

ABSTRACT

In the company one of the most important things is to gain profit as much as possible from their products. One of the example to market it is by telemarketing technique. Telemarketing is used by the company because it is very efficient in terms of time spent and money spent is smaller than sell directly. But became vain if the company is unable to predict product sales. Today, the number of product offering history is too many, it is difficult when using conventional techniques in calculating and predicting product offerings.

In this study, to resolve the issue it will be tested by using 2 algorithm methods which are KNN (K-Nearest Neighbor) algorithm and SVM (support Vector Machine) algorithm. From this two methods will be studied which method has most accurately used to predict product offerings that optimize the seller. With the prediction of product offerings are expected to simplify and add value in optimizing the telemarketing department to support sales strategy based on data generated from the existing process.

The results of this study facilitate telemarketing department in carrying out their duties. Because the value of accuracy obtained from these applications help predict which customers will use the product of the bank. From the tests carried out in this case study, SVM algorithm is superior compared with KNN algorithm. SVM algorithm accuracy value at 266 data at 69.55%, while the value of KNN accuracy of 49.62%.

Keywords: *Data Mining, KNN,SVM*