# ABSTRACT

This study aims to develop a Decision Support System (DSS) for loan feasibility assessment at the Savings and Loan Cooperative of the West Sumatra Regional Office of Social Services using the *Simple Additive Weighting* (SAW) method. Loan approval processes in cooperatives often face challenges in assessing borrower eligibility, requiring consideration of various criteria such as repayment ability, credit history, and collateral. The SAW method was chosen for its ability to combine various quantitative and qualitative criteria to produce an optimal ranking of alternatives. The developed system implements the steps of the SAW method, including determining criteria, normalizing the decision matrix, assigning weights, and calculating the final score to evaluate borrower feasibility. The findings of this study indicate that the DSS developed can assist cooperatives in making loan approval decisions more objectively and efficiently, reducing the potential for human error and speeding up the assessment process. It is hoped that the results of this study can serve as a reference for other cooperatives in adopting information technology for loan assessment processes.

***Keywords : Savings and Loan Cooperative, Decision Support System, Simple Additive Weighting (SAW), Loan Feasibility Assessment, Process Efficiency.***

## ABSTRAK

Penelitian ini bertujuan untuk mengembangkan sistem pendukung keputusan (SPK) dalam penilaian kelayakan peminjaman pada Koperasi Simpan Pinjam Kanwil Depensos Sumatera Barat menggunakan metode *Simple Additive Weighting* (SAW). Proses pemberian pinjaman di koperasi seringkali menghadapi tantangan dalam penilaian kelayakan peminjam, yang memerlukan pertimbangan berbagai kriteria seperti kemampuan bayar, riwayat kredit, dan jaminan. Metode SAW dipilih karena kemampuannya dalam menggabungkan berbagai kriteria yang bersifat kuantitatif dan kualitatif untuk menghasilkan peringkat alternatif yang optimal. Sistem yang dikembangkan mengimplementasikan langkah-langkah dalam metode SAW, yaitu penentuan kriteria, normalisasi matriks keputusan, pemberian bobot, dan perhitungan skor akhir untuk menentukan kelayakan peminjam. Hasil dari penelitian ini menunjukkan bahwa sistem SPK yang dikembangkan dapat membantu pihak koperasi dalam mengambil keputusan pemberian pinjaman secara lebih objektif dan efisien, mengurangi potensi kesalahan manusia, dan mempercepat proses penilaian. Diharapkan hasil dari penelitian ini dapat menjadi referensi bagi koperasi lainnya dalam menerapkan teknologi informasi dalam proses penilaian peminjaman.

***Kata Kunci : Sistem Pendukung Keputusan, Simple Additive Weighting (SAW), Penilaian Kelayakan Peminjaman, Koperasi Simpan Pinjam.***