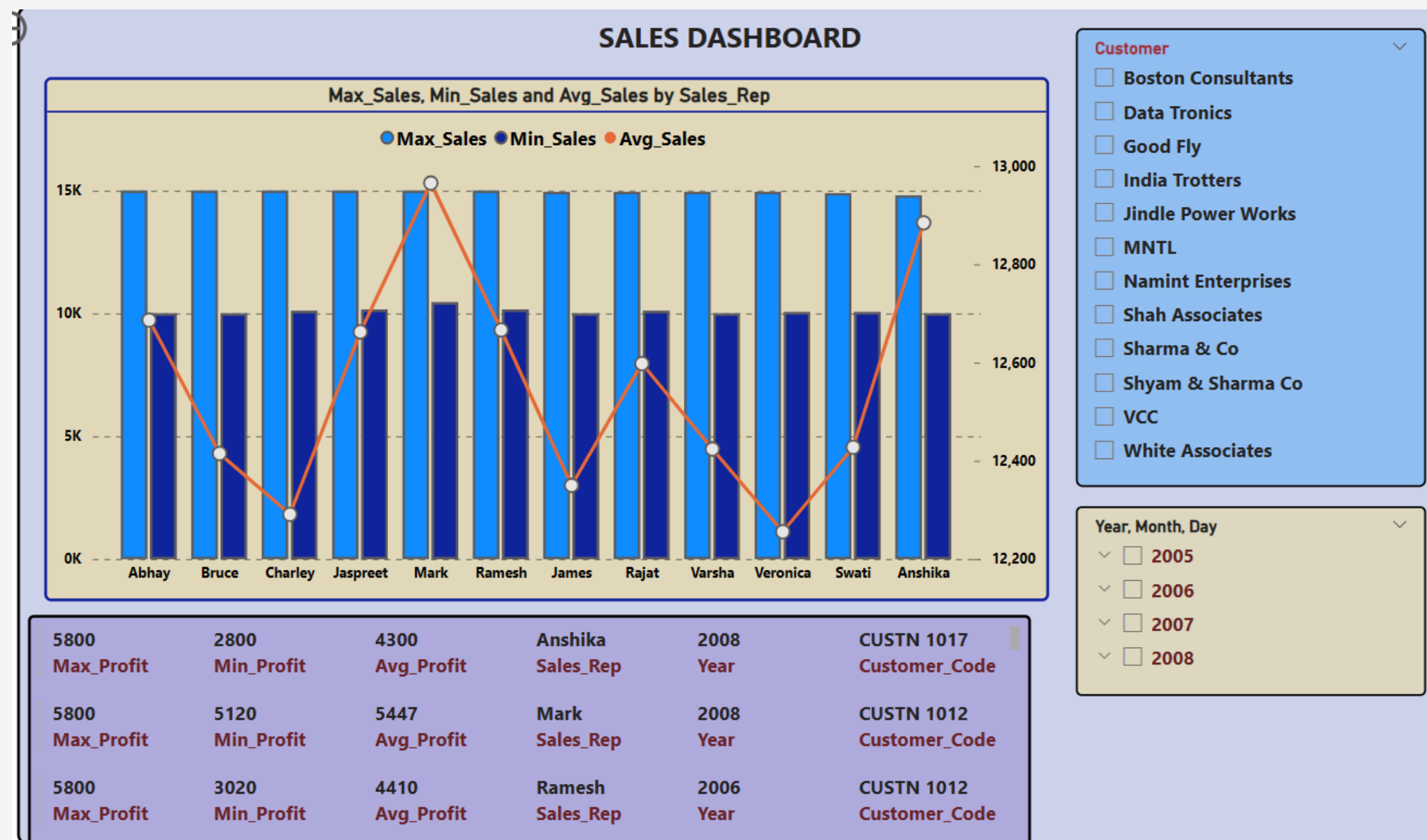


VISUALIZATION REPORT BY USING SQL AND POWER-BI

By Ramakanth Limala



Sales Dashboard Overview

- Visual representation of Max, Min, and Average Sales by each Sales Representative.
- Dashboard supports filtering by Customer and Year (2005–2008).
- Clearly distinguishes:
 - ● Max Sales (light blue bars)
 - ◆ Min Sales (dark blue bars)
 - ● Average Sales (orange line)

Performance Insights – Sales Reps

- Performance Insights – Sales Reps
- All Sales Reps show consistent Max Sales (15K).
- Significant variation in Min Sales across reps.
- Average Sales peak for:
 - Abhay (highest avg)
 - Anshika and Mark (strong performers)
- Lowest Average recorded by Veronica.

Multi-Row Card:

- Show Detailed Metrics Together.
- It presents multiple related KPIs (Key Performance Indicators) like.
 - Max-Profit, Min-Profit, Avg-Profit, Sales-Rep, Year, Customer-Code.
- This allows viewers to see complete profit-related details for top-performing sales reps in one place.
- Highlight Top Performer Records.
 - It helps compare who made the most profit, in which year, and for which customer.
- Quick Comparative Summary
 - Unlike the graph, which focuses on sales, this card gives a quick glance at profit performance.
 - It's useful for management to make data-driven decisions like rewarding high performers or targeting high-value customers.

- Supports Visual Hierarchy
 - It complements the bar/line chart by giving granular context.
 - The card acts as a supporting visual for data that may not be clear just from the chart.

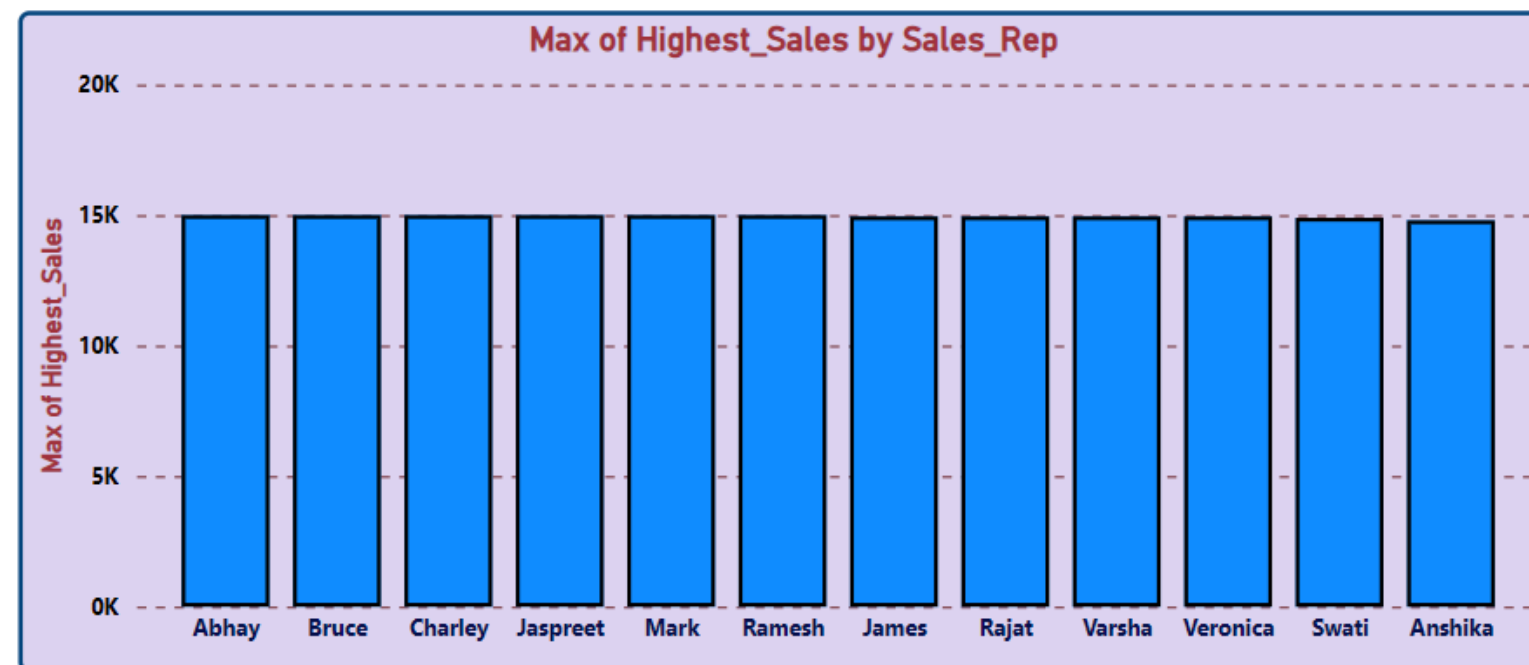
Purpose of Using Slicer Cards:

1. Customer Slicer:

- Purpose: To filter the sales data based on selected customers.
- Helps focus the dashboard analysis on specific clients.
- Allows comparison of performance customer-wise.
- Useful in targeted decision-making (e.g., which customers generate the most profit or sales).

2. Year Slicer:

- Purpose: To filter the data by specific years (2005–2008).
- Enables time-based analysis of sales trends.
- Helps identify best performing years for individual sales reps.
- Allows tracking of growth or decline over time.



15000
Max of Highest_Sales

Abhay	East	14550
Sales_Rep	Region	Max of Highest_Sales
Abhay	North	14950
Sales_Rep	Region	Max of Highest_Sales
Abhay	South	15000
Sales_Rep	Region	Max of Highest_Sales
Abhay	West	14800
Sales_Rep	Region	Max of Highest_Sales
Anshika	East	14300

Max of Highest Sales by Sales Rep:

- Visualizes the maximum highest sales achieved by each Sales Representative.
- All reps show strong and consistent performance, mostly close to ₹15,000.
- Top performing reps include:
 - Abhay (Max = ₹15,000)
 - Bruce, Charley, Jaspreet, Mark – All near ₹15K.
 - Swathi has the lowest among top performers with ₹13,600.

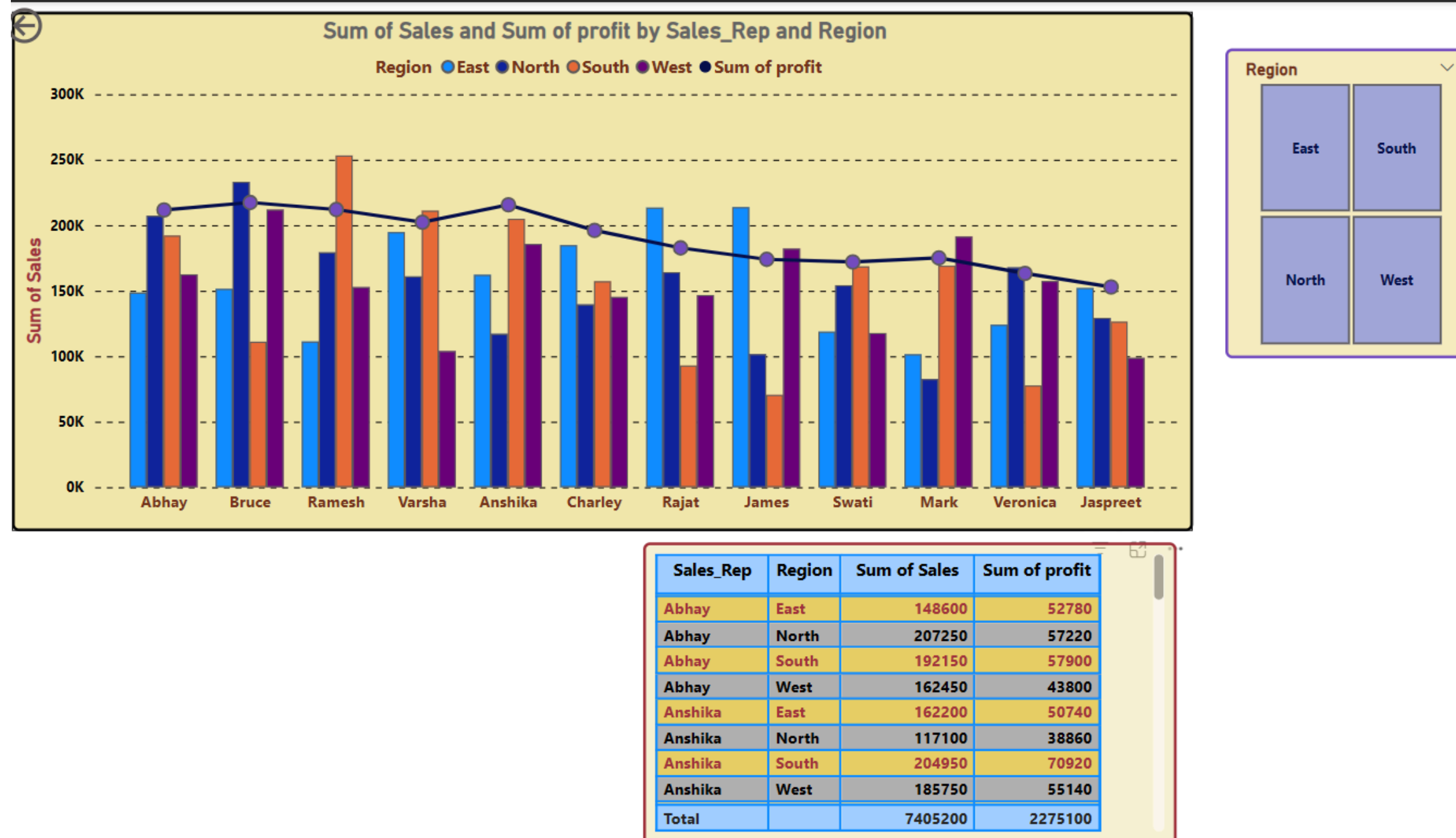
Multi-Row Card:

To display detailed breakdown of sales data across multiple dimensions (Sales-Rep, Region, and Max of Highest Sales).

- Detailed View by Sales Rep & Region:
 - Shows each Sales Rep's performance across different regions.
 - Example: Abhay's sales in East, West, North, and South are listed separately.
- Makes Complex Data Readable:
 - Instead of adding multiple visual elements, the multi-row card neatly groups and aligns related data.
 - Reduces clutter while maintaining depth of information.
- Quick Reference for Tabular Info:
 - Provides a compact, scrollable list that behaves like a dynamic summary table.
 - Ideal for dashboards where you need to look up values quickly without navigating charts.
- Supports Decision Making:
 - Helps you identify which region contributes the most to each Sales Rep's total sales.
 - Useful for assigning sales targets or analyzing regional sales strategy.

Card:

- The Card displays the maximum value of Highest Sales across all Sales Reps.
- It immediately draws attention to the most important figure on the dashboard.



Sales & Profit Distribution by Sales Rep and Region:

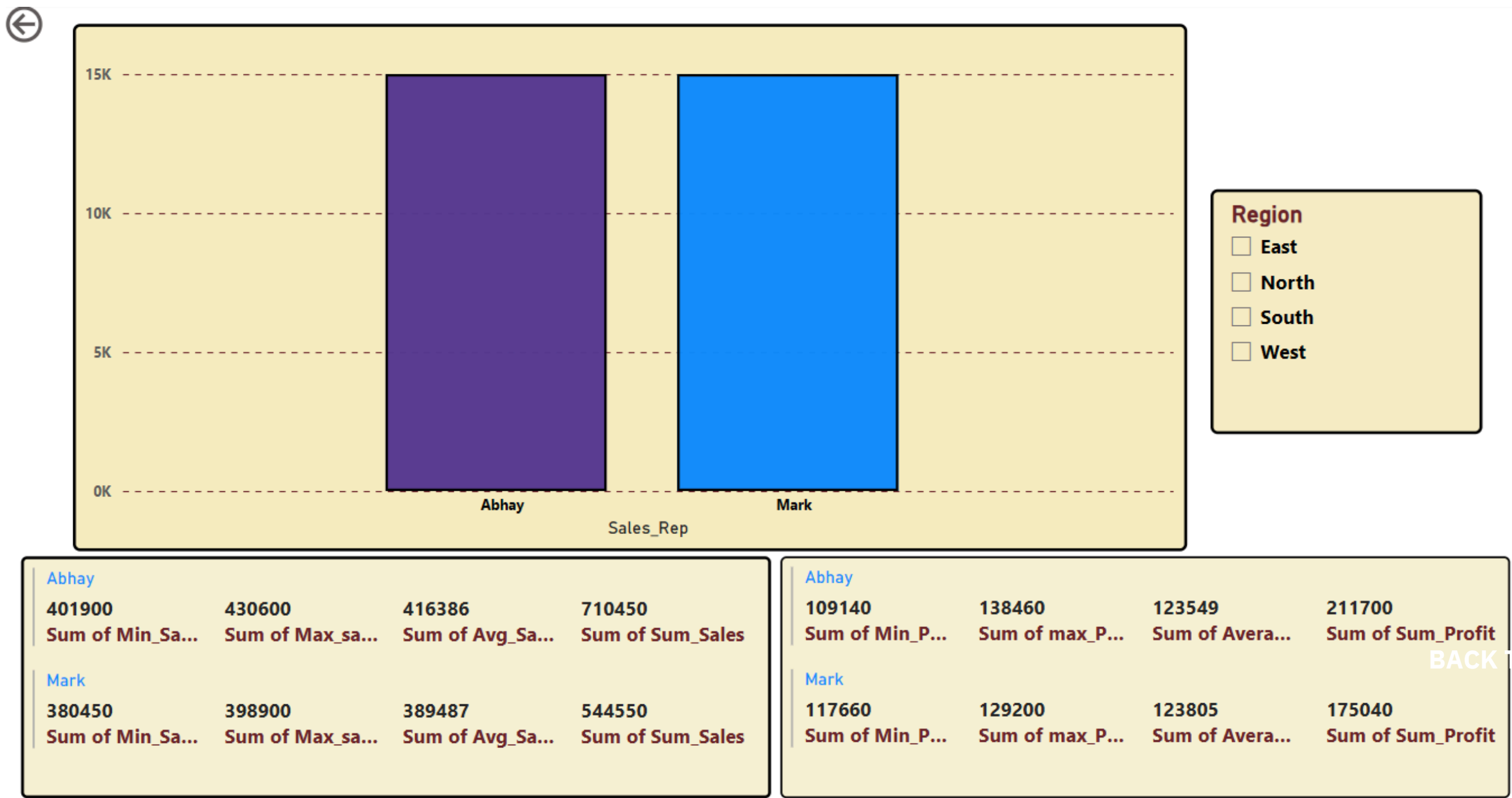
- Displays sum of sales (bars) and sum of profit (line) by each Sales Rep.
- Data is broken down by region: East, North, South, and West.
- Color-coded bars represent sales in each region for quick comparison.
- Line chart overlaid to indicate overall profit trends.

Table Visual:

- The table provides a clear, detailed view of the total sales and profit for each Sales Rep by Region.
- Helps users verify or drill down into the summary data shown in the chart.

Slicer:

- Filter by Region
 - The slicer allows you to filter the visualizations (bar chart, line graph, and table) based on selected regions — East, West, North, South.



Sales and Profit Comparison between Abhay and Mark:

- To compare two Sales Representatives: Abhay and Mark.
- Visualizes their sales and profit performance across key metrics.
 - Sum of Min-Sales, Max-Sales, Average Sales and Total Sales.
 - Sum of Min-Profit, Max-Profit, Average Profit and Total Profit.

Slicer:

- Enables region-wise filtering to see how both reps performed in East, West, North, and South.
- Makes the report interactive and user-friendly for deeper analysis.

Multi-Row Card:

- To display multiple key statistics at once for each Sales Representative (Abhay and Mark).
- Provides a quick summary of performance metrics like:
 - Minimum Sales, Maximum Sales, Average Sales, Total Sales
 - Minimum Profit, Maximum Profit, Average Profit, Total Profit
- Helps users easily compare values side-by-side for each rep without navigating multiple visuals.
- Enhances readability and makes it easier to digest detailed numeric insights.
- Complements the bar chart by providing exact numbers that the visual can't fully show.
- Works well with slicers — when a region is selected, the card updates to reflect filtered insights for that specific region.

Conclusion:

- The Power BI dashboard effectively visualizes sales and profit performance across different regions and sales representatives.
- Visual elements like bar charts, cards, multi-row cards, and slicers help in delivering clear and interactive insights.
- Cards provide quick KPIs, multi-row cards offer detailed stats, and slicers allow dynamic filtering for focused analysis.
- These tools together enable better decision-making, trend identification, and performance comparison.
- Overall, the dashboard empowers users to explore data from multiple perspectives and draw actionable insights with ease.

THANK YOU