

IMPLEMENTATION OF AUTOREGRESSIVE INTEGRATED MOVING AVERAGE (ARIMA) METHOD FOR PT XL AXIATA TBK STOCK PRICE PREDICTION WITH WEBSITE-BASED DASHBOARD VISUALIZATION

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Abstract	<p>The financial market is a dynamic and uncertain sector, with stocks being one of the most commonly used investment instruments. PT XL Axiata Tbk, a telecommunications company listed on the Indonesia Stock Exchange as a blue chip stock, attracts the attention of many investors due to its financial stability and consistent performance. Technical analysis, particularly the ARIMA (Autoregressive Integrated Moving Average) method is used to predict prices. This research focuses on the use of the ARIMA method in predicting the closing price of PT XL Axiata Tbk shares and the implementation of visualization of prediction results through a web-based dashboard. The results of the analysis obtained the best model for stock prediction is ARIMA (2,1,2) with RMSE and MAPE are 50.743 and 0.01653, respectively. The closing price prediction results for 10 consecutive days are 2,190; 2,194; 2,193; 2,196; 2,194; 2,197; 2,195; 2,197; 2,195; and 2,197. Visualization for the results of this prediction is based on a website with the Streamlit framework that presents the results of stock prediction analysis. The existence of a website-based dashboard visualization can help readers find out the prediction results easily and interactively.</p>
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