



Subtask 3: Predict Future Sales

Now that the **forecasting model** has been selected and trained on historical data, the next step is to **generate future sales predictions**. Predicting sales helps businesses:

- **Plan inventory and logistics** efficiently.
- **Optimize pricing and marketing strategies** based on demand.
- **Prepare for seasonal fluctuations** such as festive sales.

By using forecasting techniques, e-commerce platforms like **Flipkart, Amazon India, and Meesho** can ensure better resource allocation and reduce risks related to **stock shortages or overstocking**.

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🔧 How You Can Perform This Task?

1 Generate Future Sales Predictions

- Use the trained forecasting model to predict **sales for the next 6 to 12 months**.
- Ensure that predictions consider **seasonal trends, holidays, and special events**.

2 Visualize the Forecasted Sales Trends

- Plot the **historical sales data** alongside the **predicted future sales**.
- Identify **growth trends, slow sales periods, and peak seasons** in the forecast.
- Check if there are **unexpected fluctuations** that need further investigation.

3 Analyze Business Implications

- If the forecast predicts **increased sales**, businesses should plan for **higher inventory and logistics support**.
- If **sales are expected to drop**, strategies like **discounts, targeted promotions, or ad campaigns** may be needed.
- Identify **which months or weeks** require **special attention for sales optimization**.

4 Validate the Forecast Accuracy

- Compare **predicted sales vs. actual sales** (if recent test data is available).
- Measure accuracy using **RMSE (Root Mean Squared Error) or MAPE (Mean Absolute Percentage Error)**.
- If predictions are not accurate enough, consider **tuning the model parameters** for better performance.

5 Prepare a Summary Report of Sales Predictions

- Document expected **sales growth or decline** over the forecasted period.
- Provide **business recommendations** on how to **leverage the forecast for strategic decision-making**.
- Include **visual charts** to clearly present forecasted trends.

Tasks

- ☐ Successfully generated **future sales predictions (6-12 months)**.
- ☐ Created **visualizations** to compare historical vs. predicted sales.
- ☐ Analyzed **business implications** of forecasted sales trends.
- ☐ Evaluated **forecast accuracy** using statistical metrics.
- ☐ Documented findings with **recommendations for business actions**.

Overall Progress

0%

Project Overview

1 Step 1: Understanding Business Requirements and Data Overview >

2 Step 2: Sales Trend Analysis >

3 Step 3: Customer Segmentation Using RFM Analysis >

4 Step 4: Sales Forecasting Using Time Series Analysis ▾

☐ Subtask 1: Prepare Time Series Data

☐ Subtask 2: Choose and Apply a Forecasting Model

☒ Subtask 3: Predict Future Sales

☐ Subtask 4: Submission

5 Step 5: Business Insights & Recommendations >