ABSTRACT

Information technology has had a significant impact on improving efficiency across various sectors. Bank Rakyat Indonesia (BRI) Unit Pasar Baru Kota Padang faces challenges in determining credit eligibility, which is still conducted manually. The manual process has weaknesses, including the potential for subjectivity in assessment and inefficiency in terms of time and labor. To address this issue, the concept of a Decision Support System (DSS) is proposed as an alternative. The Analytical Hierarchy Process (AHP) method is used due to its ability to handle multi-criteria decision-making systematically and objectively. This DSS is designed to assist the bank in evaluating the eligibility of prospective customers based on five main criteria: Income, Collateral, Occupation, Credit Purpose, and Number of Dependents. The test results show accurate ranking of customer eligibility, with Irma Dewi achieving the highest score of 0.999, indicating a very good level of creditworthiness. System evaluation shows that the use of AHP in the DSS can improve objectivity, efficiency, and speed in the decision-making process. The contribution of this research includes enhancing objectivity, efficiency, and speed in credit eligibility assessment at BRI Unit Pasar Baru Kota Padang through the implementation of AHP in the Decision Support System.

Keywords: Decision Making System, Customer Assessment, Credit Granting, Analytical Hierarchy Process, Objective Customer Evaluation.

ABSTRAK

Teknologi informasi telah memberikan dampak signifikan terhadap peningkatan efisiensi di berbagai sektor. Bank Rakyat Indonesia (BRI) Unit Pasar Baru Kota Padang menghadapi tantangan dalam proses penentuan kelayakan pemberian kredit yang masih dilakukan secara manual. Proses manual memiliki kelemahan berupa potensi subjektivitas dalam penilaian dan ketidakefisienan waktu serta tenaga. Mengatasi permasalahan tersebut, maka konsep Sistem Pendukung Keputusan (SPK) diusulkan sebagai alternatif. Metode *Analytical Hierarchy Process* (AHP) digunakan karena kemampuannya dalam mengelola keputusan multikriteria secara sistematis dan objektif. SPK ini dirancang untuk membantu pihak bank dalam mengevaluasi kelayakan calon nasabah berdasarkan lima kriteria utama, yaitu Penghasilan, Jaminan, Pekerjaan, Tujuan Kredit, dan Jumlah Tanggungan. Hasil pengujian peringkat kelayakan nasabah secara akurat, dengan Irma Dewi memperoleh skor tertinggi sebesar 0.999, yang tingkat kelayakan kredit yang sangat baik. Evaluasi terhadap sistem menunjukkan bahwa penggunaan AHP dalam SPK ini mampu meningkatkan objektivitas, efisiensi, serta kecepatan dalam proses pengambilan keputusan. Kontribusi penelitian ini mencakup peningkatan objektivitas, efisiensi, dan kecepatan dalam penilaian kelayakan kredit di BRI Unit Pasar Baru Kota Padang melalui penerapan metode AHP dalam Sistem Pendukung Keputusan.

Kata Kunci: Sistem Pengambilan Keputusan, Penilaian Nasabah, Pemberian Kredit, *Analytical Hierarchy Process*, Evaluasi Nasabah Objektif.