

# SALES FORECASTING SOLUTION FOR RETAIL AND CONSUMER GOODS

# SALES FORECASTING SOLUTION

- Managing sales across Stores and Categories is complex without accurate forecasts, leading to inefficiencies in inventory and planning.
- A machine learning-based sales forecasting model generates granular predictions for cities, products, and categories, enabling data-driven decisions for optimized inventory and resource allocation.

# SALES FORECASTING SOLUTION

## Approach

1. **Data Preparation:** Historical sales data processed to include Store, Category, date, sales and quantity
  1. The data was aggregated to daily sales total for modeling
2. **Model Training:** Built with ML Model to Handle Seasonality, Trends and holidays
  1. Models are trained for Store-Category combinations
3. **Power BI Dashboard and Web Application:** Forecasted data is saved as .csv file
  1. Dashboard enables filtering by store category and date
  2. The **web application** enables users to interact with forecasts, filter by store, category, or date, and access real-time predictions
  3. Interactive charts provide actionable Insights
4. **Optimization:** Parallel Processing with joblib for faster training
5. **Publishing:** Dashboard are published in the Environment

# SALES FORECASTING SOLUTION

Neostats Sales Forecasting

Gain insights into your sales performance.

Get Started

Neostats Sales Forecast

Select Locations

Select products

Select Categories

Select categories

Start Date

dd-mm-yyyy

End Date

dd-mm-yyyy

Submit

Neostats Sales Forecast

Select Locations

Austin

Los Angeles

New York City

Select locations

Select Products

20in Monitor

Google Phone

LG Washing Machine

Select products

Select Categories

Home Appliances



20in Monitor

Google Phone

LG Washing Machine

Select products

Select Categories

Home Appliances

Monitors

Phones and Accessories

Select categories

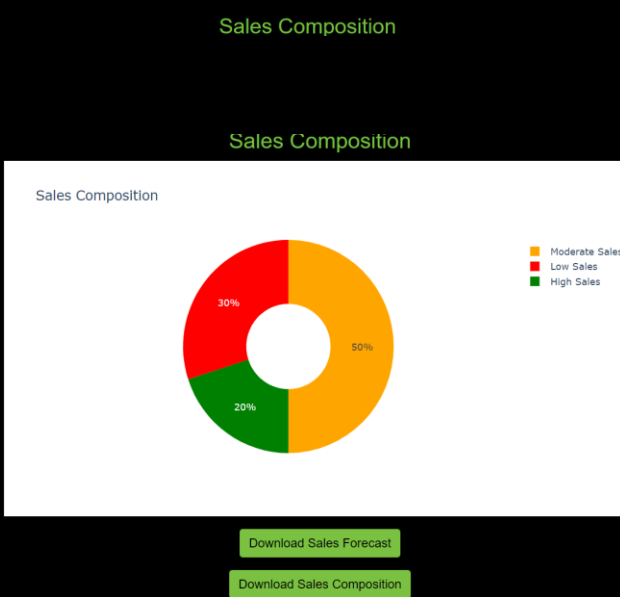
Start Date

01-01-2024

End Date

30-01-2024

Submit



# SALES FORECASTING SOLUTION

The sales forecasting model leverages machine learning to provide accurate, granular predictions. By integrating these forecasts into an interactive Power BI dashboard and Web Application, businesses can make informed decisions, optimize inventory, and plan resources effectively, ensuring operational efficiency and future scalability.