

ABSTRAK

SISTEM PENDUKUNG KEPUTUSAN KELAYAKAN PEMBERIAN KREDIT KEPADA NASABAH DENGAN METODE *TECHNIQUE FOR ORDER PREFERENCE BY SIMILARITY TO IDEAL SOLUTION*

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PT. LKM BKD Purwokerto memberikan pinjaman kepada debitur yang memenuhi persyaratan pengajuan pinjaman. Namun dalam kegiatannya terdapat beberapa masalah karena dilakukan secara konvensional. Demi meminimalisir kesalahan pengambilan keputusan dan mendapatkan hasil yang adil maka diperlukan sebuah sistem pendukung keputusan. Tujuan penelitian ini adalah membangun sebuah sistem pendukung keputusan yang mampu menganalisis dan membantu pengambilan keputusan untuk menentukan nasabah yang layak menerima pinjaman berdasarkan kriteria penilaian. Metode pengambilan keputusan yang digunakan adalah *Technique for Order Preference by Similarity to Ideal Solution (TOPSIS)* dan metode pengembangan sistem yang digunakan adalah Metode *Waterfall* serta menggunakan *Framework Laravel* dan *DBMS MySQL*. Tahapan metode TOPSIS dalam pengambilan keputusan yaitu menentukan matriks normalisasi, menentukan matriks normalisasi terbobot, menentukan solusi ideal positif dan negatif, menentukan jarak solusi ideal positif dan negatif serta menentukan nilai preferensi. Hasil dari pembangunan sistem yang menerapkan metode TOPSIS adalah menghasilkan sistem yang mampu menganalisis pengajuan pinjaman, melakukan penilaian nasabah berdasarkan prinsip 5C serta menghasilkan nilai preferensi yang digunakan sebagai penilaian kelayakan nasabah untuk mendapatkan pinjaman. Berdasarkan pengujian fungsionalitas dan tingkat akurasi metode diperoleh bahwa sistem dapat berjalan sesuai yang diharapkan serta memiliki keakurasian sebesar 100% sehingga mampu memberikan hasil yang maksimal.

Kata Kunci: Kredit, Laravel, Sistem Pendukung Keputusan, TOPSIS, Waterfall.

ABSTRACT

DECISION SUPPORT SYSTEM FOR THE FEASIBILITY OF GIVING CREDIT TO CUSTOMERS USING THE TECHNIQUE FOR ORDER PREFERENCE BY SIMILARITY TO IDEAL SOLUTION METHOD

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PT. LKM BKD Purwokerto provides loans to debtors who meet the loan application requirements. However, there are several problems in the activity because it is carried out conventionally. In order to minimize decision making errors and obtain fair results, a decision support system is needed. The aim of this research is to build a decision support system that is able to analyze and assist decision making to determine which customers are worthy of receiving a loan based on assessment criteria. The decision making method used is the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) and the system development method used is the Waterfall Method and uses the Laravel Framework and MySQL DBMS. The stages of the TOPSIS method in decision making are determining the normalization matrix, determining the weighted normalization matrix, determining positive and negative ideal solutions, determining the distance of positive and negative ideal solutions and determining preference values. The result of developing a system that applies the TOPSIS method is to produce a system that is able to analyze loan applications, carry out customer assessments based on the 5C principles and produce preference values that are used to assess customers' suitability for obtaining a loan. Based on functionality testing and the accuracy level of the method, it was found that the system can run as expected and has an accuracy of 100% so that it is able to provide maximum results.

Keyword: Credit, Laravel, Decision Support Systems, TOPSIS, Waterfall.