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UNIVERSITY INSTITUTE OF COMPUTING

PROJECT REPORT ON

Sales Performance Dashboard

Program Name: BCA

Subject Name: DATA INTERPRETATION LAB

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Submitted To:

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Designation: Ass. Profs

Sales Performance Dashboard

INTRODUCTION

In the digital age, businesses rely heavily on insightful data visualization to make smarter and faster decisions. This project presents an interactive web-based Sales Performance Dashboard that allows users to upload Excel (.xlsx) sales data and instantly view visual insights through five dynamic charts.

What sets this dashboard apart is its strong integration with Microsoft Excel. The entire dataset was initially created and structured using Excel, which served as the foundation for the dashboard. Excel helped in organizing, cleaning, and shaping the data before feeding it into the web-based interface.

Combining Excel's data handling power with modern web technologies such as HTML, CSS3, JavaScript, and Plotly.js, this dashboard bridges traditional tools with interactive, modern-day data presentation.

PROJECT DISCRIPTION

The primary goal of this project is to design an intuitive, interactive dashboard that helps visualize business sales trends from a structured Excel data source. Users can upload an Excel file and immediately gain insights across several dimensions—like top-performing products, customer-wise sales, state-wise performance, and more.

The dashboard layout adopts a glass morphism design, offering a modern and sleek user experience. Each chart is generated dynamically using JavaScript and Plotly.js, based on the uploaded Excel dataset.

This makes it easier for companies to identify trends, compare performance across regions or products, and take informed actions quickly.

Role of Microsoft Excel in the Project

Even though the final visualization layer is built using HTML, JavaScript, and Plotly.js, Microsoft Excel played a foundational role in this project. Here's how:

Excel Role	Description
Data Entry and Structuring	All sales data, including Order ID, Dates, Customer Names, Product Names, State, and Sales figures, were manually created and organized in Microsoft Excel.
Data Cleaning and Accuracy	Excel's built-in tools like data validation, filtering, sorting, and conditional formatting helped ensure data accuracy.
Data Preparation and Export	Excel data was used directly by parsing it in JavaScript via an XLSX parser, serving as the dataset source for the dashboard.
Quick Analysis (Optional)	Before visualization, Excel was used to conduct quick calculations using formulas and pivot tables.

TECH USED & THEIR PURPOSE

Technology	Purpose
Microsoft Excel	Data entry, cleaning, and preparation.
HTML5	Base structure of the web interface.
CSS3	Enhances the UI design with modern transparent, blur and rounded corners.
JavaScript	Handles data processing, chart generation and file uploading.
Plotly.js	Generates interactive charts and visualizations.
XLSX.js	Parsing Excel file into JavaScript-usable format.

Key Functional Requirements

- Upload Excel (.xlsx) file containing structured sales data
- Auto-render five types of charts based on uploaded Excel data
- Apply glass morphism effects for modern visual appeal
- Responsively adjust layout and chart sizes
- Fully interactive elements (hover, zoom, etc.)

Chart Requirement and Purpose

1. Monthly Sales Trend (Line Chart)

- Purpose: Shows how your total sales fluctuate month by month.
- Insight: Helps identify peak and low-performing months to plan inventory and promotions.

2 Sales by Category (Pie Chart)

- Purpose: Displays how sales are distributed among product categories like Electronics, Furniture, etc.
- Insight: Reveals which category contributes the most to your revenue.

3. Sales by City/State (Bar Chart)

- Purpose: Compares sales across different geographic locations.
- Insight: Identifies high-performing regions to target in marketing or logistics.

4. Top 5 Products by Sales (Horizontal Bar Chart)

- Purpose: Ranks products based on their total sales volume.
- Insight: Highlights your bestsellers and potential for bundling or restocking.

5. Customer Purchase Frequency (Donut Chart)

- Purpose: Shows the frequency of purchases by customers.
- Insight: Helps segment loyal vs one-time buyers, great for CRM efforts.

Sales Data

File	Home	Insert	Page Layout	Formulas	Data	Review	View	Help	Comments	Share
Clipboard	Font	Alignment	Number	Styles	Cells	Editing	Add-ins			

	C	D	E	F	G	H	I	J	K
	Ship Date	Ship Mode	Customer ID	Customer Name	Category	Product Name	Quantity	Unit Price (?)	Total Sales (?)
1	2023-02-10	Same Day	MPat-8055	Meera Patel	Home Appliance	Air Conditioner	4	48000	192000
2	2022-01-03	Same Day	ATha-8973	Arjun Thakur	Home Appliance	Refrigerator	5	55000	275000
3	2022-01-20	First Class	PSin-1287	Priya Singh	Electronics	Smartphone	5	52000	260000
4	2021-12-31	Second Class	RShar-4456	Ravi Sharma	Electronics	Laptop	1	75000	655548922
5	2021-04-10	First Class	PSin-1287	Priya Singh	Electronics	Television	3	60000	180000
6	2023-04-11	Standard Class	RShar-4456	Ravi Sharma	Home Appliance	Washing Machine	2	45000	90000
7	2023-08-10	First Class	RShar-4456	Ravi Sharma	Electronics	Smartphone	3	52000	156000
8	2022-05-21	Second Class	MCho-2984	Meera Chopra	Home Appliance	Refrigerator	5	55000	275000
9	2022-06-25	First Class	ATha-8973	Arjun Thakur	Home Appliance	Air Conditioner	5	48000	747783826
10	2021-03-19	First Class	MPat-8055	Meera Patel	Home Appliance	Washing Machine	3	45000	135000
11	2021-07-26	First Class	ATha-8973	Arjun Thakur	Home Appliance	Refrigerator	2	55000	110000
12	2022-05-03	Standard Class	RShar-4456	Ravi Sharma	Home Appliance	Refrigerator	5	55000	275000
13	2022-08-12	First Class	ATha-8973	Arjun Thakur	Electronics	Bluetooth Speaker	3	15000	45000
14	2022-12-21	Standard Class	PSin-1287	Priya Singh	Electronics	Smartphone	5	52000	260000
15	2023-06-28	Same Day	MPat-8055	Meera Patel	Home Appliance	Microwave Oven	1	28000	28000
16	2022-04-07	Same Day	RMeh-1221	Rahul Mehta	Home Appliance	Washing Machine	4	45000	180000
17	2021-06-25	First Class	MPat-8055	Meera Patel	Electronics	Bluetooth Speaker	2	15000	30000
18	2021-03-07	First Class	RMeh-1221	Rahul Mehta	Electronics	Laptop	3	75000	225000
19	2021-04-17	First Class	MPat-8055	Meera Patel	Home Appliance	Washing Machine	3	45000	135000

File	Home	Insert	Page Layout	Formulas	Data	Review	View	Help	
Clipboard	Font	Alignment	Number	Styles	Cells	Editing			

	G	H	I	J	K	L	M	N
	Category	Product Name	Quantity	Unit Price (?)	Total Sales (?)	Country	City	State
1	Home Appliance	Air Conditioner	4	48000	192000	India	Chennai	Tamil Nadu
2	Home Appliance	Refrigerator	5	55000	275000	India	Jaipur	Rajasthan
3	Electronics	Smartphone	5	52000	260000	India	Delhi	Delhi
4	Electronics	Laptop	1	75000	655548922	India	Ahmedabad	Gujarat
5	Electronics	Television	3	60000	180000	India	Ahmedabad	Rajasthan
6	Home Appliance	Washing Machine	2	45000	90000	India	Ahmedabad	Gujarat
7	Electronics	Smartphone	3	52000	156000	India	Ahmedabad	Gujarat
8	Home Appliance	Refrigerator	5	55000	275000	India	Bangalore	Karnataka
9	Home Appliance	Air Conditioner	5	48000	747783826	India	Jaipur	Rajasthan
10	Home Appliance	Washing Machine	3	45000	135000	India	Chennai	Rajasthan
11	Home Appliance	Refrigerator	2	55000	110000	India	Jaipur	Rajasthan
12	Home Appliance	Refrigerator	5	55000	275000	India	Ahmedabad	Gujarat
13	Electronics	Bluetooth Speaker	3	15000	45000	India	Jaipur	Rajasthan
14	Electronics	Smartphone	5	52000	260000	India	Delhi	Rajasthan
15	Home Appliance	Microwave Oven	1	28000	28000	India	Chennai	Tamil Nadu
16	Home Appliance	Washing Machine	4	45000	180000	India	Mumbai	Maharashtra
17	Electronics	Bluetooth Speaker	2	15000	30000	India	Chennai	Tamil Nadu
18	Electronics	Laptop	3	75000	225000	India	Mumbai	Maharashtra
19	Home Appliance	Washing Machine	3	45000	135000	India	Chennai	Tamil Nadu

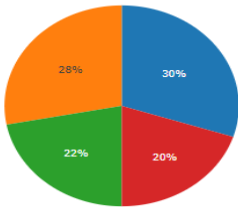
Dashboard:

Total Sales: ₹1,410,256,748

Average Sales per Order: ₹28205134.96

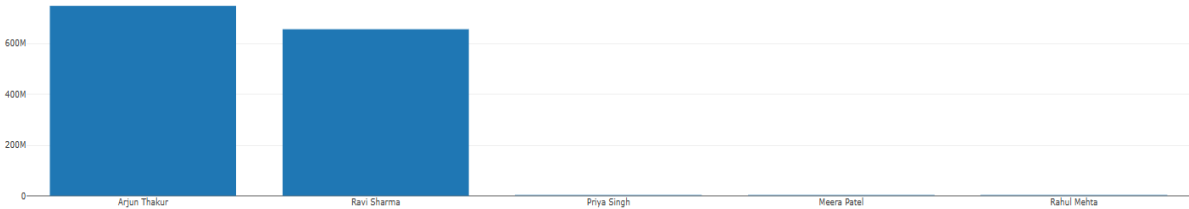
Top Performing State: Rajasthan

Shipping Mode Distribution

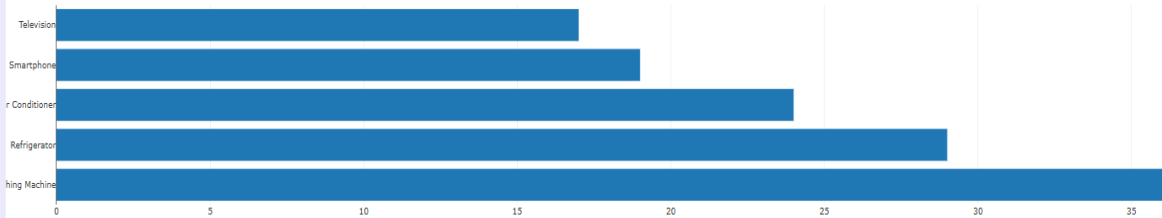


Category Distribution

Top Customers



Most Sold Products



Benefits of the Dashboard

- Presents complex sales data in a simple, visual format
- Requires no coding knowledge to use—just upload an Excel file
- Combines the power of Excel with the interactivity of web tech
- Customizable for any company's dataset
- Aesthetic and professional design ideal for business reporting

CONCLUSION

This project showcases how traditional tools like Excel can be transformed into modern, interactive dashboards with the help of web technologies. With a seamless workflow—from Excel data creation to dynamic visualization—this dashboard offers a practical, easy-to-use solution for sales analysis and reporting.

It not only demonstrates technical skill in HTML, CSS3, JavaScript, and Plotly.js but also underlines the continued relevance and importance of Excel in data-driven projects.