

Interactive Sales Dashboard – Project Report

1. Project Overview

This project focuses on designing and developing a professional interactive sales dashboard to analyze sales trends, customer behavior, and product performance using Python-based data visualization tools.

2. Objectives

- Visualize sales trends over time
- Identify top-performing products and categories
- Analyze customer segmentation and purchasing patterns
- Provide interactive exploration using Plotly

3. Tools & Technologies

Tool	Purpose
Pandas	Data manipulation
Seaborn	Statistical visualizations
Matplotlib	Static plotting
Plotly	Interactive charts
Jupyter Notebook	Analysis & presentation

4. Visualization Summary

The dashboard includes multiple visualization types such as line charts, bar charts, box plots, violin plots, heatmaps, and interactive Plotly charts. Each visualization serves a specific analytical purpose.

5. Interactive Features

- Hover tooltips for detailed data insights
- Dropdown filters for category selection
- Animated charts for time-based analysis

6. Conclusion

This interactive sales dashboard provides a comprehensive and user-friendly way to explore business data. It is suitable for executive reporting, business intelligence, and portfolio demonstration purposes.