

Regional Sales & Profit Performance Review

- Sales and Profit Analysis by Region and State -

OBJECTIVE OF THE ANALYSIS

This analysis evaluates sales and profitability across U.S. regions by examining state-level performance, with a focus on identifying top sales contributors, the most profitable states, and key segment and product drivers.

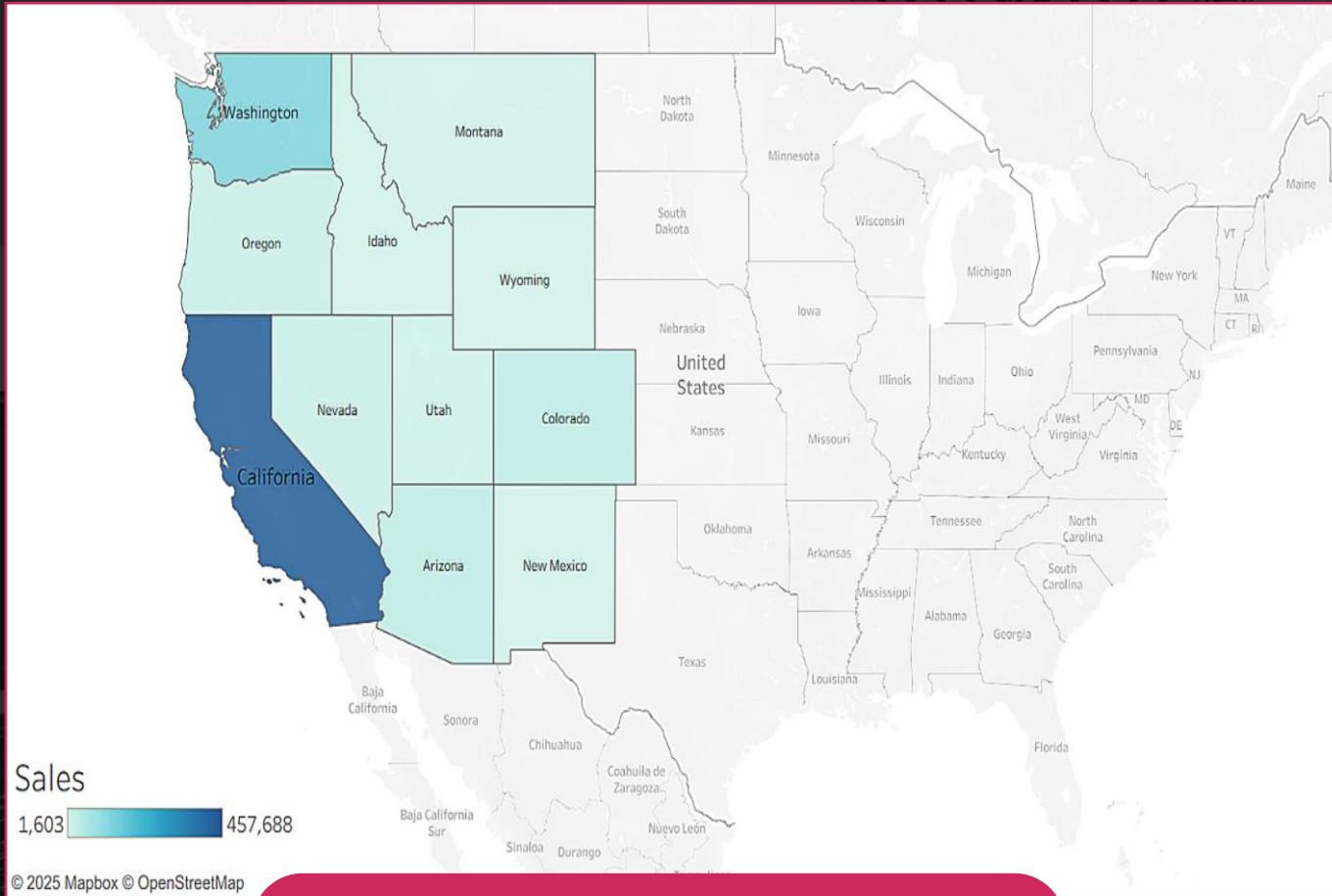
DATA OVERVIEW

- **Dataset:** Sample Superstore Sales Dataset
- **Time Period:** 2014–2017
- **Granularity:** Transaction-level order data
- **Key Metrics:** Sales, Profit
- **Dimensions:** State, Region, Segment, Category, Sub-Category
- **Regions:** West, East, Central, South

ANALYTICAL APPROACH

- The analysis is structured across four regions: **West**, **East**, **Central**, and **South**
- Each region is analyzed separately to highlight state-level performance
- Within each region, states are compared using:
 - **Total Sales**
 - **Total Profit**
- For each region, the analysis highlights:
 - The **highest sales state**
 - The **most profitable state**
 - The **largest profit contributor**
- Performance is further examined across:
 - **Customer Segments**
 - **Product Categories** and **Sub-Categories**
- Insights are summarized to highlight **key drivers and performance patterns** within each region

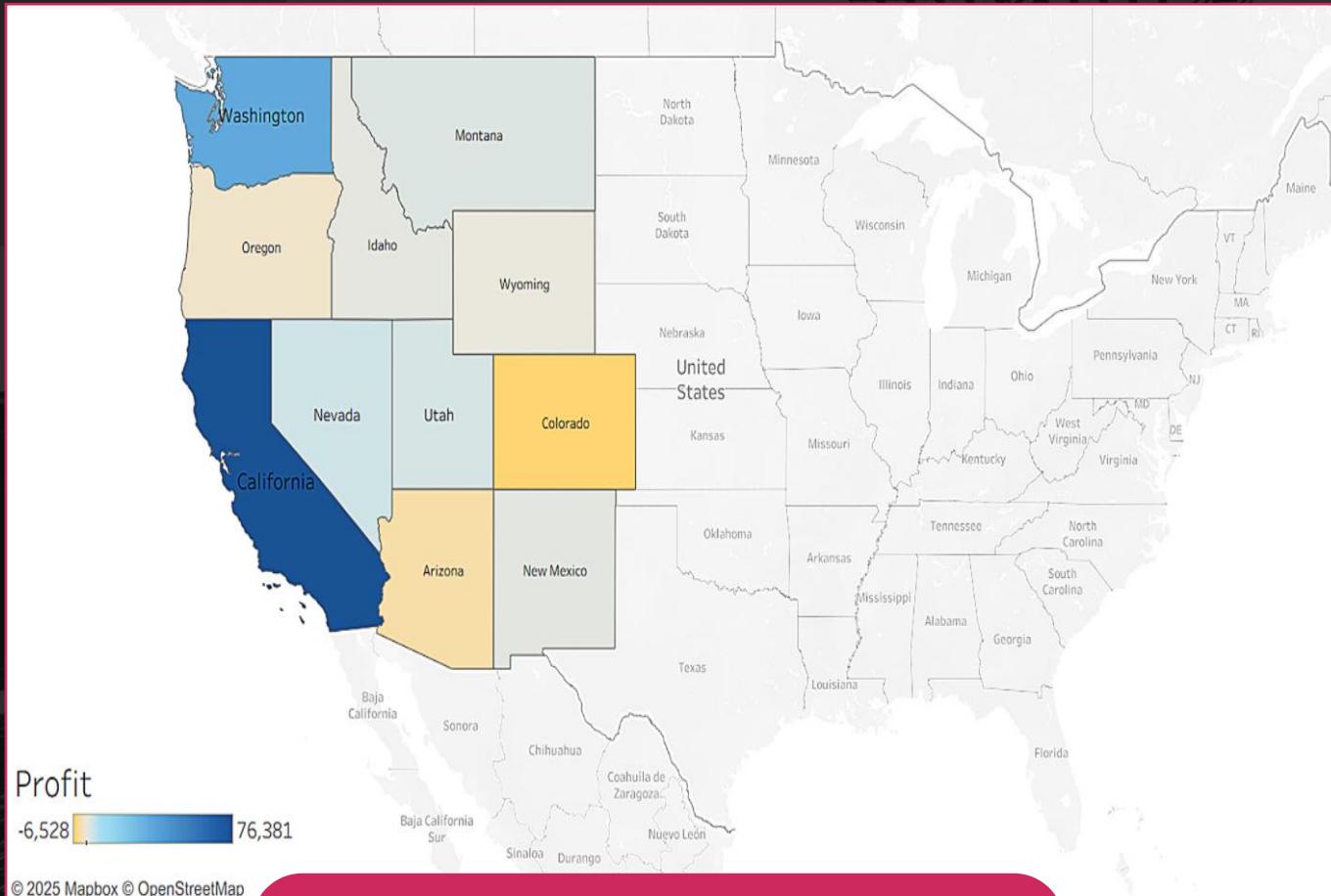
WEST REGION – SALES DISTRIBUTION BY STATE



INSIGHTS :

- Highest sales driven by California, contributing the largest share in the region (\$458k)
- Wyoming records the lowest sales, indicating limited market presence (\$1.6k)
- Sales are heavily concentrated in a few key states
- The West Region records strong overall regional sales, highest among all regions

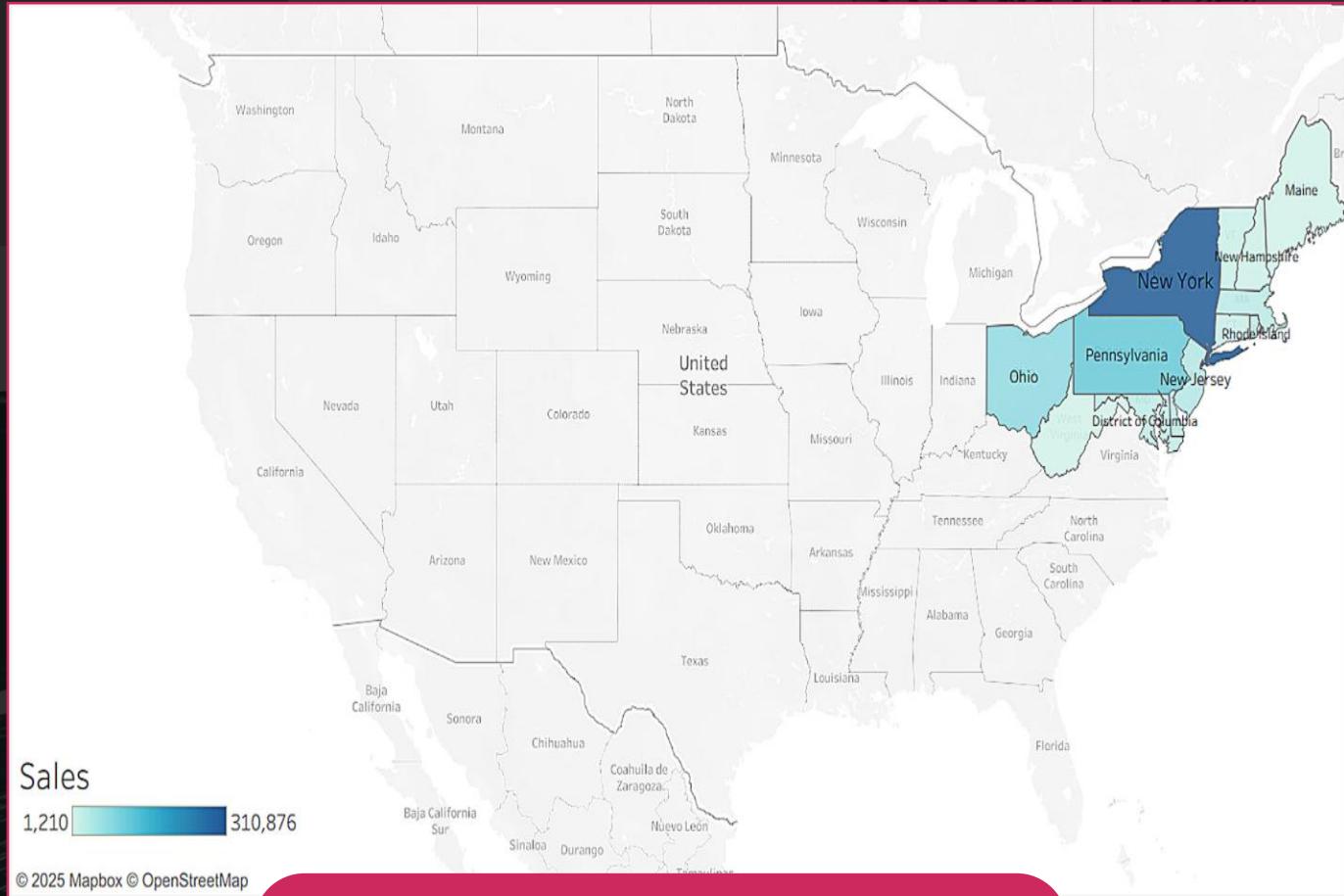
WEST REGION – PROFIT DISTRIBUTION BY STATE



INSIGHTS :

- California is also the most profitable state, supporting strong margins (\$76.4k)
- Colorado shows the lowest profit, with margin pressure despite sales (\$-6.5k)
- Profit performance largely mirrors sales concentration
- West region generates the highest total profit overall

EAST REGION – SALES DISTRIBUTION BY STATE

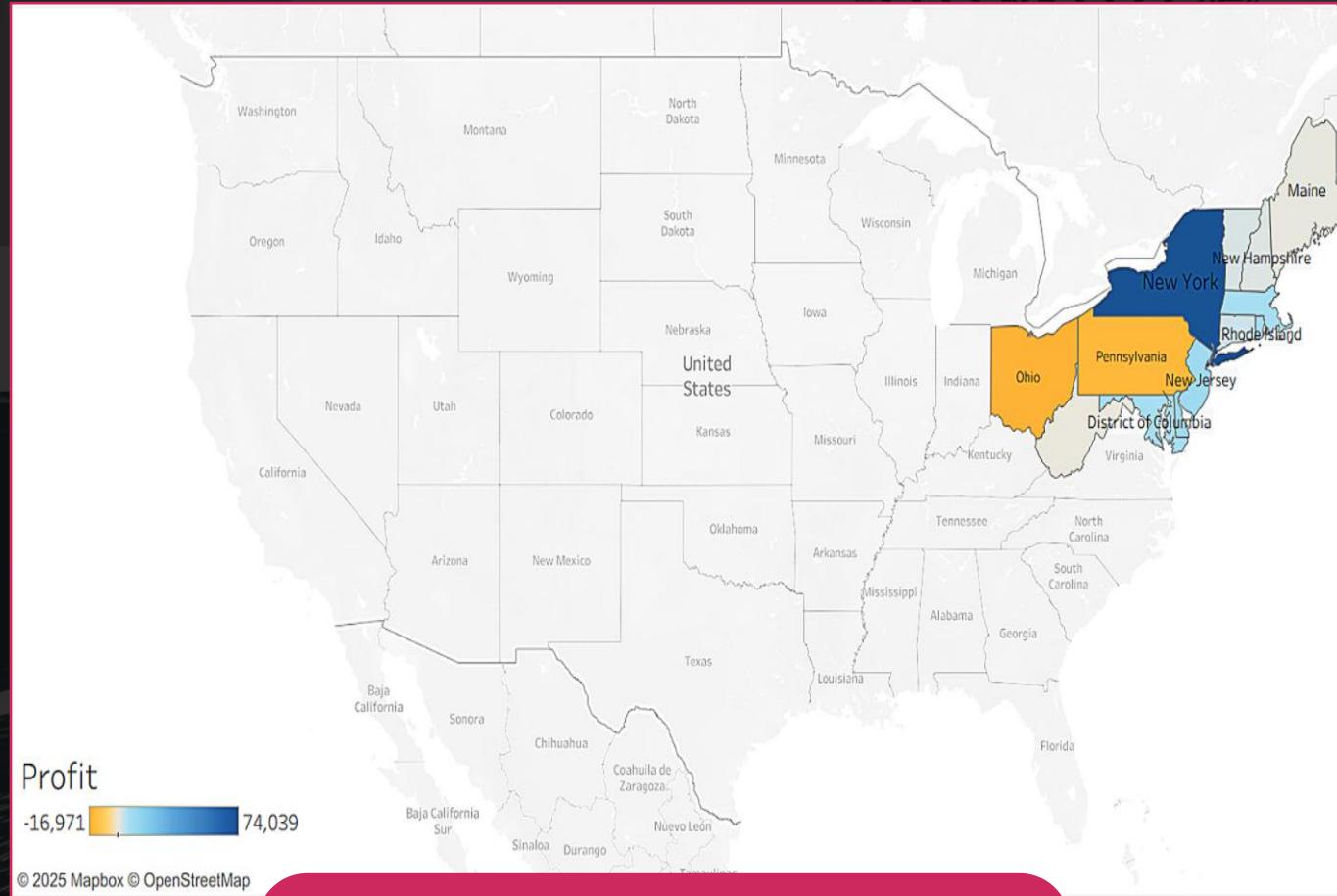


East Regional Sales Distribution

INSIGHTS :

- New York leads the region with the highest sales volume (\$311k)
- West Virginia contributes the least to regional sales (\$1.2k)
- Sales distribution is more balanced compared to the West
- East is the second-highest sales region overall

EAST REGION – PROFIT DISTRIBUTION BY STATE

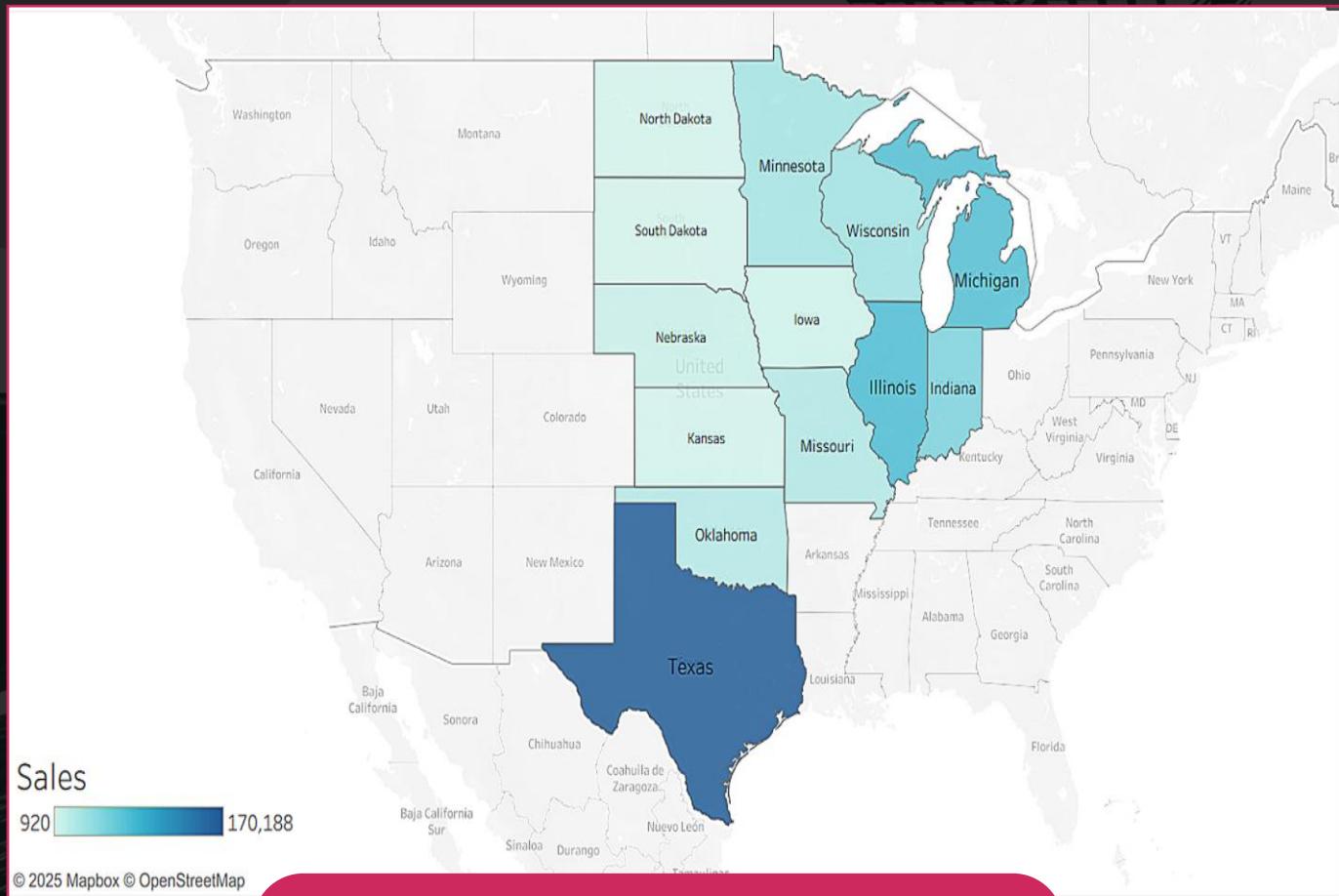


East Regional Profit Distribution

INSIGHTS :

- New York is also the top profit contributor (\$74k)
- Ohio records the lowest profit, indicating potential cost or discount issues (-\$17k)
- Profit remains positive across most states
- East region shows strong and consistent profitability

CENTRAL REGION – SALES DISTRIBUTION BY STATE

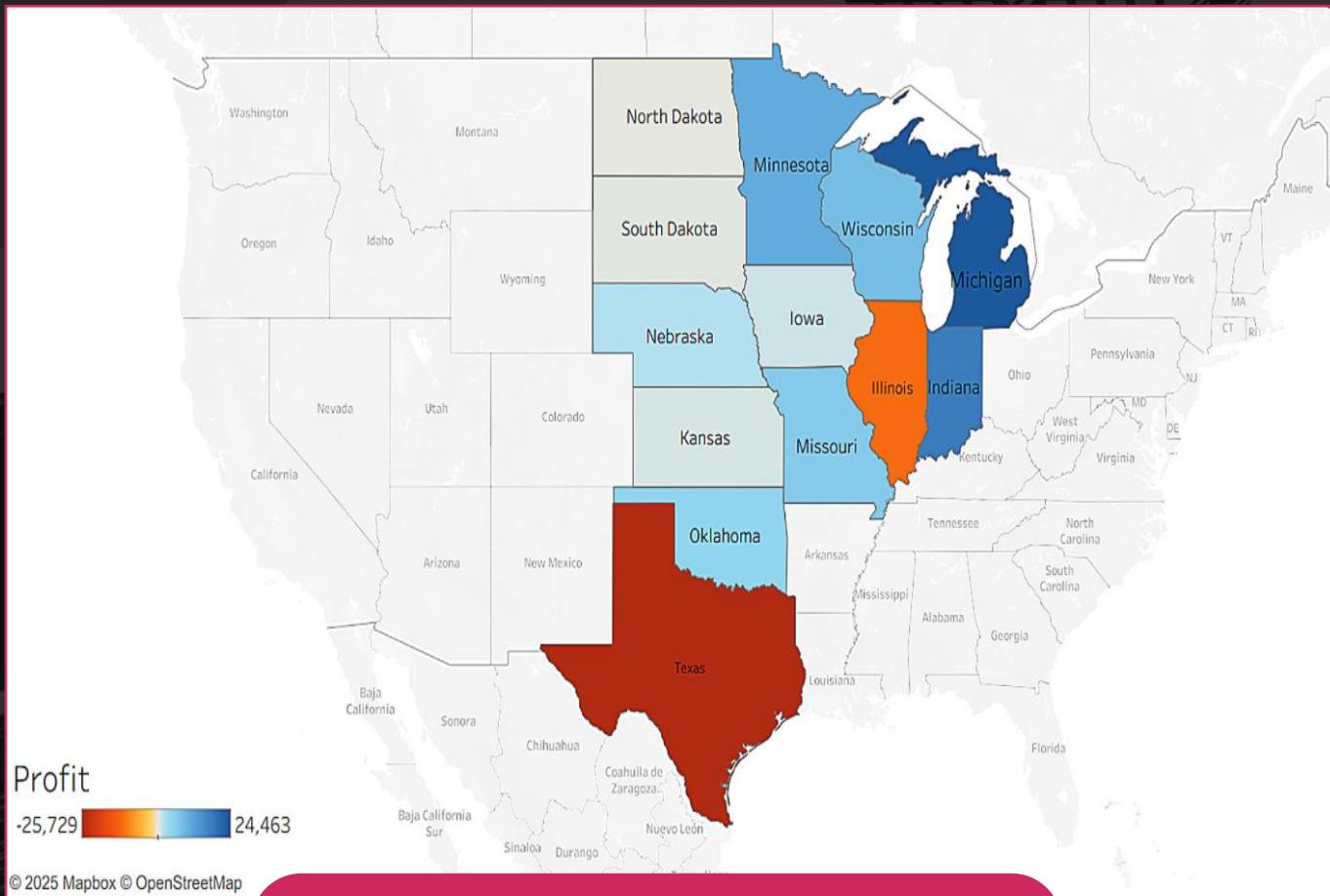


Central Regional Sales Distribution

INSIGHTS :

- Texas dominates sales in the Central region (\$170.2k)
- North Dakota has the lowest sales contribution (\$1k)
- Sales are uneven, with heavy reliance on a single state
- Central ranks third in total sales among regions

CENTRAL REGION – PROFIT DISTRIBUTION BY STATE

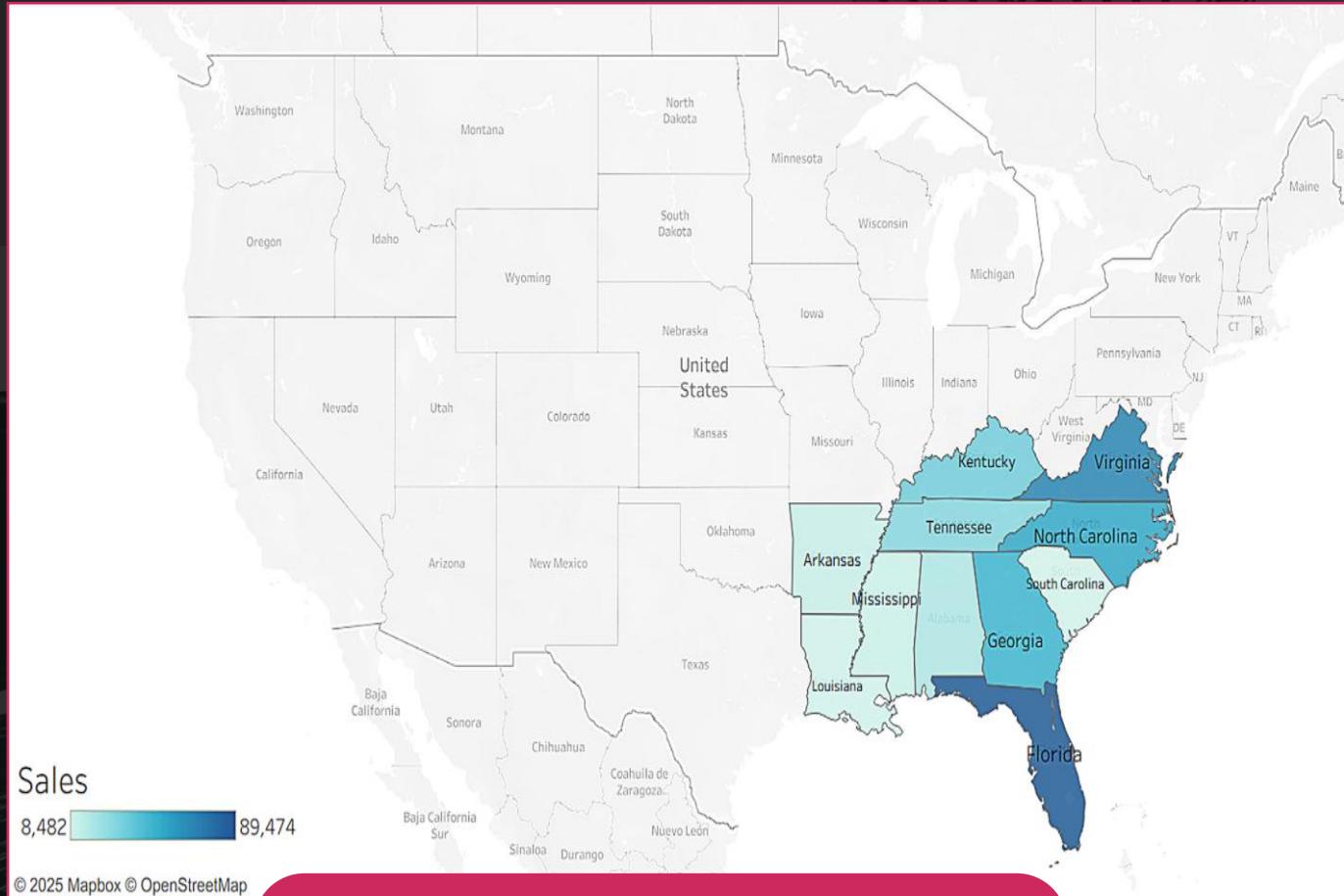


Central Regional Profit Distribution

INSIGHTS :

- Texas shows weak profitability despite high sales (-\$25.7k)
- Michigan generates the highest profit in the region (\$24.5k)
- This indicates potential pricing or discounting inefficiencies
- Central region profits are moderate compared to East and West

SOUTH REGION – SALES DISTRIBUTION BY STATE

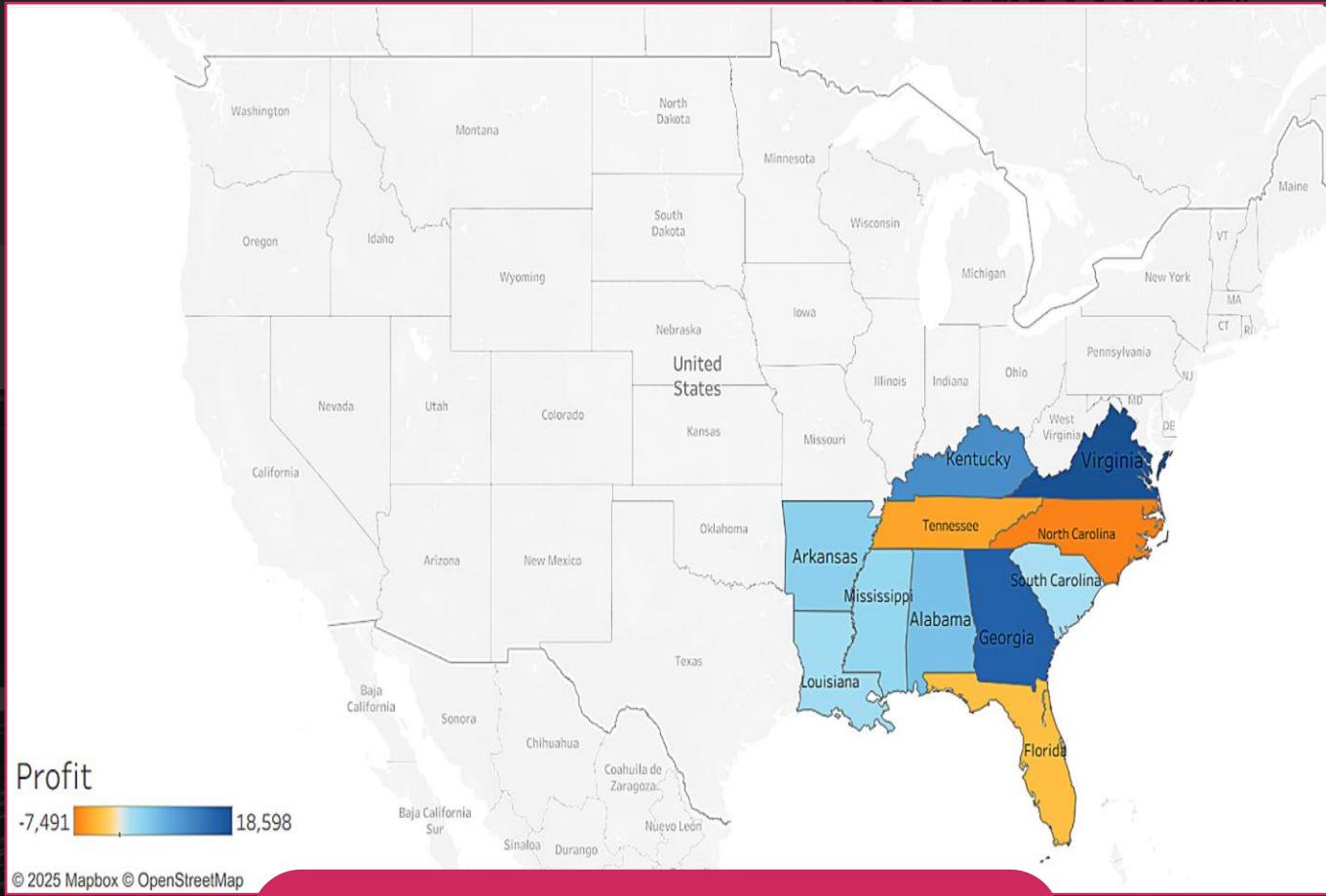


South Regional Sales Distribution

INSIGHTS :

- Florida leads sales in the South region (\$89k)
- South Carolina contributes the least sales (\$8k)
- Sales performance is spread thin across states
- South records the lowest total sales overall

SOUTH REGION – PROFIT DISTRIBUTION BY STATE



South Regional Profit Distribution

INSIGHTS :

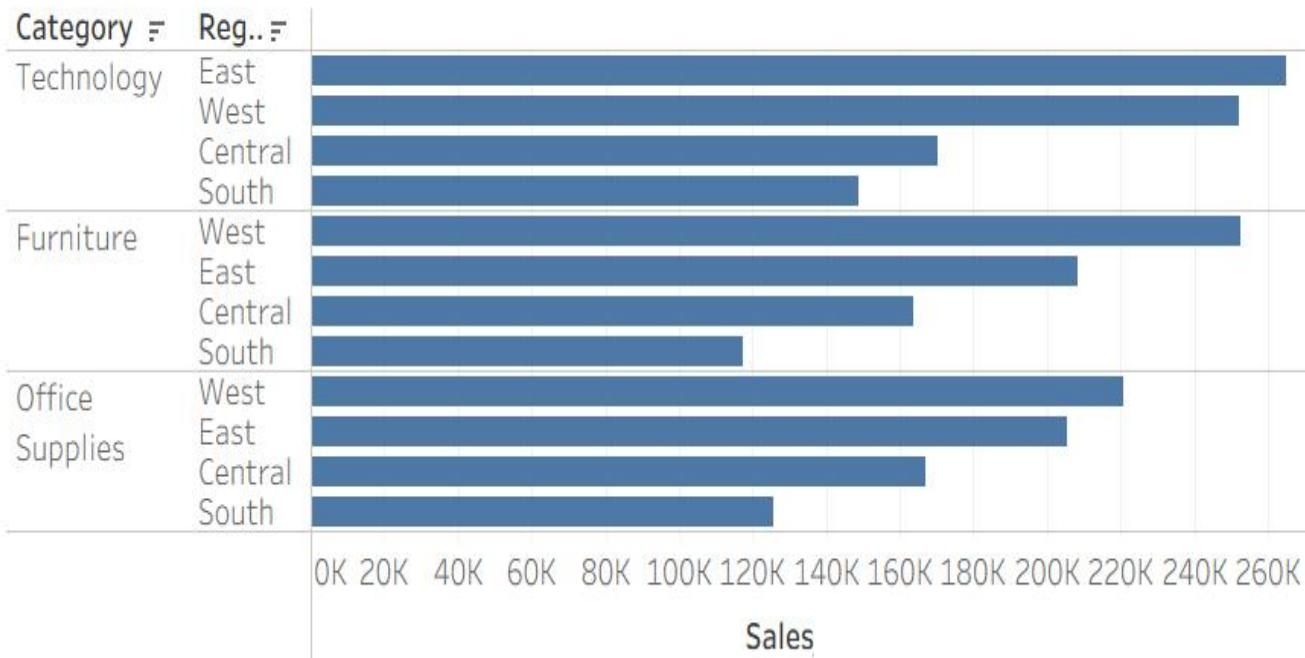
- South records the lowest total sales overall (\$18.6k)
- North Carolina records the lowest profit (-\$7.5k)
- Profitability does not consistently align with sales volume
- South maintains positive but lower overall profits

OVERALL INSIGHTS

- The West region is the top performer in both sales and profit
- The East region combines strong sales with stable profitability
- The Central region generates high sales but exhibits weaker profit efficiency
- The South region underperforms, indicating growth and optimization opportunities

CATEGORY SALES PERFORMANCE BY REGION

Category Sales for All



Category Sales Across Regions

INSIGHTS :

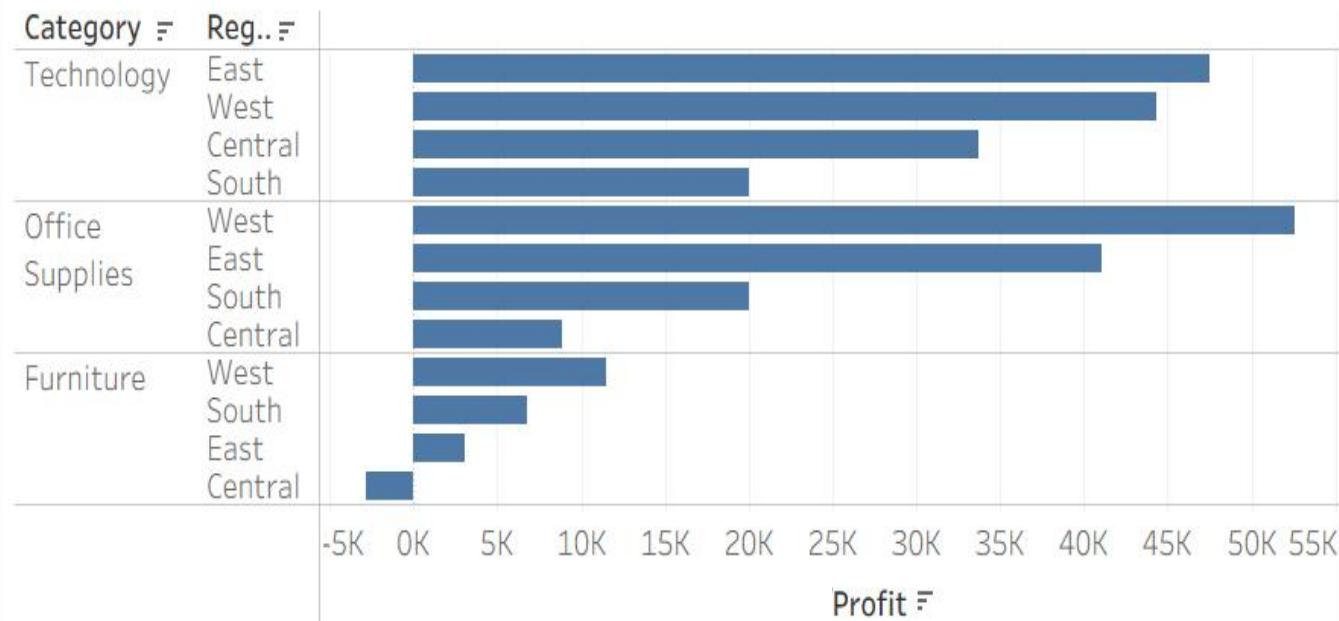
- East Technology is the highest-selling category overall, generating \$265k in revenue.
- West Furniture is the second highest-selling category (\$253k), even though its profits are relatively low.
- The South region occupies the bottom 3 spots for sales volume across all categories (Tech \$149k, Office Supplies \$126k, Furniture \$117k)
- Furniture appears among the top categories for sales but consistently underperforms in profitability, indicating a widespread conversion issue for this category.

CATEGORY PROFIT PERFORMANCE BY REGION

INSIGHTS :

- Technology takes 3 of the top 5 profit spots (East, West, and Central), proving it is the most consistent profit driver across the board.
- The single most profitable category-region combination is West Office Supplies, generating \$52.6k with a stellar 23.8% margin.
- The South region avoids extreme lows; its lowest profit category (Furniture, \$6.8k) is still more than double the profit of East Furniture.
- Central Furniture is the only category operating at a negative profit (-\$2,871), making it the biggest drag on company earnings.

Category Profit for All

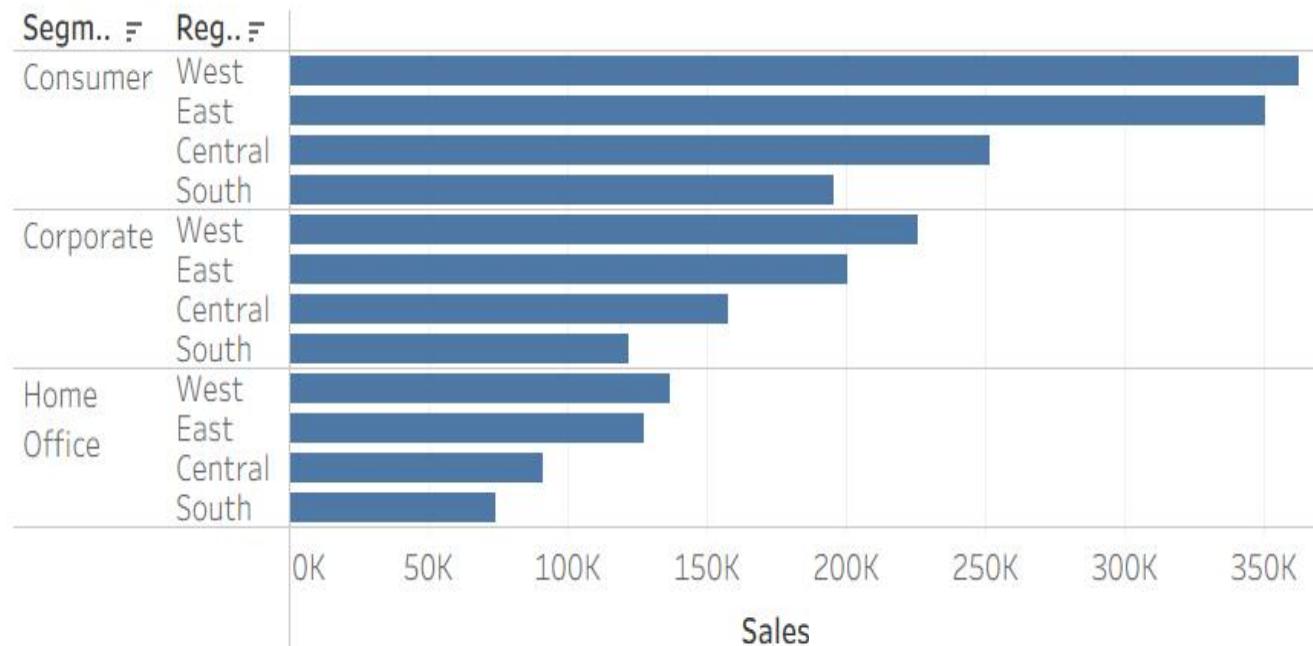


Category Profit Across Regions

SEGMENT SALES PERFORMANCE BY REGION

INSIGHTS :

Segment Sales for All



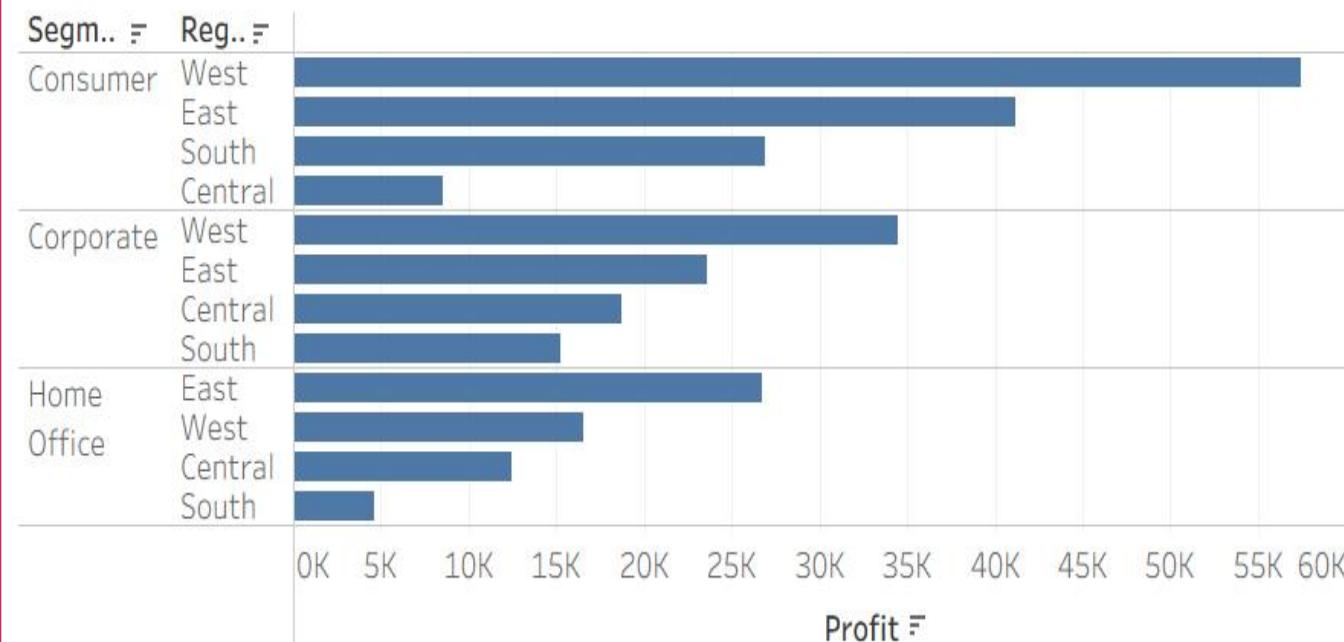
Segment Sales Across Regions

- The top 3 sales generators are all Consumer segments: West Consumer (\$363k), East Consumer (\$351k), and Central Consumer (\$252k).
- The highest-selling Corporate segment generates roughly \$137k less revenue than the top Consumer segment indicating a corporate gap.
- The Central Consumer segment generates a massive \$252k in sales, which is higher than the total sales of the entire Corporate segment in the East (\$200k), highlighting a volume-over-value issue in the Central region.
- The Home Office segment consistently generates the lowest sales in every single region, never exceeding \$140k.

SEGMENT PROFIT PERFORMANCE BY REGION

INSIGHTS :

Segment Profit for All



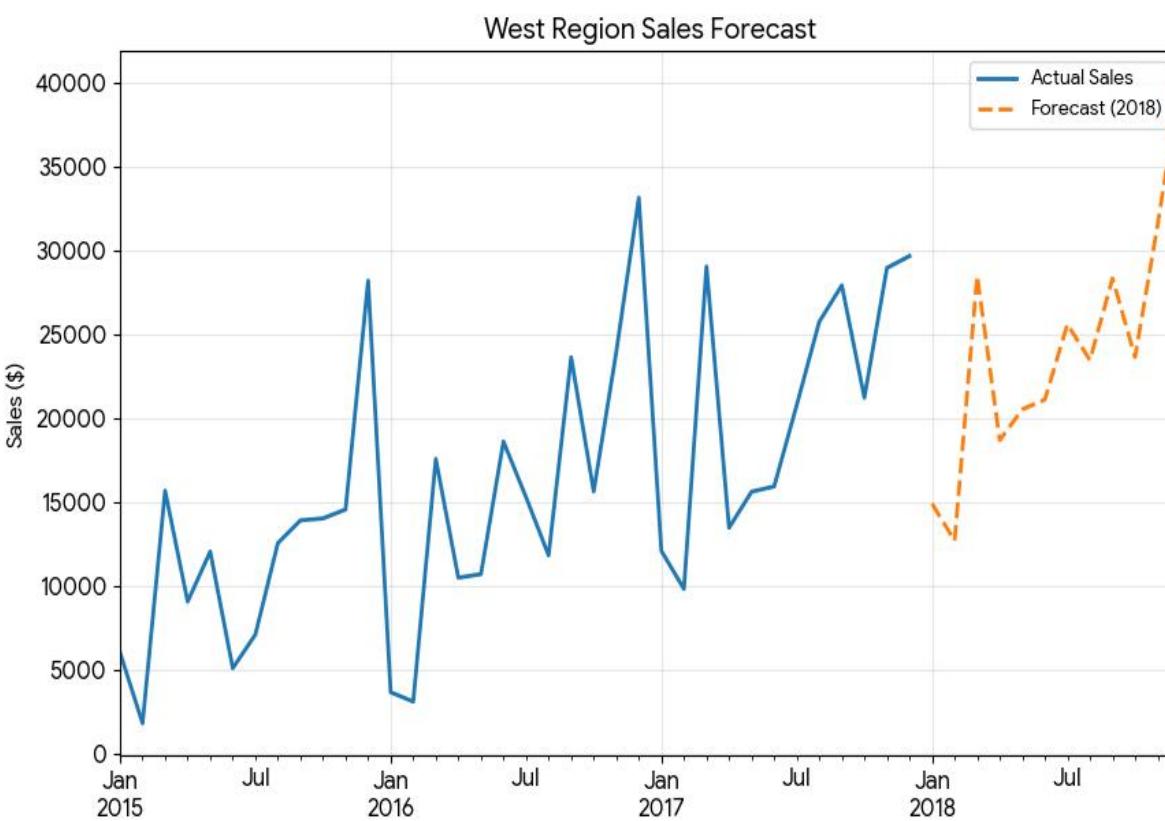
Segment Profit Across Regions

- The West Consumer segment is the absolute most profitable group, generating \$57.5k.
- Despite high sales volume, the Central Consumer segment ranks near the bottom for profit (\$8.5k) with a critically thin margin of 3.4%.
- The West Corporate segment is a solid runner-up, generating \$34.4k in profit, significantly outperforming Corporate segments in all other regions.
- The South Home Office segment generates the lowest total profit of any group (only \$4.6k) with a weak 6.2% margin.

SALES FORECAST



WEST REGION SALES FORECAST



Line Graph of West Region Sales

INTERPRETATION :

The West region shows the most consistent and stable upward trend of all regions.

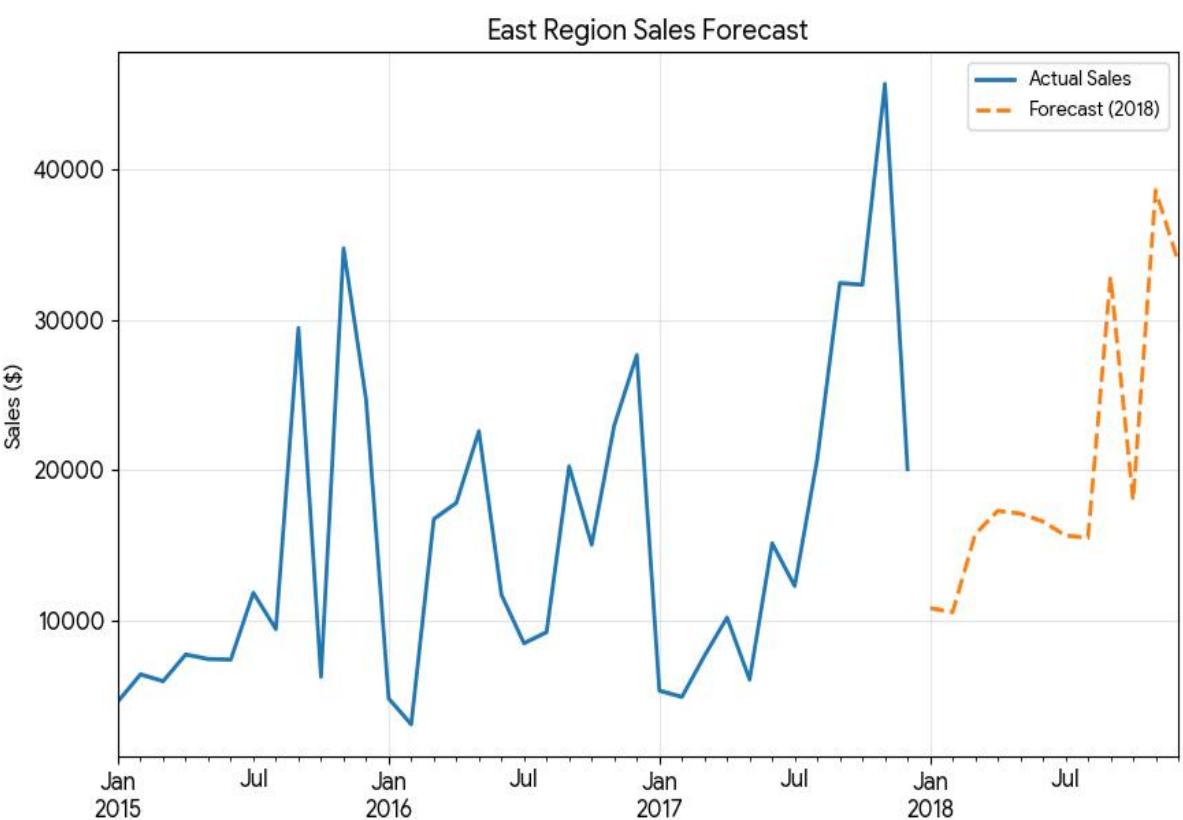
FORECAST :

It is projected to continue its dominance with a healthy 15.5% growth, potentially reaching nearly \$290k in annual sales for 2018.

KEY PATTERN :

The seasonality is predictable, with minor dips in Q1 and reliable peaks in Q4, making it the safest region for inventory planning.

EAST REGION SALES FORECAST



Line Graph of East Region Sales

INTERPRETATION :

The East follows a similar seasonal pattern to the West (peaking in Sept/Nov/Dec) but with sharper month-to-month volatility.

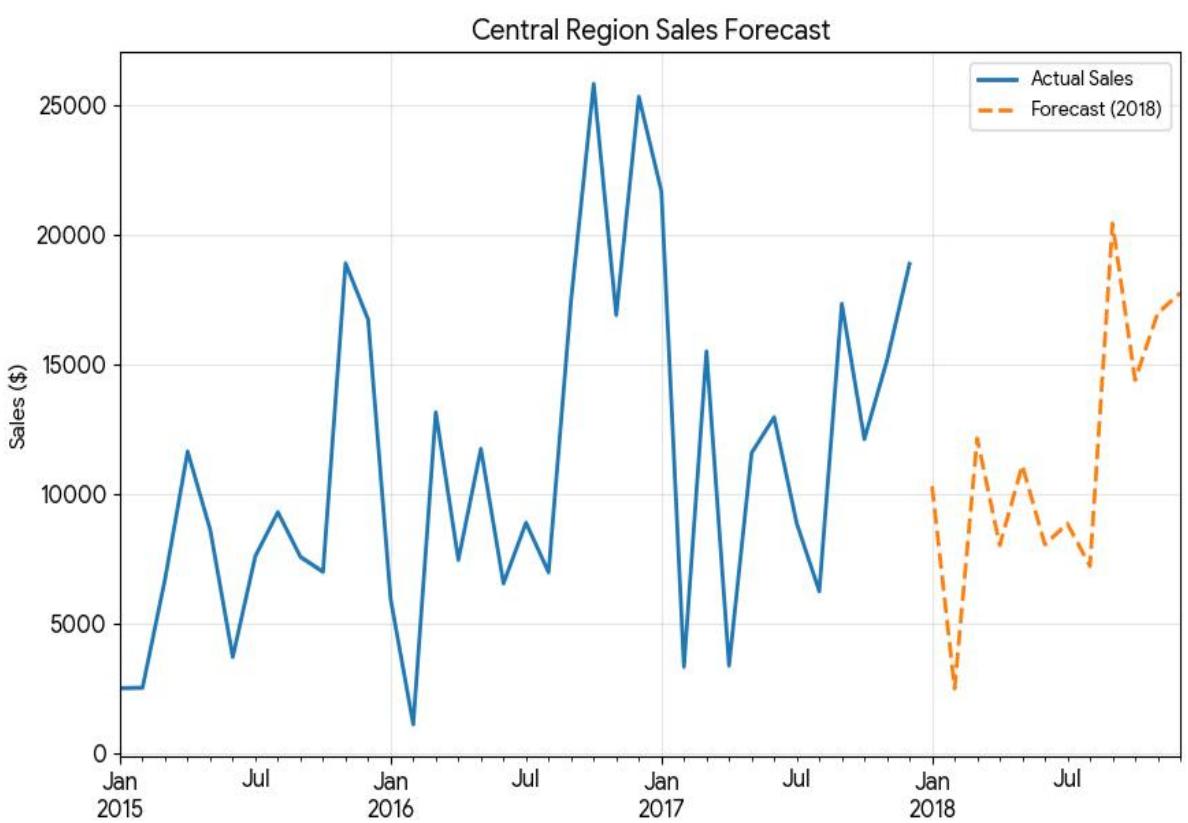
FORECAST :

Growth remains solid at ~14%, keeping it comfortably as the second-largest region.

KEY PATTERN:

The "Holiday Spike" is very pronounced here. The forecast suggests that nearly 40% of the region's sales will likely occur in the final four months of the year.

CENTRAL REGION SALES FORECAST



Line Graph of Central Region Sales

INTERPRETATION :

This is the only region showing a concerning trajectory. The forecast predicts a stagnation or decline (-6.3%) in sales for the coming year.

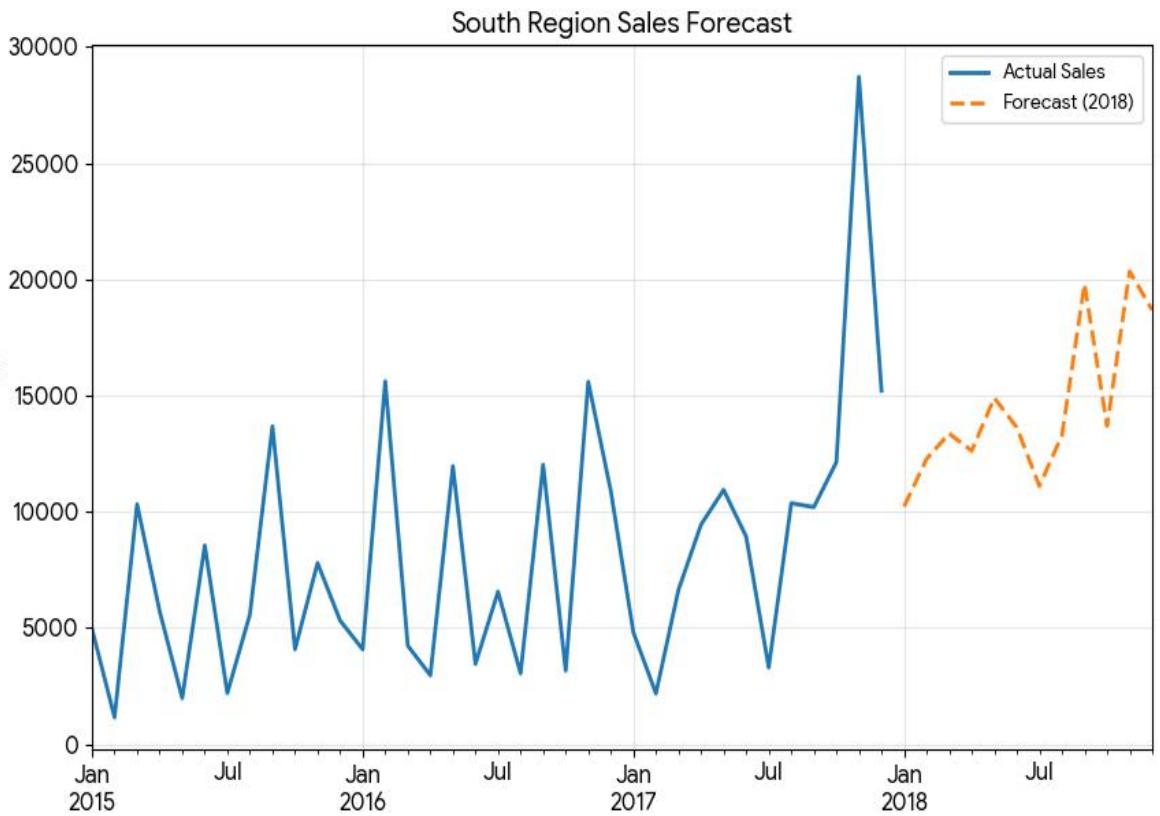
FORECAST :

While other regions are growing, the Central region is struggling to maintain its momentum.

ROOT CAUSE:

The lack of profit growth may be forcing a pullback in sales efforts, or aggressive discounting is no longer driving the necessary volume boosts.

SOUTH REGION SALES FORECAST



Line Graph of South Region Sales

INTERPRETATION :

The South is showing the most aggressive momentum. Recent data indicates a steep upward trend that the forecast model expects to continue.

FORECAST :

This region is projected to have the highest growth rate by far (+41.5%).

IMPLICATION :

If this trend holds, the South is on track to overtake the Central region in total sales volume by mid-to-late 2018, shifting from the smallest region to a major revenue driver.

RECOMMENDATIONS

- Implement a controlled discount cap (maximum 15%) on Furniture in the Central region to immediately reverse the current losses and restore category profitability.
- Create sales bundles that pair high-margin Technology products with lower-margin Furniture items to use Tech's strong margins to lift the overall profitability of mixed orders.
- Replicate the West region's pricing and operational model for Office Supplies in the Central and East regions to target the superior 23.8% profit margin achieved in the West.
- Launch targeted marketing campaigns for Home Office customers in the East to drive volume in the company's single most efficient segment (21% profit margin).
- Restructure pricing for Consumer clients in the Central region to fix the inefficiency where massive sales volume is currently yielding a negligible 3.4% profit.
- Prioritize inventory allocation for the West Consumer segment to ensure 100% fulfillment for the company's highest-grossing and most profitable customer group.



THANK YOU