ABSTRAK

Tata kelola administrasi pada Koperasi Simpan Pinjam Badan Pusat Statistik (BPS) Provinsi Sumatera Selatan saat ini masih menemui hambatan, terutama terkait sinkronisasi data pemotongan gaji untuk angsuran dan penentuan eligibilitas pinjaman yang bersifat konvensional. Implikasinya, tahapan validasi membutuhkan durasi yang panjang serta rentan terhadap subjektivitas keputusan di antara tim penguji. Penelitian ini bertujuan membangun aplikasi simpan pinjam berbasis web yang mengintegrasikan pengelolaan data simpanan, pinjaman, angsuran, dan laporan keuangan, menyediakan fitur monitoring transaksi agar anggota dan pengurus koperasi dapat memantau status pembayaran secara lebih efisien, serta menerapkan metode Simple Additive Weighting (SAW) untuk mendukung pengambilan keputusan kelayakan pinjaman berdasarkan enam kriteria: persetujuan pasangan, kualitas dokumen RHB, jumlah gaji, lama keanggotaan, jumlah pinjaman yang diajukan, dan riwayat pembayaran angsuran. Sistem dikembangkan menggunakan metode waterfall, diuji menggunakan metode Black Box Testing terhadap 15 skenario fungsional, dan divalidasi melalui User Acceptance Testing (UAT) yang melibatkan 24 responden. Hasil pengujian menunjukkan bahwa seluruh fitur utama aplikasi berjalan sesuai spesifikasi kebutuhan, dan metode SAW mampu menghasilkan nilai preferensi serta peringkat kelayakan pinjaman secara objektif dan konsisten. Aplikasi ini diharapkan dapat meningkatkan efisiensi administrasi koperasi serta transparansi dalam proses pemberian pinjaman.

Kata kunci: koperasi simpan pinjam, Simple Additive Weighting, sistem pendukung keputusan, aplikasi berbasis *web*

ABSTRACT

The Credit Cooperative at the BPS Office of South Sumatra Province encounters operational bottlenecks in credit administration, specifically in aligning salary-deducted installments and evaluating member creditworthiness under manual frameworks. Consequently, the verification cycle becomes protracted, increasing the likelihood of disparate judgments among evaluation officers. This study aims to develop a web-based savings and loan application that integrates the management of savings, loans, installment payments, and financial reporting, provides a transaction monitoring feature so that members and cooperative administrators can track payment status more efficiently, and applies the Simple Additive Weighting (SAW) method to support loan eligibility decisions based on six criteria: spousal consent, RHB document quality, salary amount, length of membership, requested loan amount, and installment payment history. The system was developed using the waterfall method, tested using Black Box Testing across 15 functional scenarios, and validated through User Acceptance Testing (UAT) involving 24 respondents. The results show that all main features of the application function according to the requirement specifications, and the SAW method successfully produces preference values and eligibility rankings objectively and consistently. This application is expected to improve the efficiency of cooperative administration and the transparency of the loan approval process.

Keywords: savings and loan cooperative, Simple Additive Weighting, decision support system, web-based application