

Sales Performance Analysis Report

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[File:Sales Performance Analysis](#)

- **Project Objective:**

The objective of this project is to analyze sales performance across regions, categories, and time to identify trends, top-performing products, and seasonality patterns. The analysis aims to support data-driven business decisions.

- **Dataset Discription:**

Dataset: Superstore Sales Data

Records: 9,800

Key Fields:

- Order Date, Ship Date
- Sales
- Category, Sub-Category
- Region
- Product Name
- Order ID

- **Data Cleaning & Preparation:**

1. Converted Order Date and Ship Date to datetime
2. Handled encoding issues during import
3. Created time-based features:

a. Order Year

b. Order Month

c. Shipping Days

4. Verified **missing** values and data types

- **Feature Engineering:**

- Shipping Days = Ship Date – Order Date
- Order-level aggregation
- Time-based features for trend analysis

- **KPI's:**

1.Total Sales:

Sum(Sales)

Total Sales

₹2,261,536.8

2.Total Orders:

COUNTD(Order_ID)

Total Orders

4,922

3.Average Order Value:

SUM(Sales) / COUNTD(Order_ID)

Avg.Order

459.5

4.Avg Shipping Days:

AVG(Shipping Days)

Avg Shipping Days

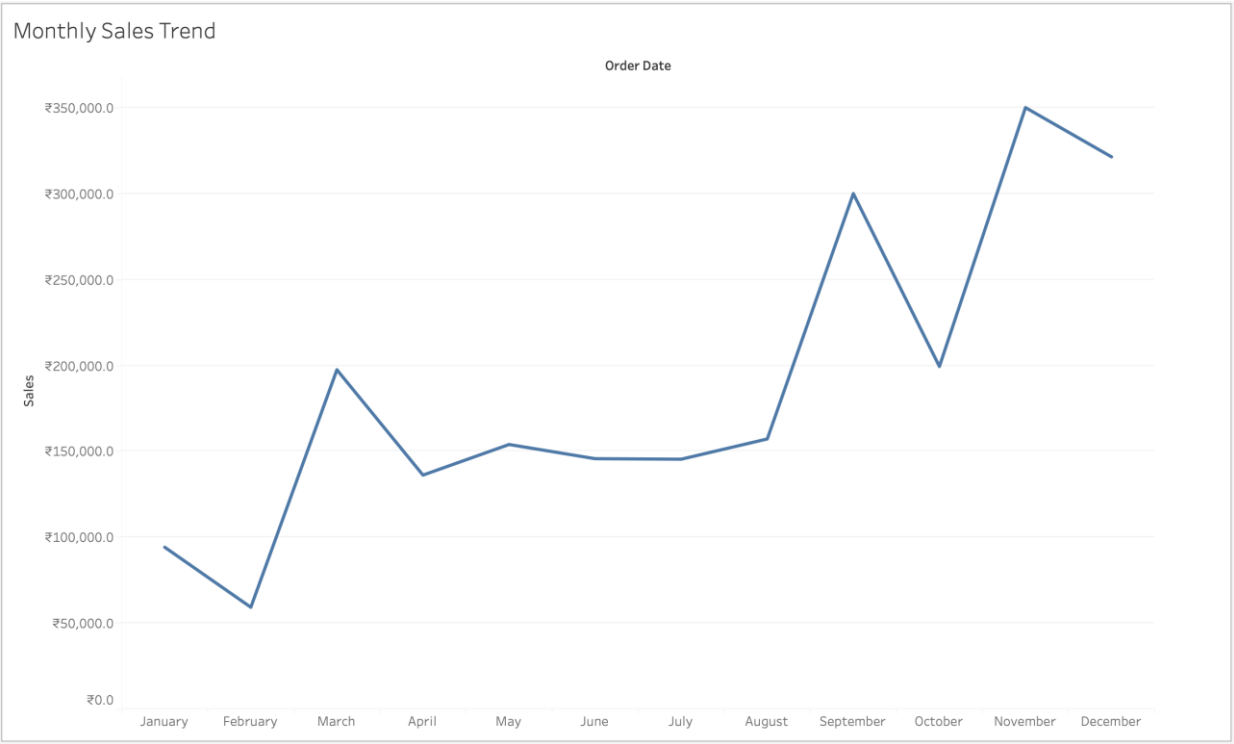
3.961

- **Key Findings:**

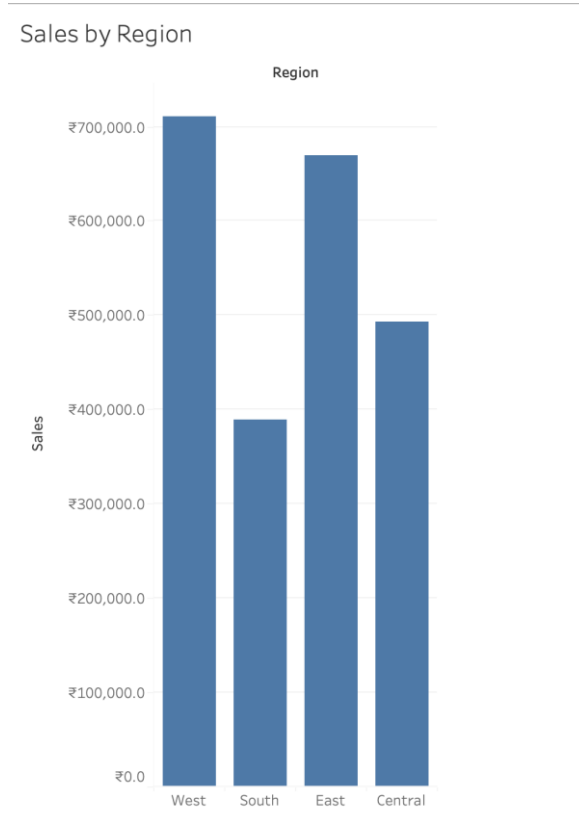
- Sales show clear seasonal patterns, peaking in September–November
- Technology is the highest revenue-generating category
- West region contributes the highest sales
- A small number of products account for a large share of revenue
- Average shipping time is approximately 4 days

- **Charts:**

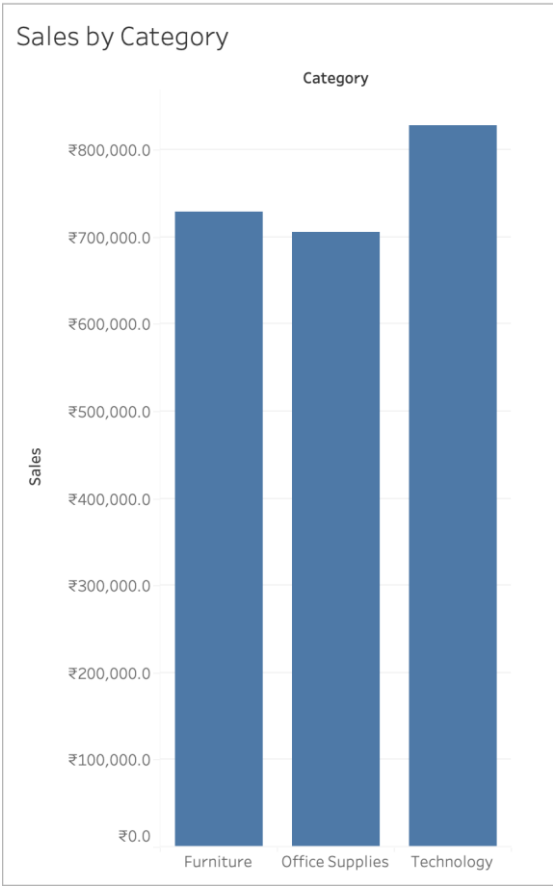
Monthly Sales Trend (Line Chart):



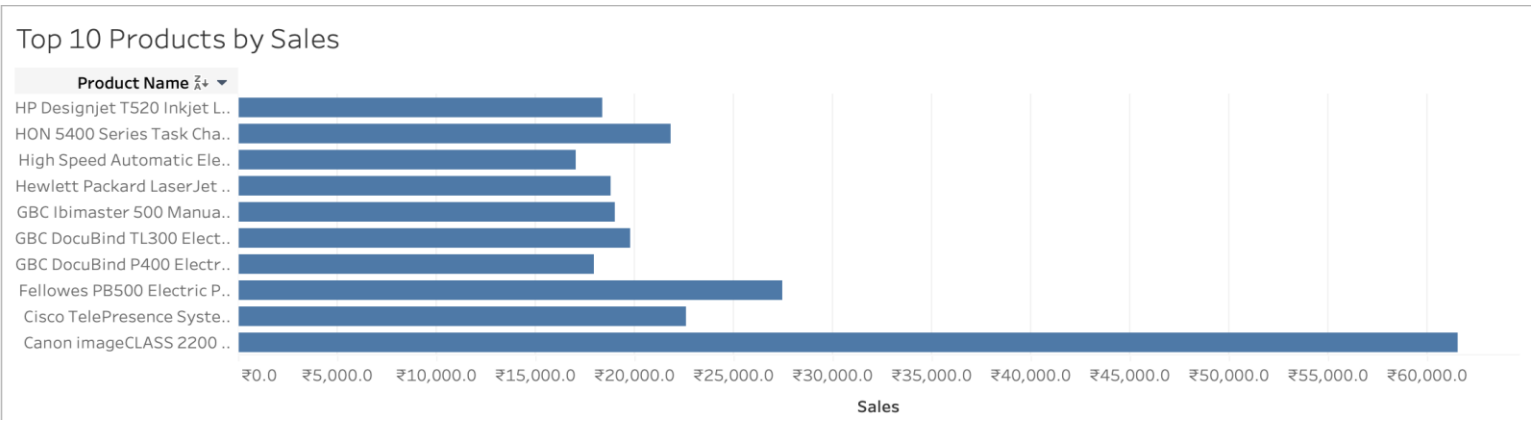
Sales by Region (Bar Chart):



Sales by Category (Bar Chart):



Top 10 Products by Sales:



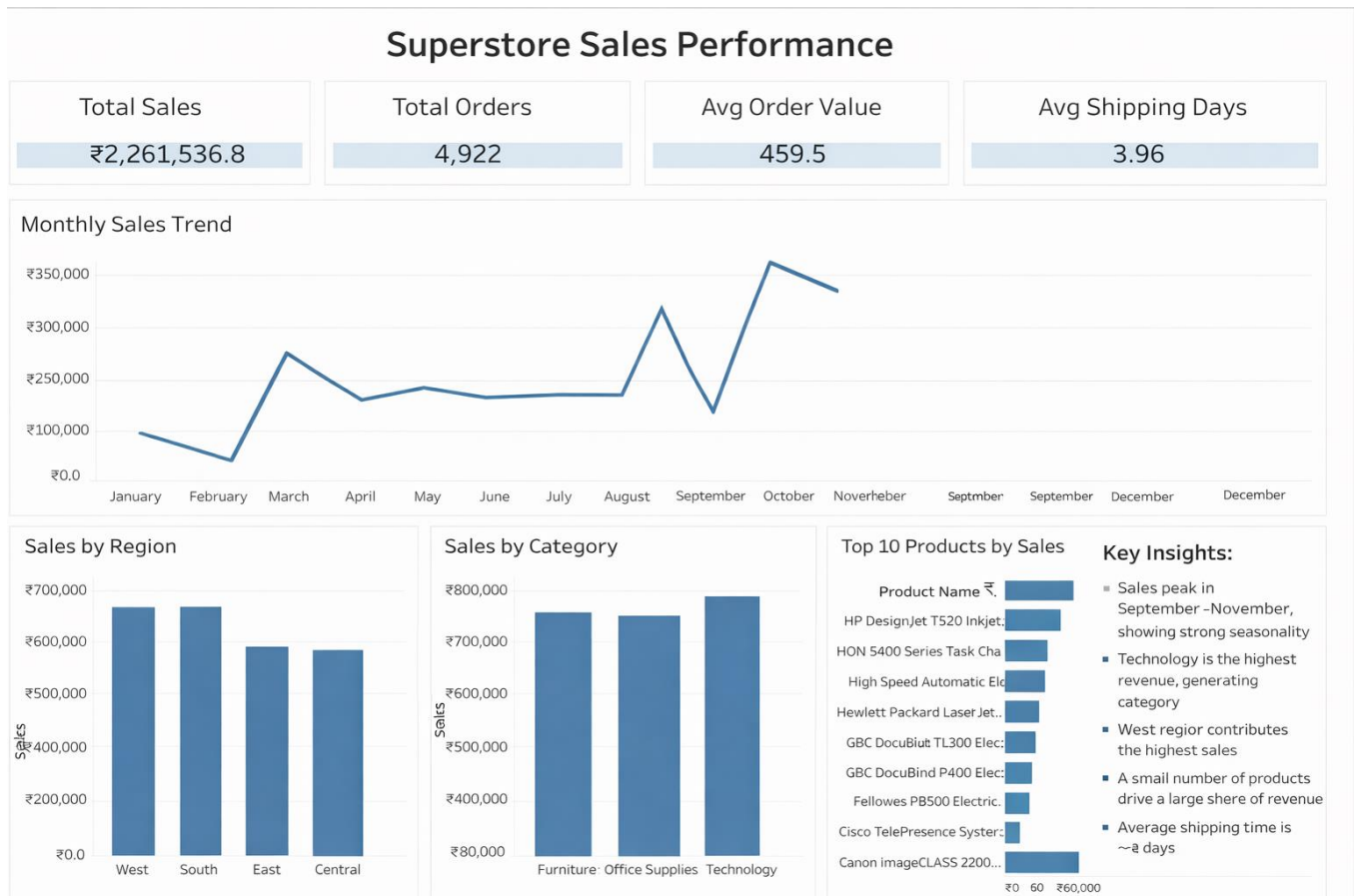
- Dashboard insight Summry:

The dashboard provides a comprehensive overview of sales performance.It highlights seasonal demand patterns, identifies high performing regionsand categories, and reveals top revenue-generating

products. This enables stakeholders to make informed strategic and operational decisions.

- **BUSINESS RECOMMENDATIONS:**

1. Focus marketing campaigns during high-sales months (Sep–Nov) to



maximize revenue.

2. Invest more in Technology category due to its strong contribution to total sales.

3. Strengthen operations in high-performing regions like the West.

4. Optimize inventory planning based on top-selling products.

5. Improve logistics efficiency to reduce average shipping time further.

- **Tools & Technologies Used:**

- Python (Pandas, NumPy) for data cleaning and feature engineering
- Jupyter Notebook for analysis and documentation
- Tableau Public for dashboard creation and visualization

- Microsoft Word for report documentation

- **Conclusion:**

This project demonstrates how sales data can be transformed into actionable insights using data analytics and visualization tools. By analyzing sales, trends, regional performance, and product-level data, the dashboard provides valuable insights to support business decision-making and operational planning.