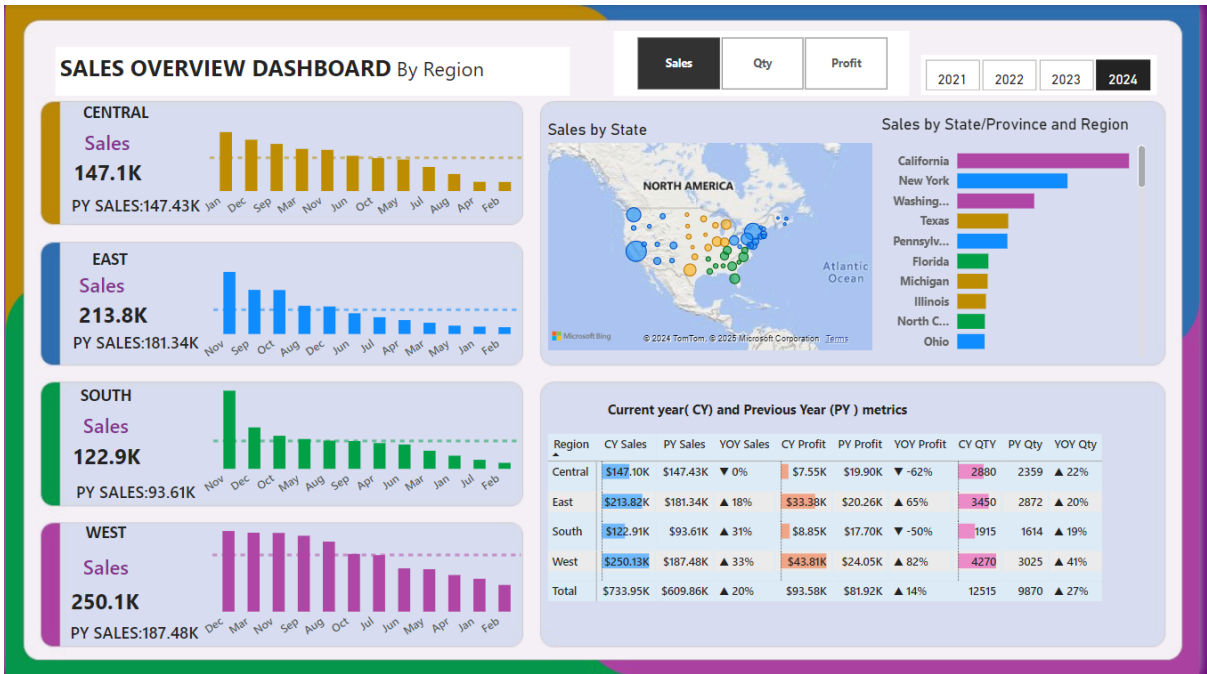# Business Analysis Report on Sales, Profit, and Quantity Metrics Dashboard

This report provides a detailed analysis of sales, profit, and quantity (QTY) metrics across different regions and states for the years 2022, 2023, and 2024. Leveraging data visualization and key performance indicators (KPIs) from the dashboard, this report identifies trends, regional insights, and performance drivers that can aid in strategic decision-making. The findings offer actionable insights to optimize sales strategies, enhance profitability, and improve supply chain efficiency.

Dashboard Overview

The dashboard comprises:

1. Select Metric Feature: Allows dynamic selection of key metrics – Sales, Profit, or Quantity. Hovering over the metrics displays detailed insights for the selected year.
2. Yearly Comparison: Data for 2022, 2023, and 2024 is available for side-by-side comparison, highlighting trends and performance shifts.
3. Region-Wise Breakdown: Central, East, South, and West regions with Year-over-Year (YoY) analysis.
4. State-Level Performance: Detailed insights into top-performing and lowest-performing states.

Key Insights

Regional Performance Trends

Sales:

- **2024**: West region led with $250.13K in sales, followed by East ($213.82K). South region showed a significant YoY growth of 31%.
- **2023**: East ($181.34K) dominated sales with 16% YoY growth, followed by the West region ($187.48K, +34%).
- **2022**: East region recorded $156.45K in sales with 21% YoY growth, while the Central region observed a slight decline (-1%).

Profit:

- **2024**: West region achieved the highest profit ($43.81K, +82% YoY), followed by East ($33.38K). Central region saw a significant drop in profits (-62%).
- **2023**: West region led with $24.05K (+17% YoY), with East trailing closely at $20.26K.
- **2022**: East and West regions were top contributors to profit, while the South region faced declining margins (-30%).

Quantity (QTY):

- **2024**: The West region delivered the highest QTY (4,270), followed by East (3,450). Significant YoY growth observed across all regions, particularly in the Central region (+22%).
- **2023**: West region (3,025) maintained leadership in QTY, with a YoY growth of 24%.
- **2022**: East region recorded the highest QTY growth at +19%.

State-Level Insights

2024

- **Top Sales States**: California, New York, Washington.
- **Lowest Sales States**: North Carolina, Ohio, Illinois.
- **Top Profit States**: California, New York, Washington.
- **Lowest Profit States**: Kentucky, Maryland, Minnesota.
- **Top Quantity States**: California, New York, Texas.
- **Lowest Quantity States**: Florida, North Carolina, Tennessee.

2023

- **Top Sales States**: California, New York, Texas.
- **Lowest Sales States**: Washington, Ohio, Illinois.
- **Top Profit States**: California, Texas, Indiana.
- **Lowest Profit States**: Washington, Wisconsin, Georgia.
- **Top Quantity States**: California, New York, Texas.
- **Lowest Quantity States**: Florida, North Carolina, Michigan.

2022

- **Top Sales States**: California, New York, Texas.
- **Lowest Sales States**: Ohio, Florida, Georgia.
- **Top Profit States**: California, New York, Washington.
- **Lowest Profit States**: Missouri, Maryland, Wisconsin.
- **Top Quantity States**: California, New York, Texas.
- **Lowest Quantity States**: Washington, Michigan, Arizona.

YoY Performance Insights

1. **Sales Growth**: East region consistently showed strong YoY growth across all years, while the South region struggled in sales performance.
2. **Profit Margins**: West region consistently outperformed other regions in profit margins, particularly in 2024 with an 82% YoY increase.
3. **Quantity Trends**: Steady YoY growth in QTY was observed, with the West region consistently leading.

Actionable Recommendations

1. **Focus on High-Performing Regions and States**:
   - Increase marketing efforts in California, New York, and Texas to capitalize on consistent top performance in sales, profit, and QTY.
   - Strengthen distribution channels in the West region to maintain leadership in profit margins and QTY.
2. **Address Underperforming Areas**:
   - Conduct a root-cause analysis for regions like South and states like Ohio and North Carolina to identify barriers to growth.
   - Develop customized strategies for low-profit states such as Kentucky and Maryland.
3. **Optimize Product Offerings**:
   - Align inventory and promotions with the highest-demand periods (e.g., December and November for most regions).
   - Leverage data to refine product mixes based on regional preferences.
4. **Leverage Advanced Analytics**:
   - Utilize predictive modeling to anticipate seasonal trends and optimize inventory.
   - Implement deeper segmentation to target underpenetrated markets effectively.

This dashboard underscores the importance of data-driven decision-making in identifying performance drivers and opportunities for improvement. By focusing on high-performing regions and addressing underperforming areas, businesses can enhance profitability and

achieve sustainable growth. Advanced analytics and tailored strategies will be critical in maintaining a competitive edge in the dynamic market landscape.