

ABSTRAK

KSPPS BMT Huwaiza Depok dalam proses penilaian kelayakan pembiayaannya masih mengandalkan Microsoft Excel dan penilaian subjektif dari masing-masing petugas, sehingga berpotensi menimbulkan perbedaan persepsi antar petugas dan risiko pemberian pembiayaan kepada calon penerima yang kurang layak. Penelitian ini bertujuan untuk merancang dan membangun Sistem Pendukung Keputusan (SPK) berbasis website menggunakan kombinasi metode Analytical Hierarchy Process (AHP) dan Simple Additive Weighting (SAW) untuk membantu proses penilaian kelayakan pembiayaan secara lebih objektif dan terstruktur. AHP digunakan untuk menentukan bobot dari lima kriteria penilaian yaitu administrasi (41,31%), riwayat pembiayaan (28,12%), pendapatan (18,60%), jaminan (7,29%), dan karakter & lingkungan (4,67%) dengan nilai CR sebesar 0,0149 yang dinyatakan konsisten. Selanjutnya SAW digunakan untuk menghasilkan peringkat kelayakan setiap calon penerima pembiayaan. Sistem ini diharapkan dapat membantu komite pembiayaan BMT Huwaiza dalam mengambil keputusan yang lebih terukur guna meminimalkan risiko pembiayaan bermasalah.

Kata kunci: Sistem Pendukung Keputusan, Kelayakan Pembiayaan, Analytical Hierarchy Process, Simple Additive Weighting, KSPPS BMT

ABSTRACT

KSPPS BMT Huwaiza Depok currently relies on Microsoft Excel and subjective assessments by individual officers in evaluating financing eligibility, which risks inconsistent judgments across officers and the potential approval of financing to less qualified applicants. This study aims to design and develop a web-based Decision Support System (DSS) using a combination of the Analytical Hierarchy Process (AHP) and Simple Additive Weighting (SAW) methods to support a more objective and structured financing eligibility assessment process. AHP was applied to determine the weights of five assessment criteria: administration (41.31%), financing history (28.12%), income (18.60%), collateral (7.29%), and character & environment (4.67%), yielding a Consistency Ratio (CR) of 0.0149, which confirms acceptable consistency. SAW was then used to generate eligibility rankings for each financing applicant. This system is expected to assist the BMT Huwaiza financing committee in making more measurable decisions, thereby minimizing the risk of non-performing financing.

Keywords: *Decision Support System, Financing Eligibility, Analytical Hierarchy Process, Simple Additive Weighting, KSPPS BMT*