MACHINE LEARNING

"SALES FORECASTING "

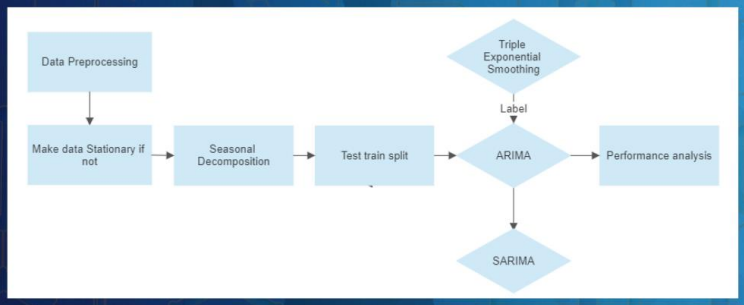
Abstract :

- This study analyzes the use of machine learning techniques for sales forecasting in a retail organization, finding improved accuracy and efficiency with methods such as ARIMA, SARIMA, and Triple exponential smoothing.

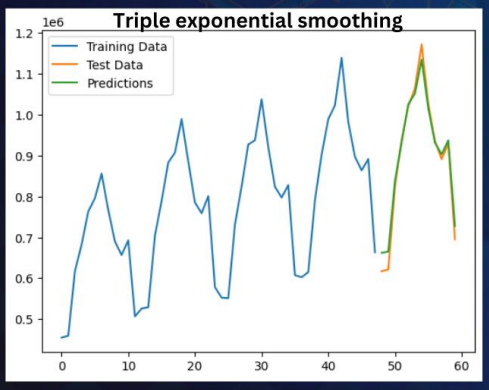
Problem Statement :

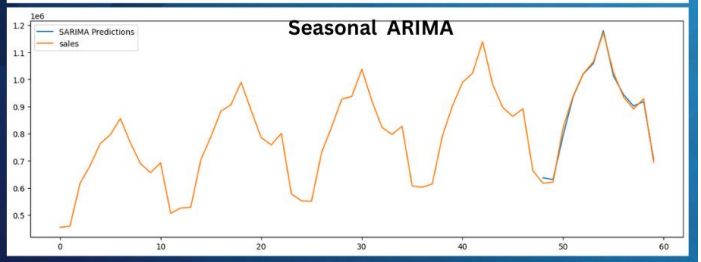
- The aim of this analysis was to identify the most suitable time series model among Triple exponential smoothing, ARIMA, and SARIMA for predicting future sales. The selection was based on the Mean Absolute Percentage Error (MAPE) as the evaluation metric.

Approach :



Final Results :





Conclusion :

- The analysis suggests that SARIMA & Triple exponential smoothing perform better as compared to ARIMA due to seasonality in data.

Model	MAPE
SARIMA	0.01330408
TSE	0.02510657
ARIMA	0.35141871

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