ABSTRACT

IKHSAN FARIZKI, *DECISION SUPPORT SYSTEM FOR DETERMINING CUSTOMER CREDITWORTHINESS AT BANK NAGARI SOLOK USING SIMPLE MULTI ATTRIBUTE RATING TECHNIQUE (SMART) METHOD*

The process of granting credit in banking institutions requires careful evaluation to ensure that borrowers are truly eligible, thereby minimizing the risk of non-performing loans. This study aims to design and develop a Decision Support System (DSS) based on the Simple Multi Attribute Rating Technique (SMART) method to assess the creditworthiness of prospective borrowers at Bank Nagari Solok. The SMART method was chosen due to its ability to integrate multiple evaluation criteria in a systematic, objective, and measurable manner. Data were collected through interviews with bank staff, and the system was developed using the Next.js framework with an SQLite database. The system processes prospective customer data based on the assigned weights and values of each criterion to generate consistent and accurate creditworthiness recommendations. Testing results indicate that the system improves both efficiency and accuracy in the credit assessment process and contributes to reducing potential credit risks. Therefore, the implementation of a SMART-based DSS is expected to support more precise decision-making in the credit granting process within banking institutions.

Keywords: ***Decision Support System, Credit, SMART, Customer Evaluation, Bank Nagari Solok***

ABSTRAK

IKHSAN FARIZKI, SISTEM PENDUKUNG KEPUTUSAN MENENTUKAN KELAYAKAN PEMBERIAN KREDIT PADA NASABAH DI BANK NAGARI SOLOK MENGGUNAKAN METODE *SIMPLE MULTI ATTRIBUTE RATING TECHNIQUE* (SMART)

Pemberian kredit oleh bank memerlukan proses evaluasi yang cermat untuk memastikan nasabah yang menerima pinjaman benar-benar layak, guna menghindari risiko kredit bermasalah. Penelitian ini bertujuan untuk merancang dan mengembangkan Sistem Pendukung Keputusan (SPK) berbasis metode *Simple Multi Attribute Rating Technique* (SMART) dalam menentukan kelayakan pemberian kredit kepada nasabah di Bank Nagari Solok. Metode SMART dipilih karena kemampuannya dalam mengintegrasikan berbagai kriteria penilaian secara sistematis, objektif, dan terukur. Data dikumpulkan melalui wawancara langsung dengan pegawai bank, dan sistem dibangun menggunakan *framework Next.js* serta *database SQLite*. Sistem yang dikembangkan memproses data calon nasabah berdasarkan bobot dan nilai masing-masing kriteria, sehingga menghasilkan rekomendasi kelayakan yang konsisten dan akurat. Hasil pengujian menunjukkan bahwa sistem dapat meningkatkan efisiensi dan akurasi dalam proses seleksi kredit, serta membantu mengurangi potensi risiko kredit bermasalah. Dengan demikian, implementasi SPK berbasis SMART diharapkan mampu mendukung pengambilan keputusan yang lebih tepat dalam proses pemberian kredit di lingkungan perbankan.

Kata Kunci: Sistem Pendukung Keputusan, Kredit, SMART, Evaluasi Nasabah, Bank Nagari Solok