Abstract

In this time, companies produce some goods that are needed by people. The cost of production to produce some goods is not cheap. In the other hand it will also make profit for the companies, because the goods that are produced are sold. So, it is need to predict the selling of product.

Prediction that used is time series prediction. In this time series, it is described how much the selling of product in particular of time. And the number of selling product in the sequence of time are different. So, it will be predicted the number of selling product in the future, it can be called time series prediction

To predict the number of selling the product, is used Adaptive Network Based Fuzzy Inference System (ANFIS). First, data of selling product are seperated into training data, validation data and testing data. And then training and validation are applied to look for the parameters that will be used in the testing process. Next step is testing with parameters that obtained from training and selected based on validation performance.

After that, doing analysis of ANFIS network performance based on MAPE of testing. From this analysis, it is known that ANFIS network able to generalize the new data. From analyzing data of selling product, we can identified that data prediction which has seasonal autocorrelation pattern better than data prediction which has non-trended autocorrelation pattern.

Key Words: ANFIS, Time Series Prediction, selling of product, training, testing, validation