Retail Sales Performance Analysis for Adidas

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BUAN 676 -Business Analytics for Decision Making

21st June

Introduction

This report presents a comprehensive retail sales performance analysis for Adidas using Tableau as the primary visualization and business intelligence tool. Drawing on a dataset of over 9,600 transactions, the team evaluated unit sales, pricing, operating profit, and regional performance across various product categories and sales channels.

Key findings reveal that Women's and Men's Apparel command the highest average unit prices, while Street Footwear products generate substantial volume, especially in the Midwest and South regions. Additionally, Online and Outlet sales channels show distinct seasonal and regional patterns, with outlets dominating total revenue in the South and Midwest.

Using Tableau dashboards, we answered targeted SMART business questions to uncover trends and outliers. Based on our insights, we recommend Adidas focus on enhancing distribution efficiency in high-performing states, investing in high-margin product lines, and aligning promotions with regional sales cycles to improve profitability.

Client Challenges

Adidas aims to optimize profitability across its U.S. retail network by making more informed decisions on product strategy, channel effectiveness, and regional allocation. The company faces the following analytical challenges:

- Uneven profit margins across states and sales methods

- Lack of clarity on seasonal demand patterns

- Difficulty in determining optimal retailer and product combinations

- Limited visibility into average pricing and high-performing product categories

This project addresses these challenges through data-driven Tableau dashboards, trend analysis, and region-specific insights.

Methodology

Dataset Description

The dataset used was "Adidas Sales" which contains 9,641 transaction records for 2021 invoiced on specific dates. The variables include fields for product category, region, city, retailer name and ID, sales method (Online/Outlet), price per unit, units sold, total sales, and operating profit.

Tools Used:

1.   Tableau Desktop: for interactive visual dashboards
2.   Microsoft Excel: for preprocessing and validation

Steps Taken:

Data Cleaning: Removed null values, standardized field types (e.g., date formatting, float conversion for price), and verified consistency across records.

Visual Design: Built interactive Tableau dashboards with filters, color coding, and annotated insights.

Business Question Development: Collaboratively defined 5 SMART questions addressing sales, pricing, profitability, and geography.

Dashboard Building: Deployed visualizations including bar charts, bubble charts, pie charts, line

charts, scatter plots, and maps to answer each SMART question

Visualizations, Smart Questions and Recommendations

1 Total Sales for each product in each region
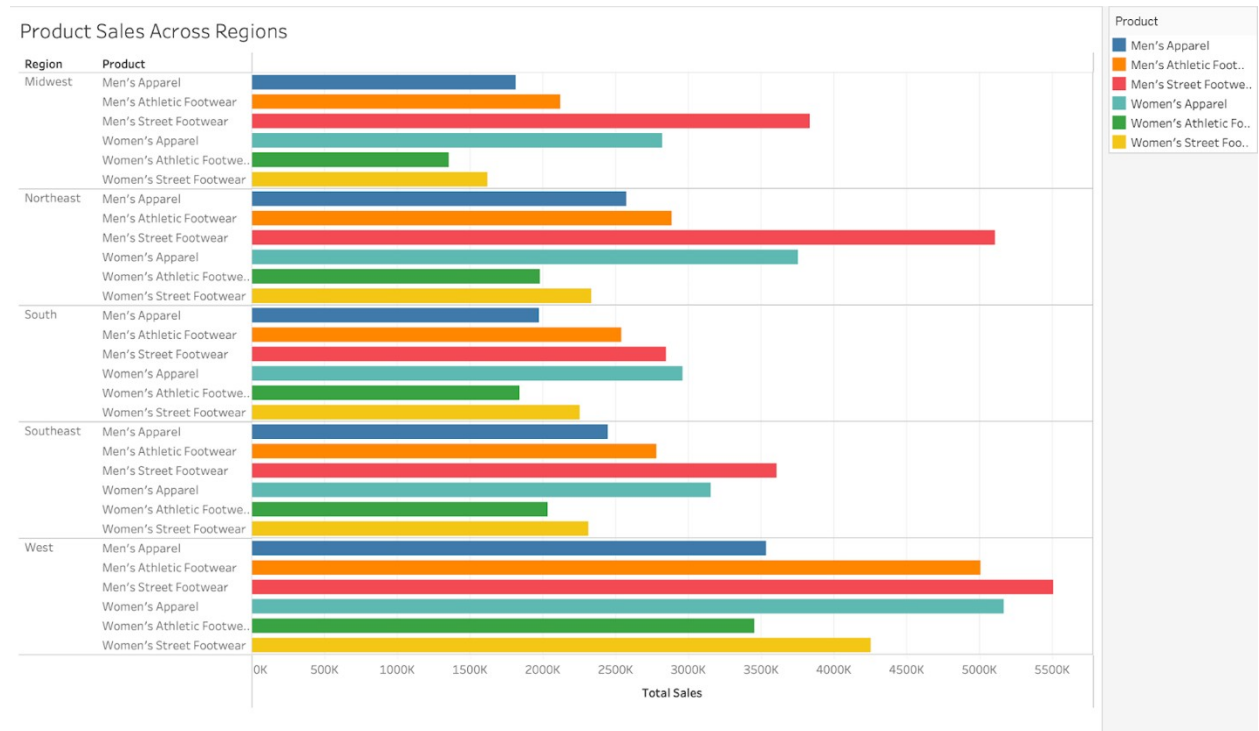
Analysis

The goal is to categorize the sales volume by category in each region. According to the Bar Chart, men's footwear was the top-selling category in almost every region, especially the West and Northeast. Men's Athletic Footwear and Women's Apparel were doing well across all regions also. The West region had high sales for all categories regardless of the product category, whereas the South region had low sales for all categories, but the distribution was consistent across all categories.

Suggestions

Since Men's Street Footwear is a hit, especially out West and in the Northeast, maintaining the inventory and running special promotions for this category is the primary focus. Women's Apparel is performing well in several regions. More targeted campaigns or new styles are expected to keep that momentum going, especially in the West and South. In places like the Midwest, where sales are solid but not leading, promoting popular categories like Women's Street Footwear could drive growth.

2 Total Monthly Sales by Product Category
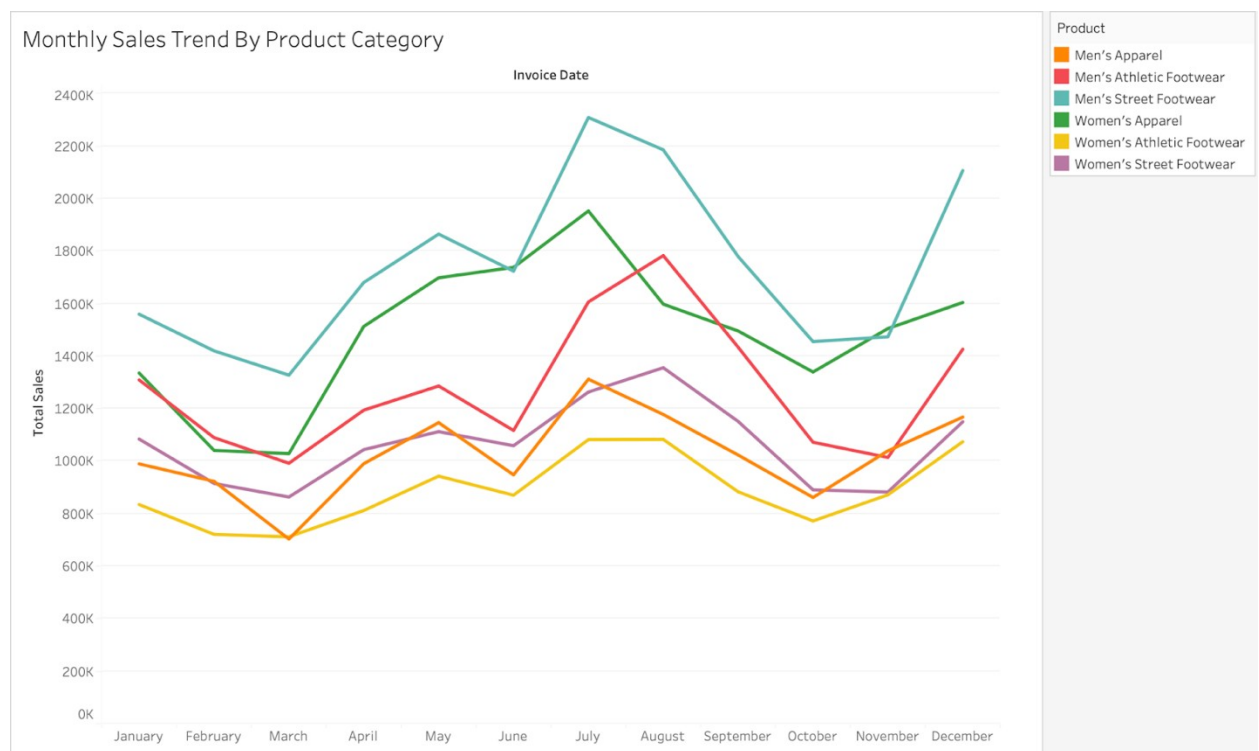
Analysis

The goal is to identify what categories perform the best during different times of the year. From the chart, we can see that Men's Street Footwear was the Highest-selling category overall.

It had a strong peak in July and August (approaching 2.4M in July), and dips in March and October, then rebounding in December. Women's Apparel ranked second, having a steady rise from March to July, showing a slight decline into fall, and rebounding again in November. Men's Athletic Footwear followed, peaking in August after a steady build-up from March. The trend dropped sharply in September and October, then rose again in December. Women's Street Footwear showed moderate sales with a clear peak in August and a notable dip in October. Similarly, Men's Apparel had a mid-year peak in July, with lower performance in March and October. Women's Athletic Footwear was consistently the lowest-selling category with a mild rise in the summer months.

Suggestions

July and August are strong sales months, especially for Men's Street Footwear and Women's Apparel. It is suggested to plan major product launches, promotions, and advertising pushes during this period. Most categories see a bounce in December, likely due to holiday shopping. Adidas should prepare early with holiday campaigns and ensure high inventory of bestsellers. Categories like Men's Athletic and Women's Street Footwear see dips in September– October. Targeted discounts, bundling, or seasonal refreshes might help maintain interest. Women's Athletic Footwear lags. Analysis of customer feedback, pricing, or product design to identify barriers, and exploring collaborations or influencer marketing to drive awareness might increase the sales. Align production and inventory with sales cycles—peak in summer, prep for holidays, scale back slightly in Q1 and fall.

3 Which U.S. states deliver high profits despite low unit sales?
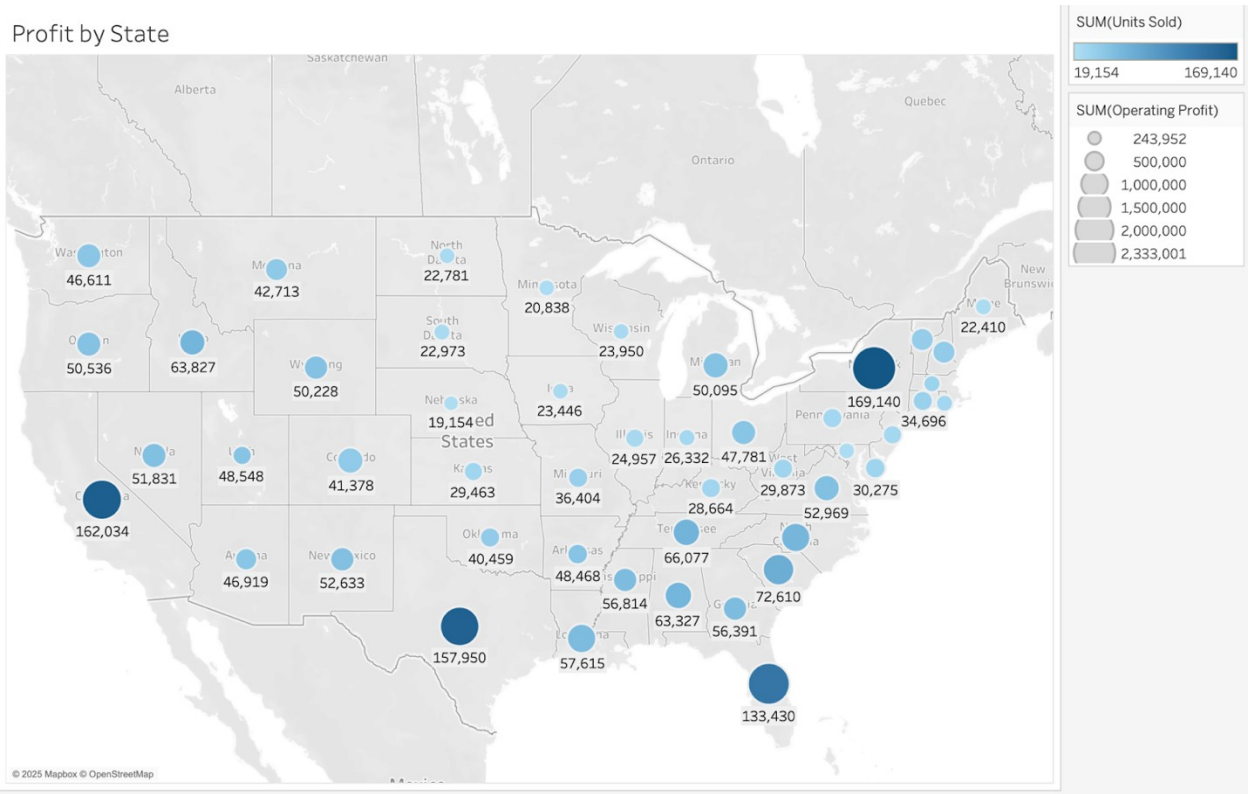
State	Total Sales	Operating Profit	Profit-to-Sales Ratio
Nebraska	592907	243952	0.4114506996881470
Missouri	968323	390725	0.40350688768107300
Vermont	1435306	578602	0.40312100694904100
Pennsylvania	1035758	415676	0.4013254061276860
Illinois	959752	384845	0.4009837958139190

Analysis

States like Nebraska, Missouri, Vermont, and Pennsylvania demonstrated exceptionally high operating profit relative to total sales, indicating efficient operations or favorable product mixes. Despite having below-median total sales, several states (e.g., Illinois, West Virginia, Utah) maintained high profitability. This suggests room for growth through expanded sales initiatives.

Many of the high-performing states by profit ratio are smaller markets not typically seen as sales leaders. This implies untapped potential in niche or underserved regions. These high-ratio states may not yet be saturated, offering an opportunity to scale sales without significantly increasing fixed costs, thereby maintaining or improving profit margins.

Recommendations

Focus on increasing visibility and product availability in states like Nebraska, Vermont, and Kentucky, where existing operations are profitable despite limited sales volume. Invest in location-specific campaigns in high-margin states to build brand awareness and stimulate demand in already-profitable areas.

Review the sales methods used in these states. If profitability is driven by outlets or online channels, optimize those further through localized promotions or loyalty programs. Analyze what contributes to the higher profitability in these states—product preferences, pricing strategies, or customer demographics—and apply similar approaches in other underperforming markets. Regularly track profit-to-sales ratios, especially in lower-sales states, to ensure continued operational efficiency as expansion efforts are rolled out.

4. How does the sales method impact regional performance?
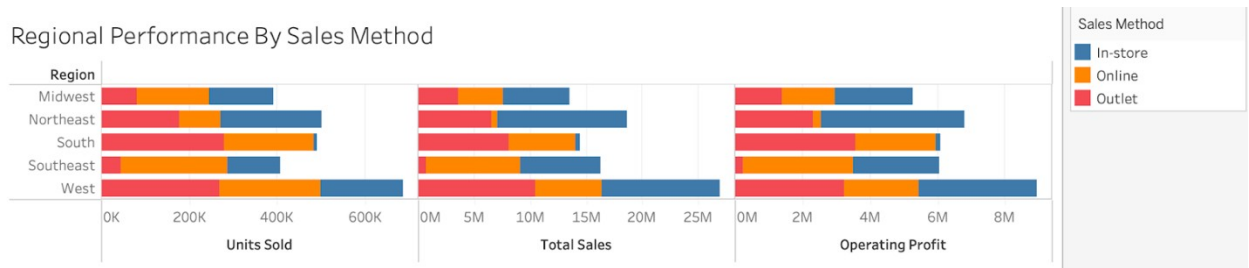
Analysis

Across all regions, In-store sales (blue) contribute significantly to Total Sales and Operating Profit, especially in the Northeast, Southeast, and West. Outlet sales (red) lead in Units Sold, particularly in the West and South, but their contribution to Operating Profit is modest. This indicates lower margins per unit.

Online sales (orange) show up in all regions but contribute the least to Operating Profit and Total Sales, especially in the Midwest and Northeast. Online performs slightly better in Southeast and South but still lags in store.

West is the strongest performing region overall in both Total Sales and Operating Profit, largely due to In-store and Outlet performance. Northeast also shows strong In-store performance, indicating mature brick-and-mortar infrastructure.

Recommendations

Prioritize In-store Sales to support In-store retail in West, Northeast, and Southeast where it's delivering the highest profit returns. Since Outlet sales drive volume but not profit, revisit pricing strategies, product mix, or operational costs at outlet locations to improve margins.

Consider improving the user experience, targeted advertising, or exclusive online promotions to boost performance in Online sales, particularly in the Midwest and Northeast. Launch regional campaigns based on existing strengths: e.g., promote outlet clearance in the West, or exclusive in-store drops in the Northeast. Introduce click-and-collect or online-to-store programs in underperforming regions to bridge Online and In-store channels, increasing conversion rates and foot traffic.

5. Which product categories have the highest average price per unit?
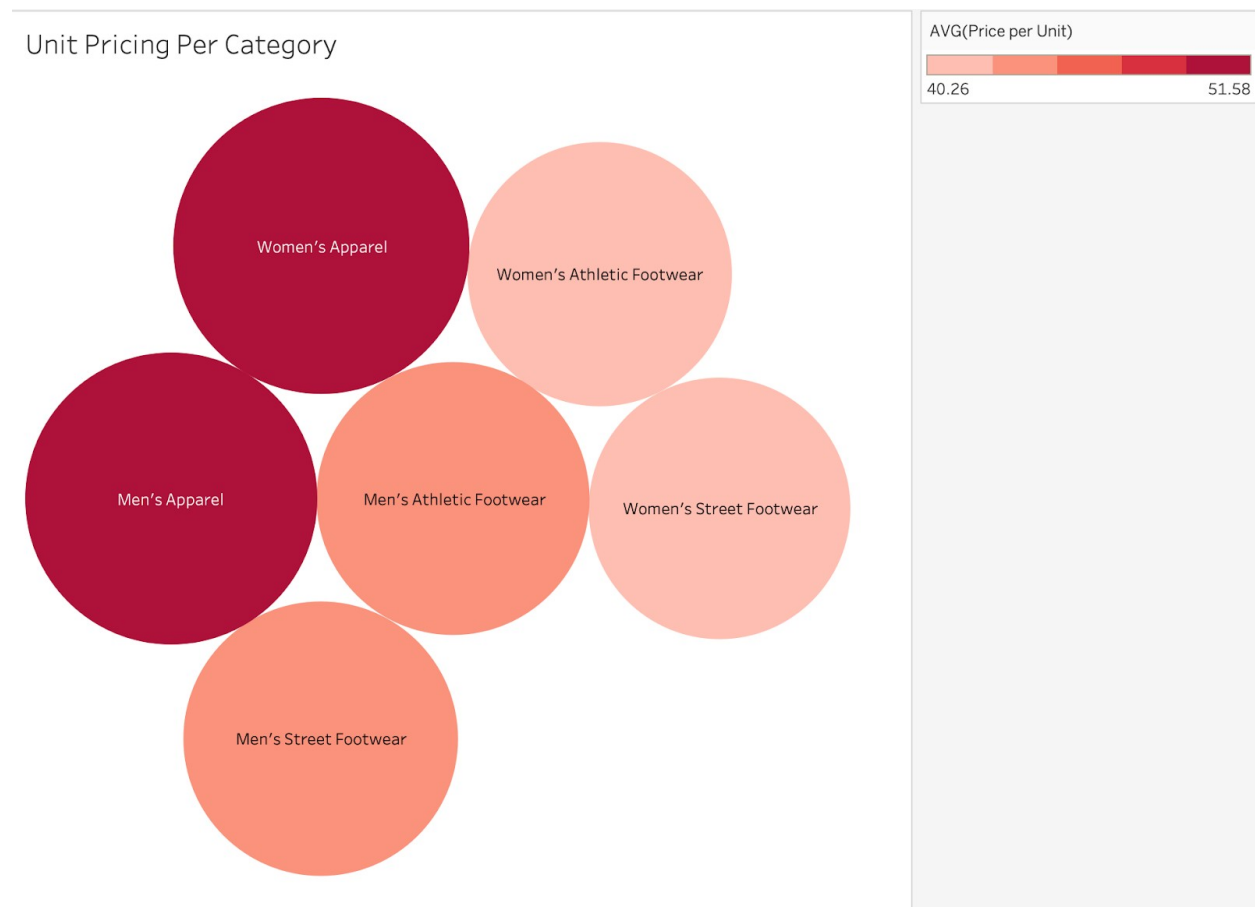
Analysis

Women's Apparel and Men's Apparel have the highest average price per unit, as shown by the largest and darkest red bubbles. Categories like Women's Street Footwear and Women's

Athletic Footwear have relatively lower average unit prices, indicated by smaller and lighter-colored bubbles. The range of average prices across categories spans approximately from $40.26 to $51.58.

Recommendation

Maintain premium pricing for Women's and Men's Apparel, as these are your highest-value categories and likely drive strong margins. Evaluate bundling or upselling strategies in lower-priced categories (e.g., Women's Footwear) to increase average transaction value. Consider promotional sensitivity testing in mid-tier categories (e.g., Men's Athletic Footwear) to see if demand elasticity supports slight price increases. Use this pricing insight to optimize marketing spend—invest more in promoting high-price categories in profitable regions.

Conclusion

This analysis of Adidas retail sales data has provided a comprehensive overview of performance across product categories, regions and sales channels. Through data visualization and trend analysis in Tableau, we identified key drivers of revenue and profitability, revealing that product pricing, regional focus, and channel strategies play a significant role in business outcomes

Our findings highlight that apparel products command the highest average unit prices, while footwear-especially street footwear achieves high volume and broad market reach. The Midwest and south regions emerge as high-contribution areas, with outlets outperforming online channels in several key markets. Based on the insights following will be recommended to Adidas

Prioritize marketing and logistics in top-performing product region combinations, expand profitable partnerships and streamline underperforming relationships, optimizing pricing and promotional strategies based on seasonal and channel-specific trends. By leveraging Tableau dashboards and real-time business intelligence, Adidas can better align its sales strategy with data-driven insights, ultimately improving profitability and competitive positioning in the retail market.

References

Abbas, A. (2023). Adidas Sales. Kaggle.

    https://www.kaggle.com/datasets/ahmedabbas757/dataset