Crafting a Comprehensive Sales Dashboard

Objective: Develop a detailed dashboard to examine sales data, monitor key performance indicators (KPIs), and offer actionable suggestions to enhance sales outcomes.

Requirements:

1. **Advanced Metrics and Calculations:**

   ○ **Sales Growth Rate:** Calculate month-over-month (MoM) and year-over-year (YoY) sales growth rates.

   ○ **Average Order Size:** Compute the average order size (Total Sales/Quantity Sold).

   ○ **Profit Calculation:** Add a column for Profit.

   ○ **Sales by Time of Day:** Analyze sales trends by time (morning, afternoon, evening, night) based on the Time column.

2. **Dashboard Elements:**

   ○ **KPIs Summary Section:** Include the following metrics as KPIs:

      ■ Total Sales

      ■ Total Quantity Sold

      ■ Total Profit

      ■ Average Order Size

      ■ Sales Growth Rate

      ■ Return Rate

   ○ **Top Performers:**

      ■ Top 2 products by total sales

- Top 2 regions by total sales

- Top 2 customers by total sales

- **Time-Based Sales Analysis:**

  - Sales by day of the week (to determine peak days)

  - Sales by time of day (morning, afternoon, evening, night)

  - Sales Rep Performance: Ranked list or chart showing sales reps by their total sales and quantity sold.

3. **Interactive Filtering and Slicers:**

   - **Slicers:** Add slicers for:

     - Product Category

     - Region

     - Sales Rep

     - Date (Year/Month)

     - Time of Day (Morning, Afternoon, Evening, Night)

   - **Dynamic Filtering:** Allow the dashboard to update dynamically when filtered by any slicer.

4. **Data Visualization:**

   - **Monthly and Yearly Sales Trends:** Line or area chart showing monthly and yearly sales trends.

   - **Hourly Sales Distribution:** A heatmap or line chart showing sales distribution by hour of day.

   - **Sales by Product Category:** Pie or donut chart displaying the share of total sales for each product category.

   - **Sales vs. Returns:** A bar chart comparing total sales and returns across regions.

- ○ **Profit Margin Analysis:** A line chart showing profit margins over time.

5. **Dashboard Insights and Analysis:**

   - ○ **Actionable Insights:** Write 3 observations based on the data, like identifying peak sales hours, best-performing products, or sales spikes by day.
   - ○ **Recommendations:** Provide 2 recommendations for sales improvement, such as increasing marketing during peak hours, focusing on high-profit products, or targeting specific customer segments.

There is the database [link](#)