

ABSTRACT

The aim of this method is to apply the C4.5 algorithm decision tree method and the AHP method decision support system in selecting potential new customers. The C4.5 algorithm decision tree method is used to form a decision tree based on borrower historical data, while the AHP method helps in determining the weight of each risk criterion. The research data set is 20 alternatives with 4 variables, namely employment, monthly income, loan amount, and loan term. The results of the research obtained a branching and ranking tree for new customers. The benefits of this research are able to improve better service in the loan management process at pegadaian

Keywords *Data Mining, C4.5 Algorithm, Analytical Hierarchy Process, Loan Risk Prediction, Pegadaian, Web-Based Application.*

ABSTRAK

Tujuan metode ini adalah menerapkan metode decision tree algoritma C4.5 dan sistem penunjang keputusan metode AHP dalam pemilihan calon nasabah baru. Metode decision tree algoritma C4.5 digunakan untuk membentuk pohon keputusan berdasarkan data historis peminjam, sementara metode AHP membantu dalam menentukan bobot dari setiap kriteria risiko. Data set penelitian 20 alternatif dengan 4 variabel yakni pekerjaan, penghasilan bulanan, jumlah pinjaman, dan jangka waktu pinjaman. Hasil penelitian mendapatkan pohon percabangan dan perengkingan terhadap nasabah baru. Manfaat penelitian ini mampu meningkatkan pelayanan yang lebih baik pada proses manajemen pinjaman di pegadaiaan

Kata kunci Data Mining, Algoritma C4.5, Analytical Hierarchy Process, Prediksi Risiko Pinjaman, Pegadaian, Aplikasi Berbasis Web.