

Executive Report on US Regional Sales Data Analysis

This report provides an in-depth analysis of the US Regional Sales Data, focusing on identifying key trends, regional performance, sales channel effectiveness, and sales team productivity. The objective is to derive actionable insights that could guide strategic decisions to enhance overall sales performance.

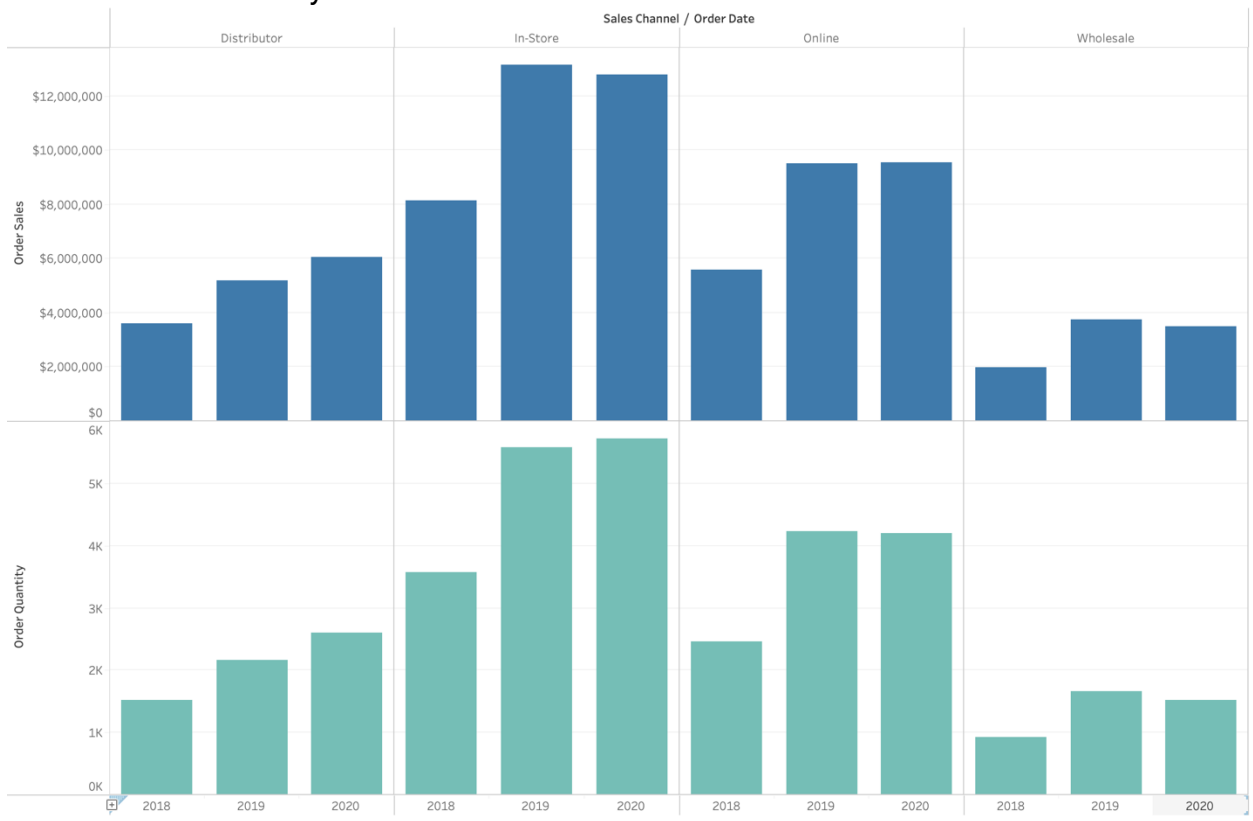
Data Overview

The dataset encompasses detailed sales information categorized by order number, sales channel, warehouse code, order and delivery dates, sales team, customer and store IDs, product details, order quantity, discount applied, and pricing information. A calculated field for the total sales amount was added for comprehensive analysis.

Key Findings

Trends and Channel Performance

The provided bar chart delineates sales figures across different channels over the years 2018 to 2020. An analysis of this data reveals:



In-Store and Online Channels: There was a significant rise in sales in both in-store and online channels in 2019 and 2020, with the in-store channel experiencing the most substantial growth. The increase indicates a successful expansion in these channels, possibly due to strategic marketing initiatives and the effectiveness of promotional strategies.

Distributor and Wholesale Channels: The distributor channel shows a steady increase in sales over the same period, while the wholesale channel exhibits some growth, albeit less pronounced. The steady rise in the distributor channel could be attributed to enhanced partnerships and distribution agreements.

2020 Downturn: Despite the growth in previous years, there is a noticeable dip in 2020 across all channels. This downturn could be attributed to external market conditions, such as economic downturns or shifts in consumer behavior, potentially exacerbated by the global events of that year.

Analysis of Sales Volume vs. Quantity

The chart also presents order quantity alongside sales volume, providing an insight into sales efficiency

Sales Volume vs. Order Quantity: A comparison between sales volume and order quantity may suggest that while the number of items sold increased, the revenue generated did not increase at the same rate. This could point towards a lower average sale price or higher discount rates during the period, affecting overall profitability.

Strategic Implications

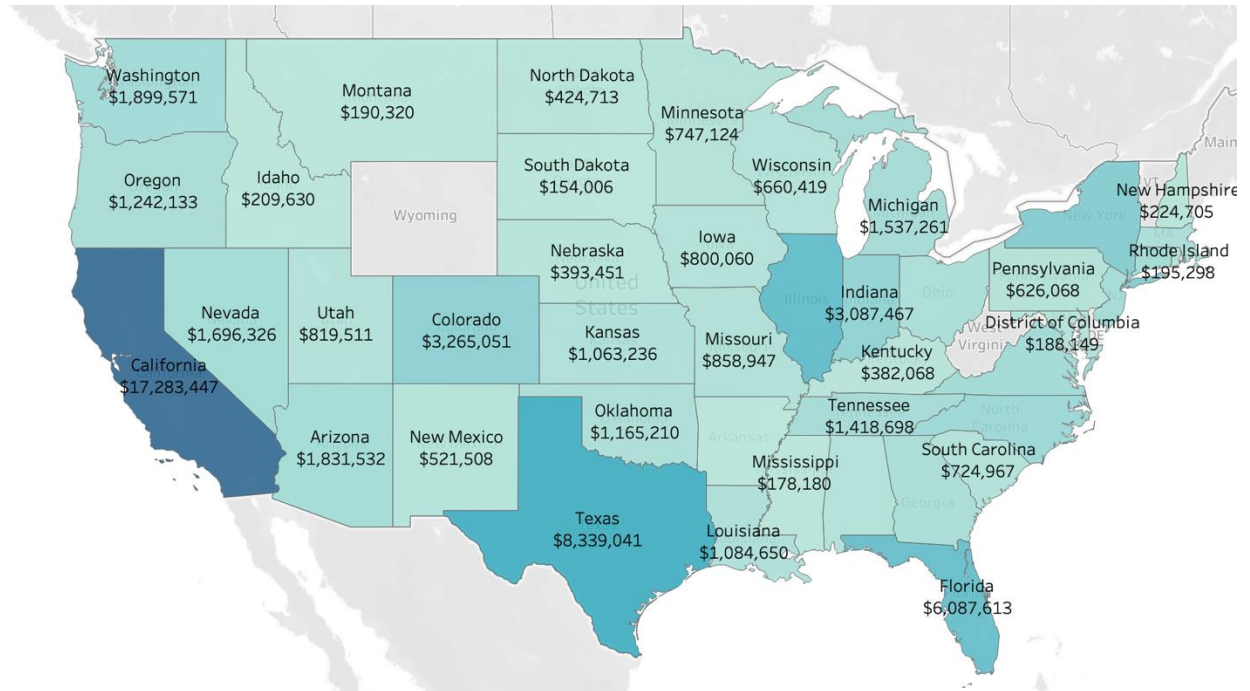
Focus on High-Performing Channels: The in-store and online channels, being the highest revenue generators, should continue to be the focus of concerted sales and marketing efforts.

Channel-Specific Strategies: Each sales channel may require tailored strategies that consider unique customer buying behaviors and preferences, particularly to address the 2020 downturn.

Efficiency Optimization: Strategies aimed at increasing the average order value and improving sales efficiency should be prioritized to ensure revenue growth aligns with the order quantity.

Sales by Region

The map visualization further enhances our understanding of regional performance:



California: With sales exceeding \$17 million, the California region stands out as the most substantial market for our products and services. This region's performance is indicative of strong market penetration and effective sales strategies.

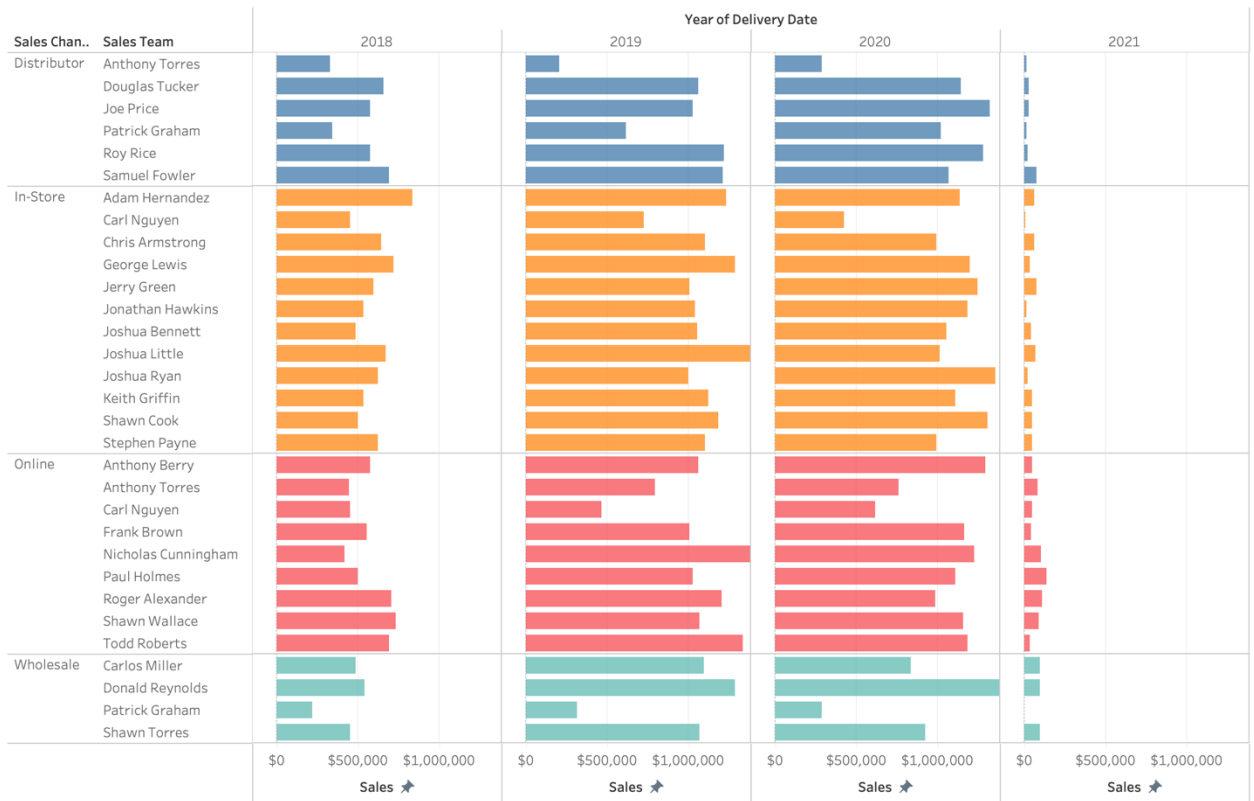
Texas: As the second-highest contributor at over \$8 million in sales, Texas also represents a key strategic market. The success in this region suggests that our offerings align well with the needs of the market here.

Regional Trends: The data reveals that coastal and southern states are the highest contributors to sales, suggesting regional preferences or economic conditions that favor our business.

Potential for Growth: States with lower sales volumes, such as South Dakota and Montana, may indicate untapped markets or areas where strategic marketing initiatives could be implemented to increase market presence.

Sales by Sales Team

Sales by Time



Analyzing the visual data on sales by the sales team up to the year 2020, we can summarize the following:

Team Performance

Teams led by Adam Hernandez and Carl Nguyen in the In-Store channel, along with Anthony Berry and Anthony Torres in the Online channel, have shown outstanding performance, indicating effective sales strategies.

Sales Trends

There is a consistent growth in sales from 2018 to 2020 across all teams, with the most substantial increases in the In-Store and Online channels.

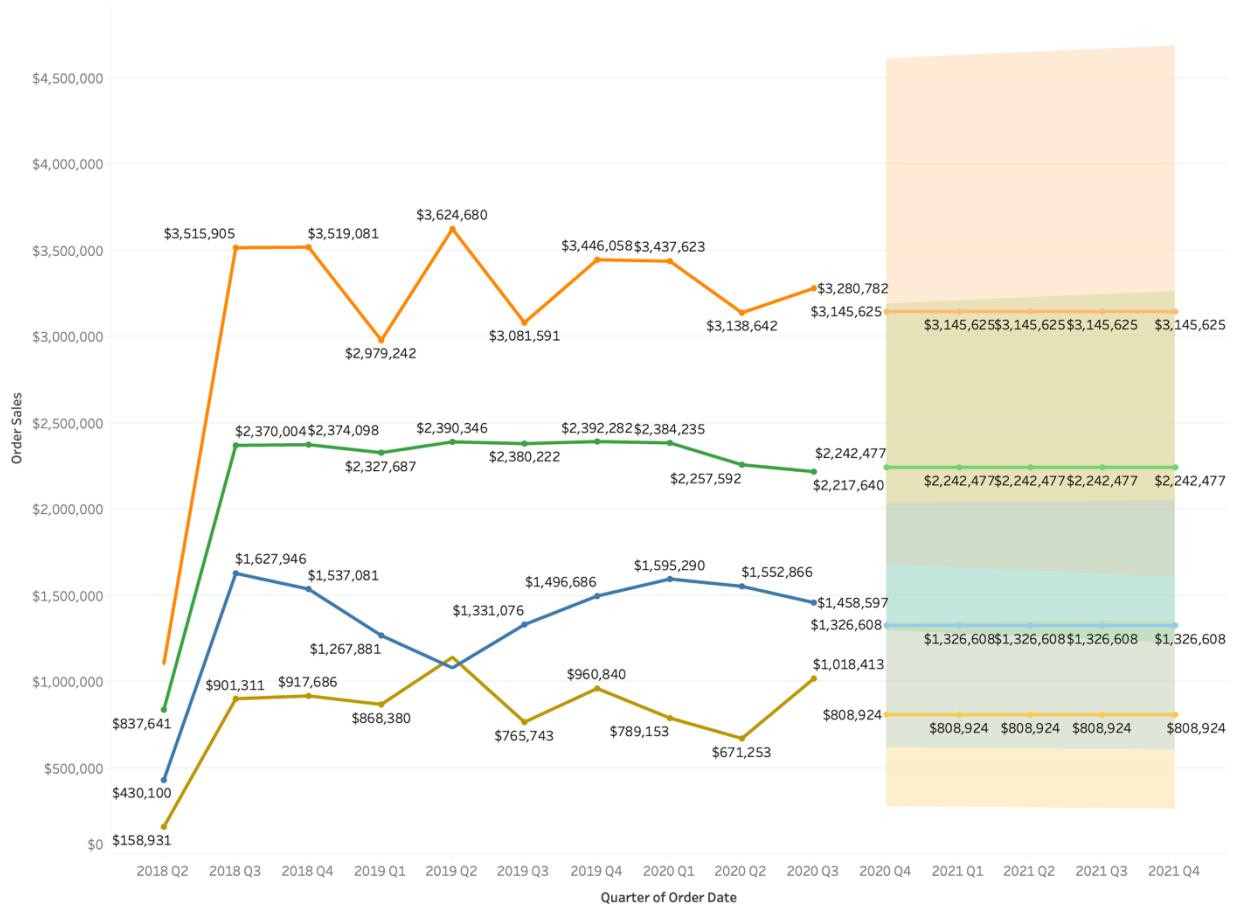
Insights

The performance disparity among sales team members underscores the influence of individual strategies and market engagement.

Actionable Steps

Replicate the sales strategies of leading team members, such as Hernandez, Nguyen, Berry, and Torres, across other teams to elevate overall performance.

Sales Trends

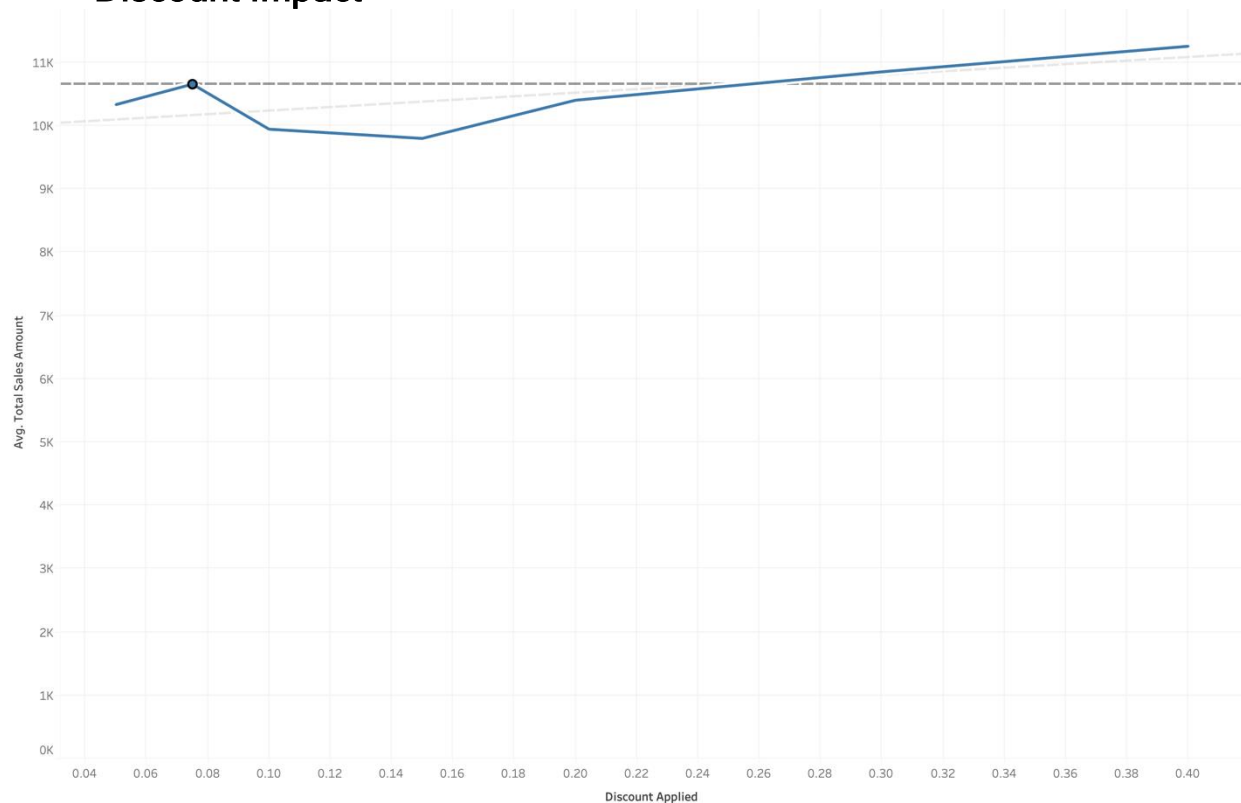


2019 Peak: The highest sales peak in Q3 2019 reached approximately \$3.6 million, indicating a strong seasonal performance.

2020 Consistency: Sales in Q1 and Q2 of 2020 remained relatively stable at around \$2.3 million, with a slight increase in Q3 to nearly \$3.4 million, before a minor drop in Q4.

Growth Trajectory: There was an upward growth trajectory from Q1 2018, starting at \$837,641, peaking in Q3 2019, and then showing a notable consistency in 2020.

Discount Impact



The visual appears to show a line graph plotting the average total sales amount against the discount applied. The trend indicated by the graph suggests the following

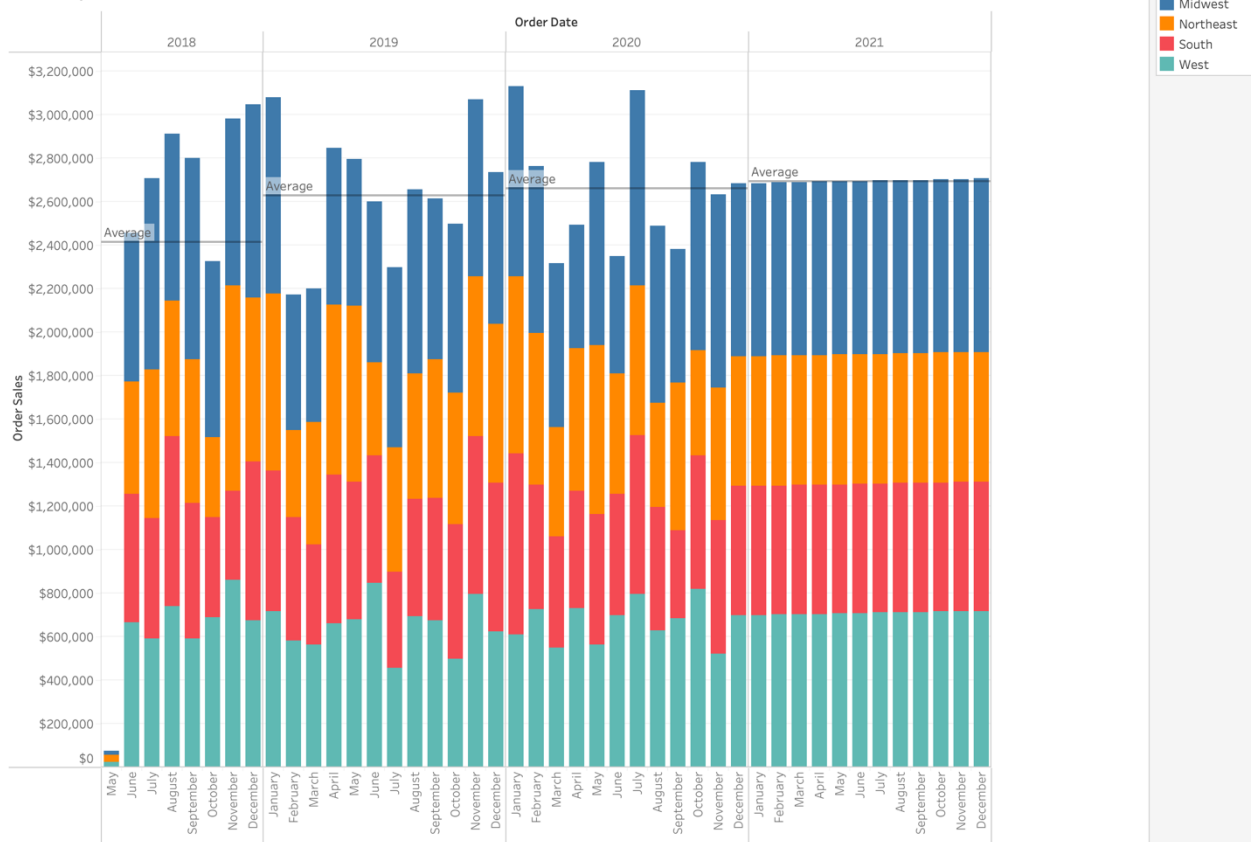
The average total sales amount remains relatively steady with varying discount levels, showing a slight upward trend as the discount applied increases.

The sales amount starts around the 10K mark for lower discounts and appears to increase marginally as the discount rate approaches 40%.

The relatively flat nature of the line suggests that discounts do not have a significant impact on the average total sales amount up to a certain discount level. However, beyond that point, there appears to be a mild increase in sales amount with higher discounts.

2021 Regional Sales KPIs Analysis

Monthly Sales Chart



Midwest Region: With an average sales figure of \$108,257, the Midwest region is indicated as the top performer among all regions for the year 2021. This suggests effective sales strategies or a strong customer base in this area.

Northeast Region: The Northeast region's average sales stand at \$102,456, making it a strong competitor and demonstrating robust sales performance, slightly above the South region.

South Region: The South region posted average sales of \$102,232, which shows a solid market performance, closely trailing the Northeast.

West Region: The West region, while leading in monthly sales in the visual data, has an average sales figure of \$100,385, which is the lowest among the regions for the year 2021 according to the provided KPIs.

Insights:

The Midwest region's performance is notably higher than the rest, which may warrant analysis to identify the drivers of this success.

The Northeast and South regions have nearly identical sales figures, indicating similar market conditions or sales effectiveness.

The West region, despite having the lowest average among the four for 2021, might have strong individual months that require further investigation to understand the variance in performance.

Strategic Considerations:

Identify Best Practices: Assess what led to the Midwest's higher average sales to understand if these practices can be applied to other regions.

Review Sales Tactics: For the West region, investigate why there might be a discrepancy between strong monthly performances and a slightly lower annual average.

Strengthen Consistency: For the Northeast and South regions, strategies should aim to maintain their steady performance and explore opportunities for incremental growth.

Comprehensive Market Analysis: Conduct a detailed market analysis to understand the factors influencing the sales in each region, such as customer preferences, economic conditions, and competition.

This analysis of the 2021 KPIs reveals a nuanced picture of regional performance, with each region showing unique strengths and opportunities for growth. The provided KPIs will guide targeted strategies to leverage regional advantages and address areas of improvement

Conclusion

The 2021 KPIs provide valuable insights into the sales performance of different regional teams. The Midwest region emerges as the leader in average sales, indicating that its strategies and market engagements are highly effective. The Northeast and South regions show commendable performance with similar average sales figures, pointing to potential shared market dynamics or equally effective sales strategies.

The West, despite being the lowest in average sales among the regions for 2021, has shown strong individual monthly performances, suggesting that certain months or specific strategies may be driving sales more effectively during those periods. This highlights an opportunity to analyze and harness these successful tactics throughout the year to enhance overall performance.

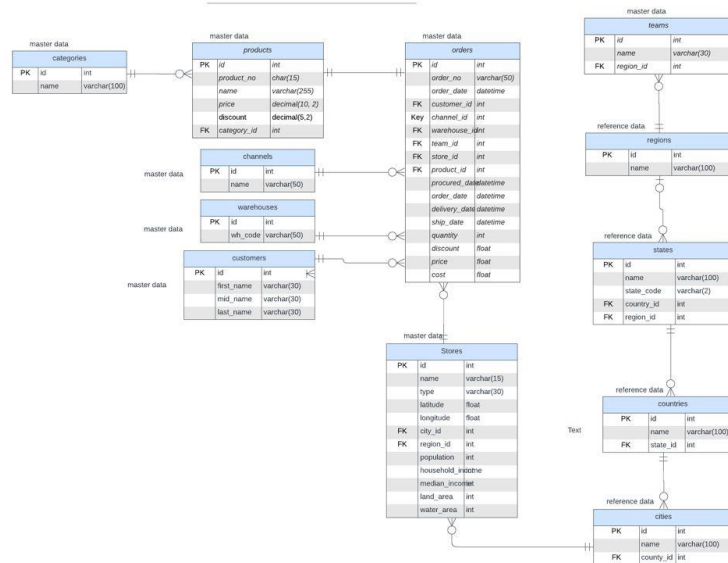
To continue building on the successes and to address the challenges, it is crucial to engage in a deeper examination of the underlying factors contributing to the performance in each region. This should include an assessment of market conditions, sales practices, and competitive landscape. By leveraging the strengths of each region and addressing their unique challenges, there is a substantial opportunity to optimize sales strategies, encourage best practice sharing, and ultimately drive growth across all regions.

The insights from these KPIs serve as a roadmap for strategic decision-making aimed at refining sales approaches and capitalizing on market opportunities to achieve sustained success in the coming years.

Appendix

1. ERD of data sources

Data Visualization Lab2



2. KPIs used:

- Profit Ratio = Profit / Sales
 - Growth Ratio = (Current Month/Year Sales - Previous Month/Year Sales) / Previous Month/Year Sales
- Hyper file extracted from Tableau Prep Builder is marked as Main Data Source and 'region sheet' in US_Region_Sales and Product Category files are used as Secondary Data Sources in this project
 - Unites of each attribute have been added into Text Table 'Sales By Years'

Team Members

1. Vinayak Goyal
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3. Arun sebastian
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5. Qianfan Cheng
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