

## Classification of Poverty Level Data in Indonesia Using the Naïve Bayes Method

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**Abstract :** Poverty poses a significant challenge in Indonesia, requiring an effective analytical approach to understand and address this issue. In this research, we applied the Naïve Bayes classification method to examine and classify poverty data in Indonesia. The main focus is on classifying data using RapidMiner, a powerful data analysis platform. The analysis process involves data splitting to train and test the classification model. First, we collected and prepared a poverty dataset that includes various factors such as education, employment, and health. The experimental results indicate that the Naïve Bayes classification model can provide accurate predictions regarding the risk of poverty. The use of RapidMiner in the analysis process offers flexibility and efficiency in evaluating the model's performance. The classification produces several values to serve as the standard for classifying poverty data in Indonesia using Naive Bayes. The accuracy result obtained is 40.26%, with a moderate recall result of 35.94%, a high recall result of 63.16%, and a low recall result of 38.03%. The precision for the moderate class is 58.97%, for the high class is 17.39%, and for the low class is 58.70%. These results can be seen from the graph below.

**Keywords :** poverty, classification, naïve bayes, Indonesia

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