SONGKOK PRODUCTS IN STORES ON E-COMMERCE SHOPEE

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ABSTRACT

The development of e-commerce such as Shopee has opened up great opportunities for sellers to expand their market reach, including the sale of songkok products. However, the uncertain fluctuations in demand are a challenge for optimal stock management. This study aims to implement the ARIMA method in predicting songkok sales at the Kebumen Berkah Songkok Shop on Shopee. The sales data used covers the period from January 2023 to October 2024. The research stages include business understanding, data collection, data preparation, exploratory data analysis (EDA), modeling using ARIMA, and model evaluation. This study identified four ARIMA estimation models, namely ARIMA (1,0,0), ARIMA (0,0,1), ARIMA (1,0,1), and ARIMA (0,1,0). Based on the model evaluation using the AIC criteria, ARIMA (0,1,0) was selected as the best model with an AIC value of 360.596 and a Mean Absolute Percentage Error (MAPE) value of 44.19. The prediction results show a stable sales pattern every month for the next 12 months, from November 2024 to October 2025.

Keywords: Shopee, Songkok, Forecasting, ARIMA.