

Adidas Sales Analysis for 2020-2021

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Introduction:

The task at hand involves analyzing the Adidas sales database to uncover significant findings that can enhance sales performance and refine business strategies. Through a thorough examination of sales data, the goal is to grasp the factors impacting sales, detect emerging patterns, and pinpoint avenues for expansion. Advanced Power BI visualizations and filters will be leveraged to craft an interactive and informative dashboard, facilitating a comprehensive analysis.

About the Dataset:

Link: <https://www.kaggle.com/datasets/vishwas199728/adidas-sales-data>

Dataset Explanation:

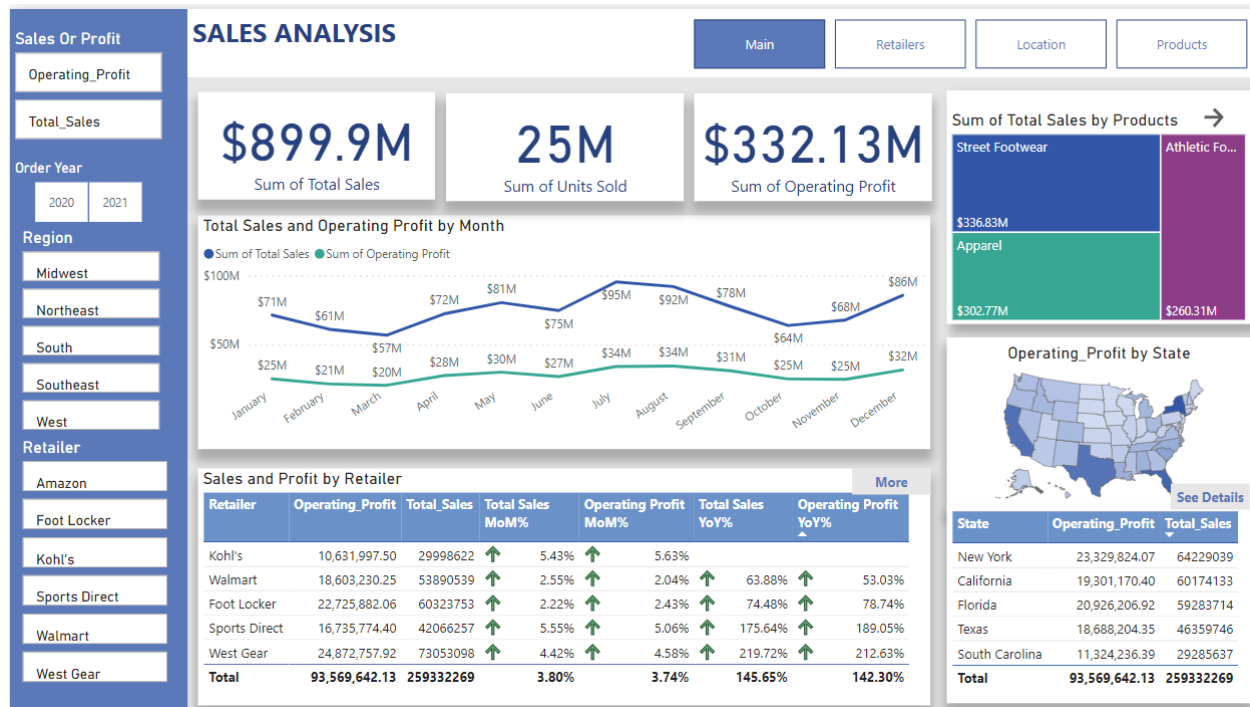
The Adidas sales database contains the following columns:

- **Retailer:** Represents the business or individual that sells Adidas products directly to consumers.
- **Retailer ID:** A unique identifier assigned to each retailer in the dataset.
- **Invoice Date:** The date when a particular invoice or sales transaction took place.
- **Region:** Refers to a specific geographical area or district where the sales activity or retail operations occur.
- **State:** Represents a specific administrative division or territory within a country.
- **City:** Refers to an urban area or municipality where the sales activity or retail operations are conducted.
- **Gender Type:** Categorization of individuals based on their gender, such as male or female.
- **Product Category:** Represents the classification or grouping of Adidas products.
- **Price per Unit:** The cost or price associated with a single unit of a product.
- **Units Sold:** The quantity or number of units of a particular product sold during a specific sales transaction.
- **Total Sales:** The overall revenue generated from the sales transactions.
- **Operating Profit:** The profit earned by the retailer from its normal business operations.
- **Operating Margin:** A financial metric that indicates the profitability and efficiency of a retailer's operations.
- **Sales Method:** The approach or channel used by the retailer to sell its products or services.

Data Cleaning Steps:

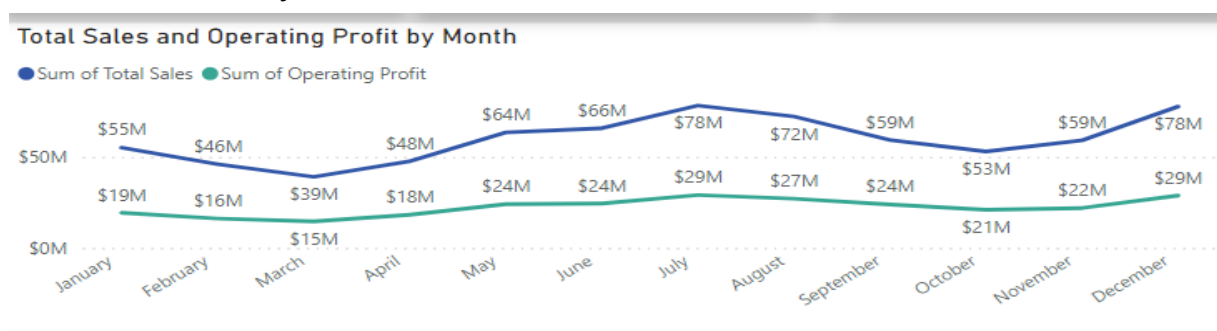
This dataset was found to be clean with no missing or duplicate values and all rows had consistent values, so no data cleaning steps were performed.

Main Dashboard



The primary dashboard provides an overview of sales and operating profits categorized by products, states, and retailers, supplemented with a comprehensive time-series analysis. It includes dynamic features such as Month-on-Month Change and Year-on-Year Change percentages. The interactive slicers enable effortless data manipulation, allowing users to focus on specific details instantly. At the top of the dashboard, intuitive navigation buttons facilitate seamless page transitions, enhancing user experience. Additionally, the "More" and "See Details" options provide a deeper level of analysis, allowing users to drill down for more granular information and insights.

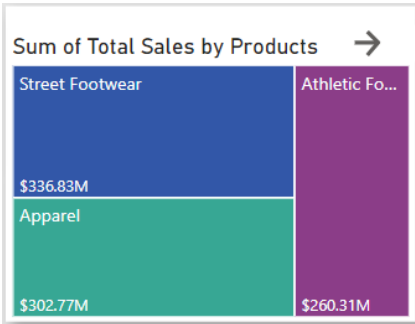
Time Series Analysis of Sales and Profit



December stands out as the month with the highest sales, reaching \$78 million, closely followed by strong sales in July and August. Conversely, the months of July and December report the highest profits. These trends align with holiday shopping trends and year-end promotions, driving increased sales and profitability. Tooltips provide a clear view of the percentage increase in both sales and operating profit. The chart's flexibility allows for drill-up or drill-down options based on year, quarter, and month, enhancing the depth of analysis for sales performance.



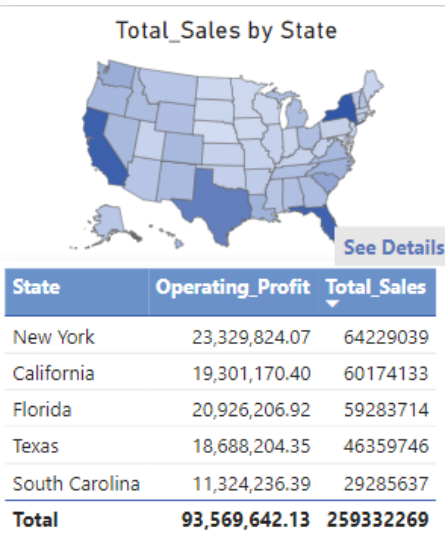
Sales by Products



With only 3 product categories, tree map chart effectively displays product-wise sales data, revealing that street footwear is the most favored category among customers with total sales in 2020 and 2021 being \$336.83M, followed by apparel with \$302.77M and then athletic footwear with \$260.31M

Sales by State

A map displaying color saturation based on total sales offers a clear visual representation of the best-performing states in a state-wise analysis. It enables quick identification of regions that are generally performing well. Additionally, a table provides the same information with precise values, sorted to highlight states with the highest sales at the top. New York leads in both sales and operating profit, followed by California and Florida. The "See Details" button allows for further exploration to understand the factors contributing to New York's superior performance compared to other states.

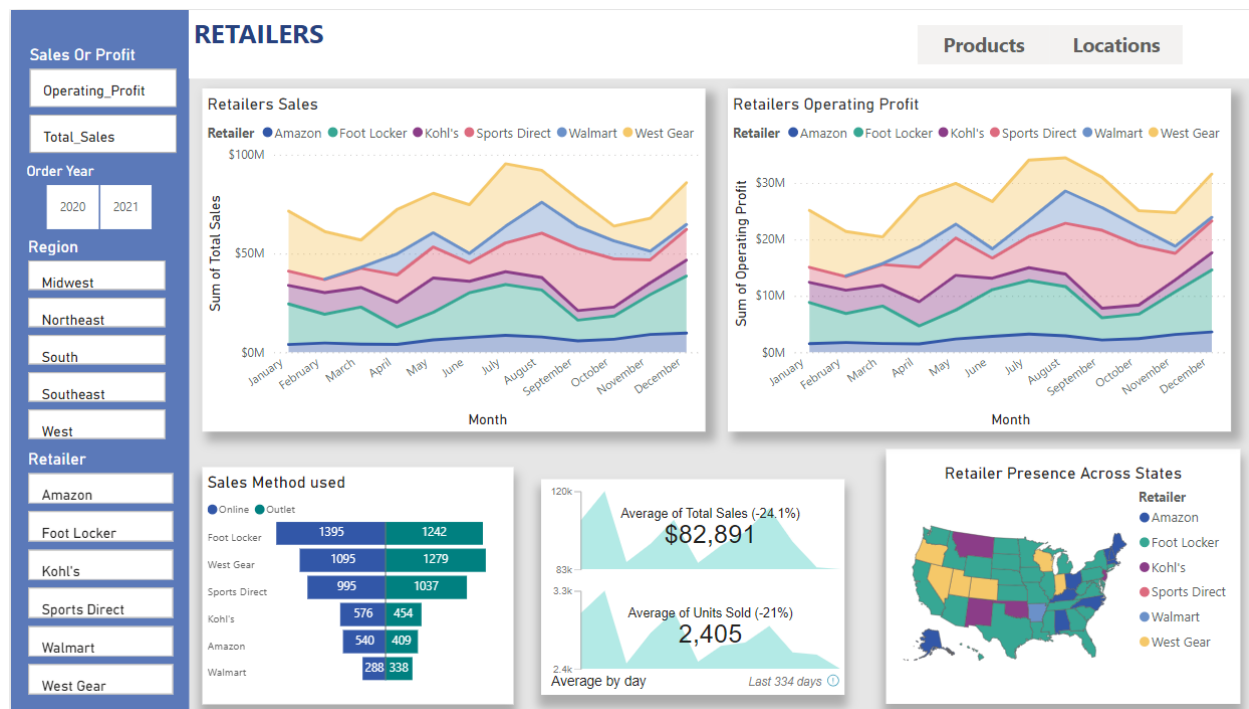


Sales by Retailer

Sales and Profit by Retailer									More	
Retailer	Operating_Profit	Total_Sales	Total Sales MoM%		Operating Profit MoM%		Total Sales YoY%		Operating Profit YoY%	
Kohl's	10,631,997.50	29998622	↑	5.43%	↑	5.63%				
Walmart	18,603,230.25	53890539	↑	2.55%	↑	2.04%	↑	63.88%	↑	53.03%
Foot Locker	22,725,882.06	60323753	↑	2.22%	↑	2.43%	↑	74.48%	↑	78.74%
Sports Direct	16,735,774.40	42066257	↑	5.55%	↑	5.06%	↑	175.64%	↑	189.05%
West Gear	24,872,757.92	73053098	↑	4.42%	↑	4.58%	↑	219.72%	↑	212.63%
Total	93,569,642.13	259332269		3.80%		3.74%		145.65%		142.30%

Since our dataset centers on Adidas sales via retailers, we found it crucial to highlight retailers experiencing significant growth in both sales and operating profit, both annually and monthly. West Gear emerged with the highest total sales and profit, prompting us to delve deeper using the "More" button for further insights. Similarly, Kohl's exhibited the highest monthly growth rate, making it another retailer worth exploring in detail.

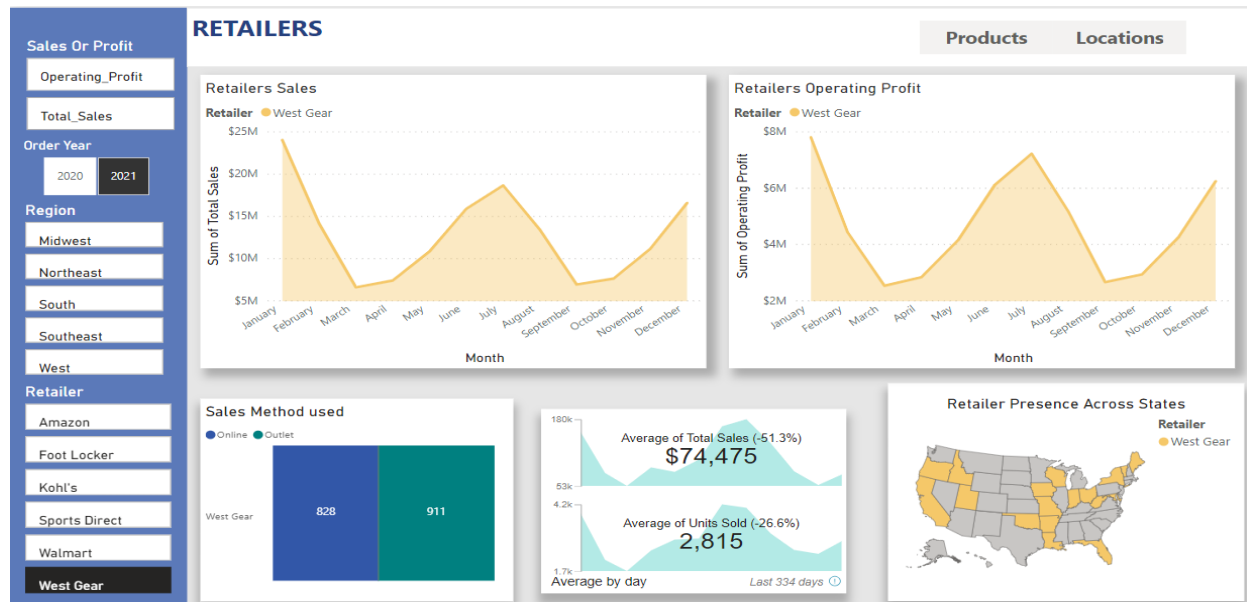
Retailers Dashboard



This shows a general overview of how all retailers are performing across the US. It reveals a trend of declining sales in February, March, and October through November across all retailers. The tornado chart offers a visual comparison of customers' preferred buying methods across

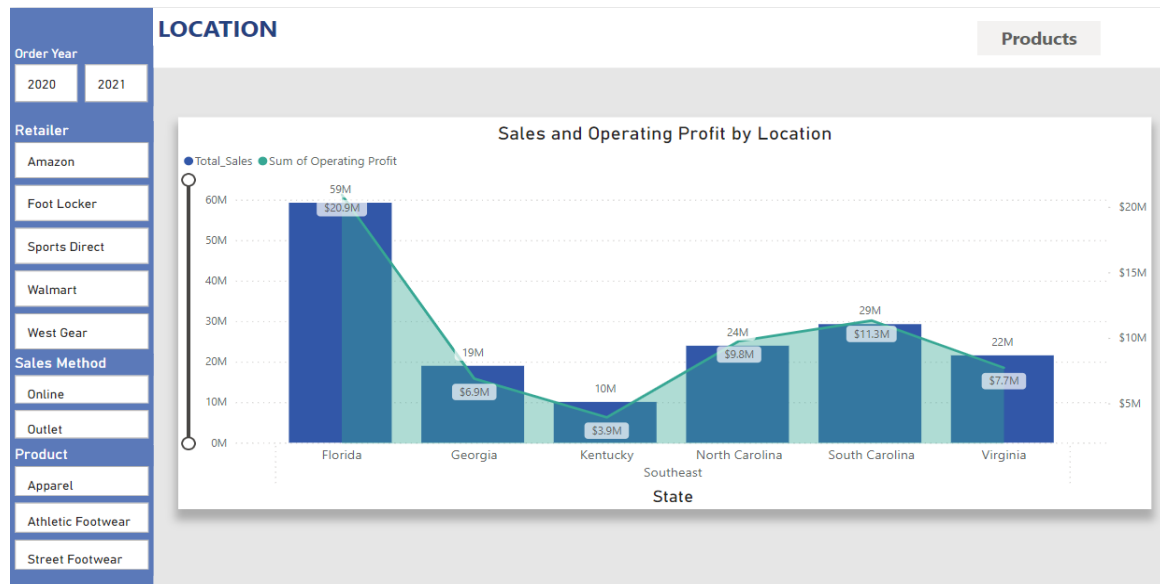
different retailers. It can help identify which sales channels (e.g., online, in-store, mobile app) are most effective for each retailer, guiding resource allocation and marketing strategies. Meanwhile, the Dual KPI chart provides immediate insights into daily units sold and average sales, indicating whether there was an uptick or downtrend. By monitoring these metrics, businesses can track sales performance over time, identify patterns, and take corrective actions or capitalize on positive trends to improve overall sales and profitability.

A look into West Gear's sales performance



Drilling down for West Gear sales in 2021, we find out that they too performed very well during the holiday seasons. Their robust sales figures throughout the year indicate a strong potential for expanding their outlets to other states within the US, especially since they were only present in 18 states in 2021. The sales chart also reveals that there isn't a substantial disparity between the number of units sold online versus in outlets. Therefore, offering online discounts or promo codes specifically may not significantly boost sales, as customers generally prefer purchasing from physical outlets.

Location Dashboard



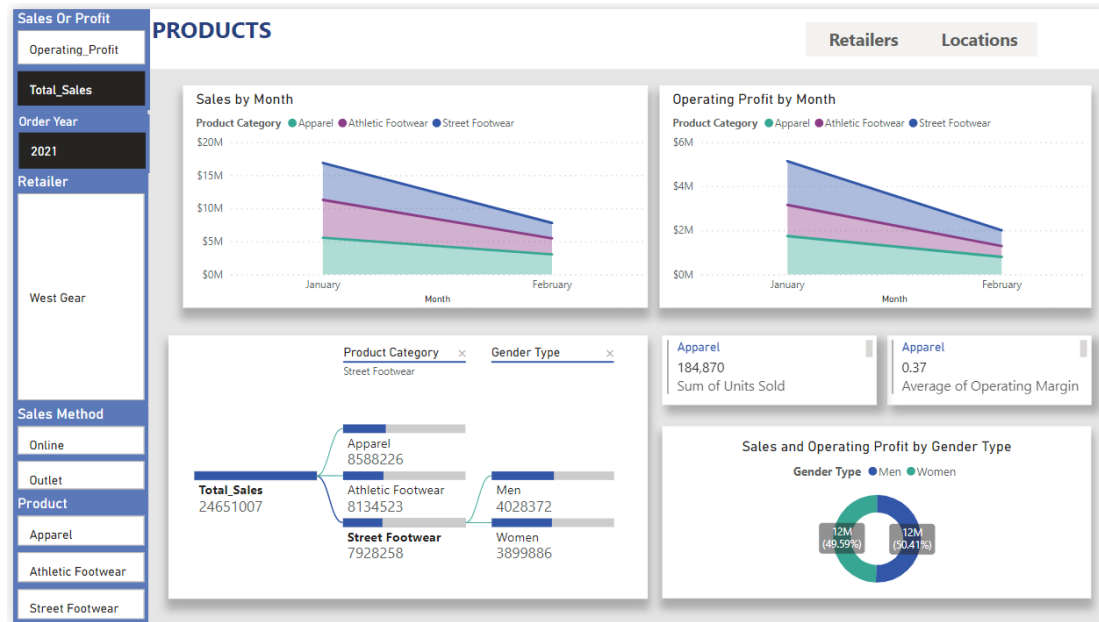
It gives a general overview of sales and operating profit across different regions, states or cities. Using the slicers, data can again be further manipulated to offer better insights.

Identifying the Top-Performing Cities for West Gear



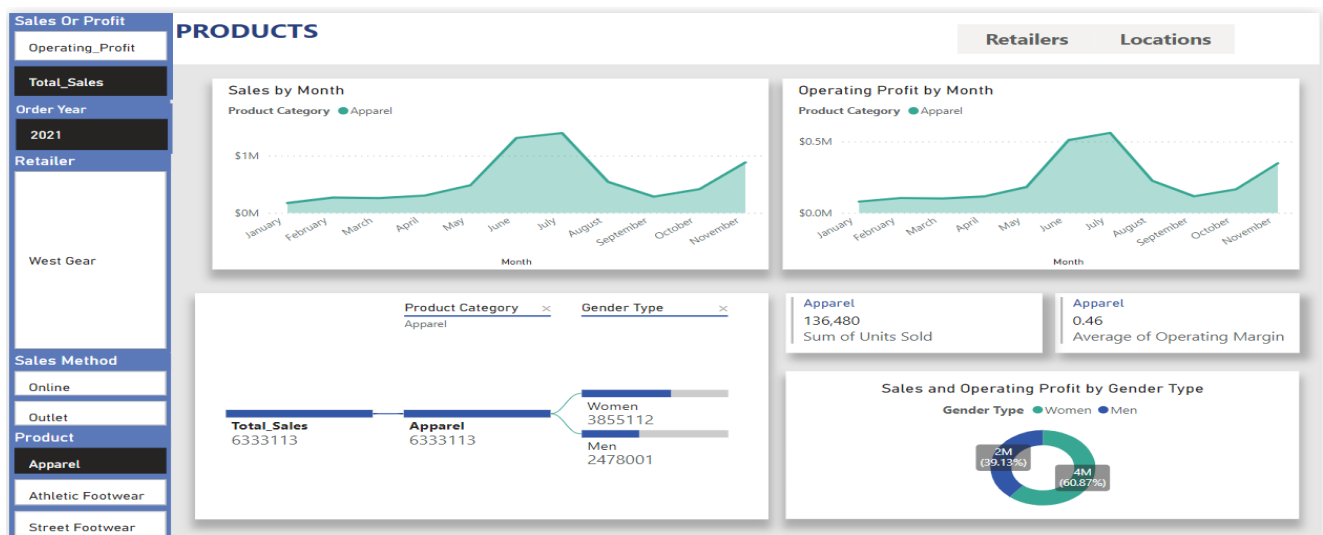
West Gear demonstrates outstanding performance in California, achieving total sales of \$25 million in 2021, followed closely by New York and Utah with \$21 million each. Louisiana stands out as the highest profitable state, generating \$8.2 million in profits. By delving into product-level details, we can uncover which specific products contributed to West Gear's success in California.

Products Dashboard



Through product analysis, it was discovered that apparel contributed the most to West Gear's sales in California. The donut chart revealed a nearly equal split between men's and women's apparel, with both categories sharing about half of the sales. Consistent with the overall trend observed for all retailers, there was a decline in sales and operating profit immediately after the holiday season, particularly in February. To gain additional insights into profitability, a sum of units sold, and operating margin was included, shedding light on which products drive higher profitability.

Higher Sales vs Higher Profitability



Upon closer examination of Louisiana, the state with the highest profitability, it becomes evident that despite lower units sold compared to California, the average operating margin was higher, resulting in Louisiana contributing the most profit to Adidas. Remarkably, akin to California, women's apparel emerges as the top-performing product here as well.

Conclusion:

Adidas made total sales of \$899.9M, profit of \$332.13M between the years of 2020 and 2021 with 25M total units sold. There is a high percentage of increase in sales between 2020 and 2021 mainly because of 219.72% increase of sales from West Gear. Kohl's had the highest monthly growth indicating potential. West Gear also holds the highest number of Sales, Profit and Units sold among all the retailers.

Among all the products, Women's Athletic Footwear holds the last rank in both sales and profit wise. So new strategies and marketing ideas need to be implemented to increase the sales. This includes introducing new designs, collaborations, and promotions to capitalize on its popularity. Use cross-selling strategies to leverage the popularity of street footwear to drive cross-selling opportunities. Bundle street footwear with related accessories or complementary apparel items to encourage customers to make additional purchases, increasing average order value.

Women's Apparel on the other hand holds highest rank, this enables Adidas to focus on their most successful offerings and allocate resources efficiently. By understanding which products perform well in specific regions, businesses gain valuable insights into customer preferences, buying behavior, and market trends. This information can guide product development, marketing campaigns, and customer engagement strategies to enhance customer satisfaction and loyalty.

We also identified that as our highest performing retailer, West Gear can be expanded across other states in the US. Given the higher sales and profits in December and during the summer months (July and August) in general and specifically 2021, businesses can capitalize on seasonal trends by offering targeted promotions and marketing campaigns. This could include holiday-themed discounts, summer sales events, and promotions aligned with peak shopping periods. This expansion can potentially tap into new markets, increase brand visibility, and drive revenue growth.

The insights gleaned from this analysis highlight the importance of considering factors beyond just sales volume. While selling more units is beneficial, focusing on products with higher profit margins can significantly impact overall profitability. Louisiana's example demonstrates that even with lower units sold compared to California, a focus on higher profit margins led to substantial profits for Adidas.