

## **ABSTRACT**

Poverty interprets one of the conditions a person is unable to meet their basic needs such as clothing, shelter, food, health, in studying, etc. The Central Statistics Agency or better known as BPS uses the concept of ability to be able to meet needs (basic needs approach) to measure poverty levels in Indonesia. By using this concept, expenditure becomes a benchmark of poverty which is seen as an inability from the economic side to meet food and non-food needs, so that the poor can be those who have per capita expenditure per month below the poverty line. Another method proposed by the author to supplement survey and census results to predict poverty in an area in Indonesia is to use Naive Bayes with XGBoost and Similarity Based ecommerce methods. In the experiments that have been carried out, the value is quite relevant between the features and the original values. The number of features that are too little does not always produce a value of accuracy that is also small, as well as vice versa, where the use of a large number of features does not always produce high accuracy.

Keywords: Poverty, BPS, Naive Bayes, XGBoost, Similarity Based, e-commerce data.