, Pelaku IKM, Kepala Dinas, dan Perusahaan CSR. Metode MOORA diterapkan untuk melakukan normalisasi, pembobotan, dan perhitungan nilai optimasi (Yi) secara otomatis berdasarkan lima kriteria, yaitu jenis usaha, lama usaha, nilai investasi, jumlah tenaga kerja, dan izin usaha. Hasil pengujian menggunakan metode *Black Box Testing* menunjukkan seluruh fitur sistem berjalan sesuai kebutuhan fungsional yang ditetapkan. Hasil perangkingan menunjukkan alternatif A2 (Cap Pohon Aren) memperoleh nilai Yi tertinggi sebesar 0,389986242 dan menempati peringkat pertama, sedangkan alternatif A6 (CV. Sinar Maju Perkasa) memperoleh nilai terendah sebesar 0,220879582. Hasil perhitungan sistem terbukti sesuai dengan perhitungan manual yang telah divalidasi sehingga sistem memiliki tingkat akurasi yang baik. Sistem ini efektif mempersingkat proses seleksi serta memberikan nilai tambah melalui pengelolaan bantuan dari dua sumber pendanaan yaitu APBD dan CSR perusahaan.

Kata kunci: Sistem Pendukung Keputusan, MOORA, Industri Kecil Menengah, Bantuan, *Rapid Application Development*

ABSTRACT

The Department of Industry of South Sumatra Province faces challenges in objectively determining priority recipients of Small and Medium Industry (IKM) assistance, as the manual selection process is prone to subjectivity and difficult to be held accountable. This study aims to design and implement a Decision Support System based on the Multi-Objective Optimization on the Basis of Ratio Analysis (MOORA) method to determine IKM assistance priority recipients. The system was developed using the Waterfall method model involving four user roles: Admin, IKM Actor, Head of Department, and CSR Company. The MOORA method was applied to automatically perform normalization, weighting, and optimization value (Yi) calculation based on five criteria: type of business, length of business, investment value, number of employees, and business license. Black Box Testing results indicate that all system features operate in accordance with the established functional requirements. The ranking results show that alternative A2 (Cap Pohon Aren) achieved the highest Yi value of 0.389986242 and ranked first, while alternative A6 (CV. Sinar Maju Perkasa) obtained the lowest value of 0.220879582. System calculations were proven consistent with validated manual calculations, demonstrating a high level of accuracy. The system effectively shortens the selection process and adds value through assistance management from two funding sources: the Regional Budget (APBD) and Corporate Social Responsibility (CSR) funds.

Keywords: Decision Support System, MOORA, Small and Medium Industry, Assistance, Rapid Application Development