📊 Project Documentation: Sales Performance Dashboard (Power BI)

📄 **Project Title**: ***Sales Performance Analysis Dashboard***

📌 Objective:

To build an interactive Power BI dashboard that provides insights into sales, profit, and category performance across different regions and years, helping businesses monitor and improve sales strategy.

📁 Tools & Technologies Used:

- Power BI Desktop
- Data Source: Superstore Sales Data (2014–2017)
- Techniques: Data Cleaning, DAX Measures, Interactive Filters, Visual Analytics

📂 Dataset Overview:

The dataset includes:

- Order ID, Product Details, Category, and Sub-Category
- Sales, Quantity, Discount, and Profit
- Customer Region and State
- Order Date and Shipping Date
- Time Period Covered: January 2014 – December 2017

🧹 Data Cleaning & Preparation:

- Removed nulls and irrelevant columns (e.g., Postal Code, Country)
- Converted date columns into appropriate formats
- Created Date Table for time intelligence

Created calculated columns and measures for:

- Total Sales
- Total Profit
- Profit Margin (%)
- Sales by Year, State, Category, and Product

📊 Dashboard Features:

✅ *KPI Cards*

- Total Sales: $2.30M
- Total Profit: $286.40K
- Profit Margin: 12%

📅 *Sales Over Time*

- Bar chart showing sales trend by year (2014–2017)

🌎 *Sales by State*

- Horizontal bar chart visualizing state-wise sales distribution
- Top performing states: California, New York, Texas

🛒 *Top 10 Products by Sales*

- Insight into high-performing products (e.g., Canon imageCLASS, Fellowes PB500)

🧮 *Category-Wise Performance*

Pie chart showing:

- Technology: 50.79%
- Office Supplies: 42.77%
- Furniture: 6.44%

🔄 *Interactive Filters:*

- Category
- Region
- Date Range

🎯 Key Insights:

- Technology is the highest contributing category (~51% of sales)
- California leads all states in total sales
- Sales increased steadily from 2014 to 2017
- Profit margins can be further optimized (currently ~12%)

📈 Business Impact:

- This dashboard can help stakeholders:
- Identify sales trends and product performance
- Recognize high-performing regions and categories
- Make data-driven decisions to optimize product and regional strategy
- Monitor KPIs in real-time with filterable visuals

🔧 Challenges Faced:

- Inconsistent data formats in date columns
- Balancing visual simplicity with analytical depth
- Ensuring responsiveness of visuals for all filters

📋 Future Improvements:

- Add forecasting for upcoming quarters
- Include customer segmentation analysis
- Add drill-through pages for state or product-wise deep dives

🖼️ Dashboard Preview: