# Superstore Sales Dataset

Predict Sales using Time Series



Data Card

Code (115)

Discussion (1)

## About Dataset

### Context

Retail dataset of a global superstore for 4 years.  
Perform EDA and Predict the sales of the next 7 days from the last date of the Training dataset!

### Content

Time series analysis deals with time series based data to extract patterns for predictions and other characteristics of the data. It uses a model for forecasting future values in a small time frame based on previous observations. It is widely used for non-stationary data, such as economic data, weather data, stock prices, and retail sales forecasting.

## Dataset

The dataset is easy to understand and is self-explanatory

### Inspiration

Perform EDA and Predict the sales of the next 7 days from the last date of the Training dataset!

**Project Title: Sales Prediction and EDA**

**Step 1: Data Exploration and Understanding**

*Objective:* Understand the dataset and its structure.

*Questions:*

1. What is the total sales revenue in the dataset?
2. Which ship mode is the most commonly used?
3. Which category has the highest average sales?

**Step 2: Sales Prediction**

*Objective:* Predict sales for the next 7 days from the last date of the training dataset.

*Questions:*

1. Identify the last date in the dataset.
2. Calculate the average daily sales for the last 30 days.
3. Predict the total sales for the next 7 days.

**Project Title: Advanced Sales Analysis and Prediction**

**Step 1: Data Exploration and Understanding**

*Objective:* Dive deeper into the dataset to gain insights.

*Complex Questions:*

1. Calculate the total sales revenue for each sub-category.
2. Find the top 5 customers who made the highest total purchases.
3. Determine the correlation between the discount percentage and sales.

*Complex Questions:*

1. Create a time series plot of daily sales.
2. Implement a moving average method to predict future sales.
3. Use a more advanced forecasting method like Exponential Smoothing to predict sales for the next 7 days.

**Step 3: Data Visualization**

*Objective:* Create informative visualizations based on the data.

*Complex Questions:*

1. Create a bar chart showing total sales by region.
2. Visualize the seasonality of sales over a year.
3. Generate a heatmap to show the correlation between different product categories.