Abstract

Abstract− Technical analysis carries an essential role in a stock market. Traders using technical analysis to find the trading strategy on the market stock. There are some technical indicators tools that can support the technical analysis, such as Moving Average, Stochastic, and others. Candlestick pattern also parts of the tools that used in technical analysis to develop the trading strategy since Candlestick represents the stock behavior. Therefore, understanding the Candlestick pattern and technical indicator tools will be valuable for the traders to predict the trading strategy. This study performs the prediction of trading strategy by analyzing the Candlestick pattern using an Artificial Neural Network (ANN). The technical indicator tools and Candlestick pattern will be generated as the features and label data in the modeling process. The method is applied to four stocks from IDX through their technical indicators for a determined period of time. We find that in the period of 28 days, the model generates the highest accuracy that reached 85.96%. We also used K-Fold Cross Validation to evaluate the model that generates.

Keywords: Artificial Neural Network; Candlestick; K-Fold Cross-Validation; Technical Analysis; Trading Strategy.