

Abstract

Stock market movement prediction is one of challenging case on financial prediction problem. A precise prediction can make a big advantage for the investors. But, stock market with its complexity makes a hard searching for development of an effective model.

On this final project, the writer was trying to develop two learning models, *artificial neural network* (ANN) dan *support vector machine* (SVM) which can be accurate to predict the stock market movement and compare the performance results based on the study case of technical analysis *input* using Indeks Harga Saham Gabungan (IHSG), a prominent index of Indonesian stock market.

From this final project, It can be conclude that SVM had an advantage than ANN from accuracy testing of IHSG's movement prediction with SVM's highest accuracy was 56,405% and ANN's highest movement was 56,40498% with input of stock market's technical analysis of 3-days periodic.

Keyword: *Artificial Neural Network, Support Vector Machine, Technical Analysis, Prediction, Indeks Harga Saham Gabungan, Trend*