

## ABSTRACT

*IDX High Dividend 20 (IDXHIDIV20) is a new index issued by the Indonesia Stock Exchange (IDX) in 2018, this index is very suitable for novice investors because it always shares its dividends every year. Technical analysis is expected to help determine patterns of stock price movements in the future.*

*The purpose of this study is to build a prediction model of the Artificial Neural Network (ANN) Backpropagation and calculate the accuracy and evaluation using Mean Square Error (MSE), Mean Absolute Error (MAE) and R Square ( $R^2$ ).*

*TensorFlow and Keras as Deep Learning Framework and Technical Indicators namely Accumulation Distribution Oscillator (ADOSC), Commodity Channel Index (CCI), Larry William R% (WILLR), Momentum (MOM), Rate of Change (ROC), Relative Strength Index (RSI), Simple Moving Average (SMA), Moving Average (MA), Weighted Moving Average (WMA) are used as input variables*

*Open, High, Low, Close and Volume of BBCA, BBRI, HMSP, TLKM and UNVR emitters for 10 years (January 2009 - December 2018) were used to build the model using Artificial Neural Network (ANN) Backpropagation.*

*Empirical result show that model with hidden layer 32-32-1 using Stochastic Gradient Descent (SGD) 0.01 and No Batch Normalization is the best model in this study.*

*Keywords: Artificial Neural Network, Backpropagation, Stock Market, Prediction*