

ABSTRACT

Capital market plays a critical role in the economy as one of the investment vehicles that impacts a country's long-term growth and development. The increasing involvement of stock investors, particularly the younger generation, necessitates protection through a solid understanding of financial literacy. The method employed in stock prediction in this research is Bidirectional Long Short-Term Memory (Bi-LSTM), with the forecasting target being PT Unilever (UNVR). LSTM, a variation of RNN, provides a solution for handling the exploding gradient issue when predicting lengthy data sequences. The Bidirectional LSTM model that performed the best in this study achieved a MAPE value of 2,2712%. This was attained with a training and testing data split of 80%:20%, along with hyperparameters including 50 hidden states, 150 maximum epochs, a batch size of 4, and the NADAM optimizer.

Keywords : Stocks; Bidirectional Long Short – Term Memory ; Reccurent Neural Network ; NADAM optimizer