

ABSTRACT

As a non-bank financial institution, a guarantee company provides credit guarantees to individuals, government institutions, and/or business entities that are feasible in terms of business and business but do not yet meet banking requirements and are not creditworthy (feasible but not yet bankable). This guarantee activity involves three parties, namely the Guarantee Recipient, the Guaranteed, and the Guarantor. Credit assessment in this guarantee company is important to help MSMEs in obtaining financing even though they are not yet bankable.

This study aims to determine, measure accuracy and determine what factors influence the application of the Naïve Bayes Classifier in a competitive advantage to classify which debtor criteria are eligible and unfit for Credit Guarantee. The categorization of the guarantee data variables used are work area, business sector, credit period, credit allocation, guaranteed age, credit value and claim status.

To achieve the objectives of this research, it is necessary to apply competitive advantage that utilizes machine learning to be able to classify guarantee data to determine the criteria for which debtors are eligible and not eligible for Credit Guarantee..

This study focuses on Micro products at one of the Recipients which is a Bank with the largest guarantee volume in the production of Micro Credit of XYZ Guarantee Company for the period 2022 to 2024. However, the large amount of guaranteed volume is followed by the large claim value, it is known that the increase in the Value of Micro Credit Claims at Guarantee Recipient A has increased significantly from the 4th quarter of 2023 and continues to increase until the 4th quarter. Micro Credit has a Conditional Automatic Coverage Scheme or commonly known as Conditional Automatic Coverage (CAC) which is a guarantee system that is carried out automatically and conditionally.

The Naïve Bayes model showed an accuracy rate of 79.69%, indicating good performance and is feasible to be implemented in a data-based digital guarantee system. Variables such as credit value, credit term, business sector, debtor age, allocation, and work area are proven to contribute to the classification of claim risks. The results of this study can be used as a basis for guarantee companies in providing credit guarantees to prospective guarantees and the results of the analysis can also be used as suggestions to guarantee companies in carrying out wider business expansion as well as providing information regarding important parameters in making provisions for credit guarantee prerequisites in the future.

Keywords: *Credit Guarantee, Competitive Advantage, Naïve Bayes*