UNIVERSITI TEKNOLOGI MARA

WEB-BASED APPLICATION OF LOAN ELIGIBILITY VERIFICATION SYSTEM FOR NO CREDIT USERS BY USING POWER-BI

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AUGUST 2022

SUPERVISOR'S APPROVAL

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This research proposal was prepared under the supervision of the project supervisor, Dr. Ruzita binti Ahmad. It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Information Technology (Hons.).

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STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

Despite the growth of economic and technology, a great deal of loan applicants, especially lower income earners (LIEs) and young adults, suffer from loan rejection due to little or no credit history. This issue contributes to a high loan rejection rate, which not only causes great losses for the lenders but also harms many applicants, particularly LIEs and young adults. They would not be able to access affordable financing in the future resulting in many financial constraints especially in facing emergencies of unexpected events and widening prospects to improve life such as education, home ownership and family's welfare. Thus, they require an alternative loan eligibility verification model. This research emphasizes that the borrowers' characteristics affect the lending decision. This research identifies several criteria of the applicant such as the debit bank account transaction data instead of conventional credit history data. The objectives of this study are to identify the criteria for loan eligibility, to develop a web-based application system for loan eligibility verification for no credit users and to evaluate the reliability and effectiveness of the proposed model. Predictive analytics with decision tree classification models in the field of machine learning employed a model of decisions in this proposed loan eligibility verification. The finding of this study will assist the lenders in granting loans and decrease the loan rejection rate among the LIEs and young adults. The expected outcome of this study is to ensure that the needs of the society in assessing loans are adequately addressed.

Keywords: Data Visualization, Financial behavior, Predictive analytics and Business Intelligence

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