

ABSTRACT

Marketplaces have gained popularity with the people of Indonesia, resulting in an increase in the products offered. One of the business activities that must carry out so that the company continues to run and develop is sales. Sales are one of the benchmarks of success in the trading business. Many factors affect the level of sales. The use of existing data in company's information system to support decision-making activities request data analysis to explore the potential of available information. Data mining analyzes patterns in data involving machine learning, statistics, and database systems. The decision taken by the holder of corporate responsibility will affect the company in the future. One of the decisions that must be determined is the product to be produced and sold for the next period. In determining the decision needed, a method so that the decision to be taken can be right on target. The technique used to estimate the state in the next period is called prediction. This research proposes the development of goods sales prediction system is the K-Nearest Neighbor method with the Shopee Marketplace case study on the Berrybenka Brand.

Based on the results of research that has been done, the calculation of data mining to predict sales using regression techniques, obtained a different assessment of each category using the calculation of root performance means the square of the error. Root mean squared error is used to find out how different a set of values is. The smaller the RMSE value, the closer the predicted and observed value. And vice versa, the greater the value of the RMSE, the predicted results have a large amount of difference. In the clothing category, the accuracy value is 1,626. For the accessories category, get an accuracy value of 0.29. Whereas, for the bags and shoes category each produced a fairly high verification value, namely 3,918 and 3,587. In this research, there are inaccurate sales prediction results, such as sales that increase or decrease in the value of a drastic prediction, which is considered as sales data in certain months were no product(s) sold or the age range of items not yet started or completed.

Keywords: *Sales, Prediction, Marketplace, K-Nearest Neighbor*