Presentation on Sales Data Analysis

for Adidas

By Group 1
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Project Overview

<u>Role as Consultants:</u>
    To perform data-driven analysis and look for patterns for improvement.

<u>On Adidas</u>
    They sell apparel, footwear, and sports equipment

<u>On the Goal:</u>
    Identify the product categories driving the sales and maintain and/or improve them.

Client Challenges

To Optimize Profitability By Making More Informed Decisions On Product Strategy, Channel Effectiveness, And Regional Allocation.

<u>Analytical Challenges:</u>

- 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

SMART Business Questions

Which products and regions generate the highest sales?

What are the monthly sales trends by product category?

Which US states deliver high profits despite low unit sales?

How does the sales method impact regional performance?

Which product categories have the highest average price per unit?

DATASET OVERVIEW

Dataset
Adidas Sales (Abbas, 2023)
- 9,641 transaction records
- Includes: Product category, region, city, retailer details, sales method, price, units sold, total sales, and operating profit

Tools Used:
- **Tableau Desktop** – for interactive visual dashboards
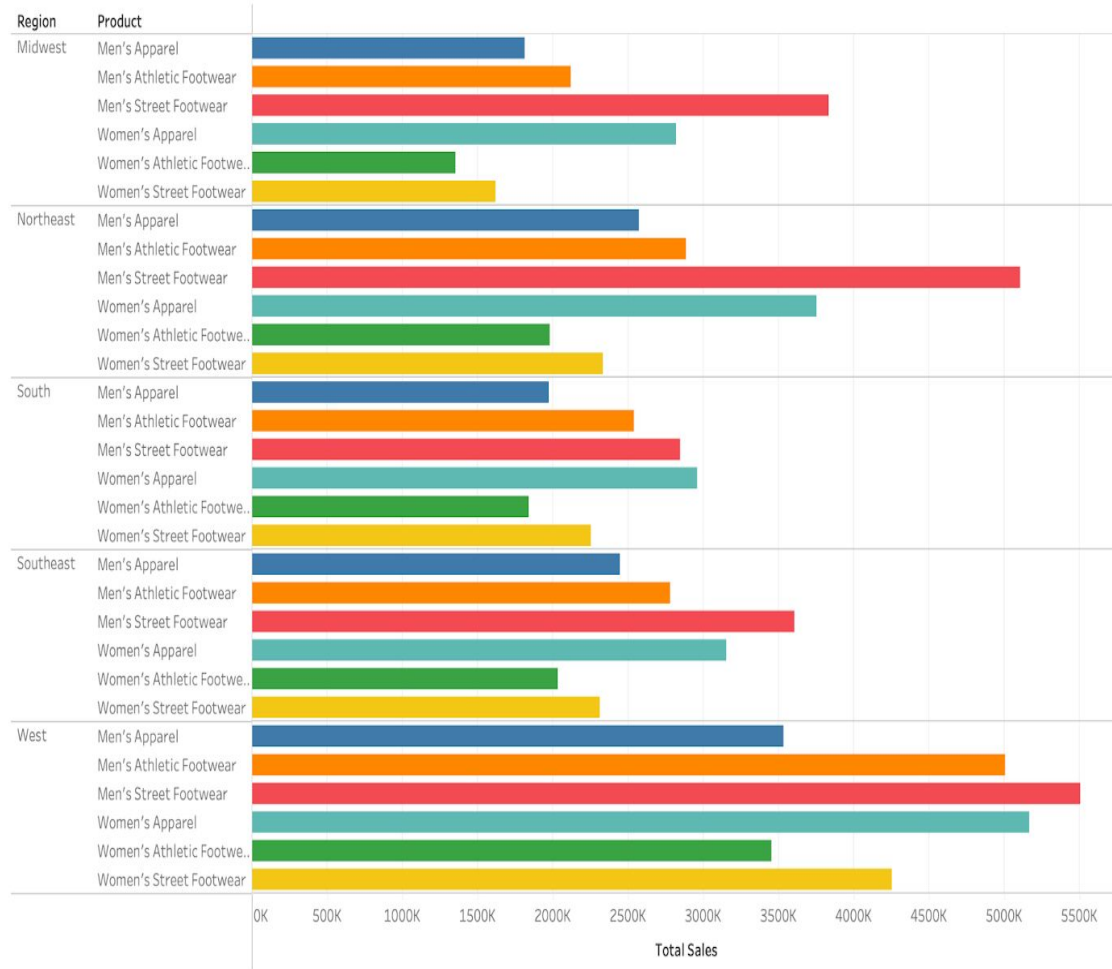- **Microsoft Excel** – for preprocessing and data validation

Methodology
- **Data Cleaning**: Removed nulls, standardized data types (e.g., date formats, numeric precision)
- **Visual Design**: Built Tableau dashboards with filters, color schemes, and insights
- **Business Question Development**: Defined 5 SMART questions focusing on sales trends, pricing, profitability, and regional performance
- **Suggestions**: Visualized the data and Analyzed them for trends.

WHICH PRODUCTS AND REGIONS GENERATE THE HIGHEST SALES?

- Men's Footwear is the top-selling category in nearly all regions

- Especially strong in West and Northeast

- Men's Athletic Footwear and Women's Apparel show consistent performance nationwide

- West Region: High sales across all product categories

- South Region: Lowest sales, but evenly distributed across categories

To know if any categories are over/underperforming in any regions
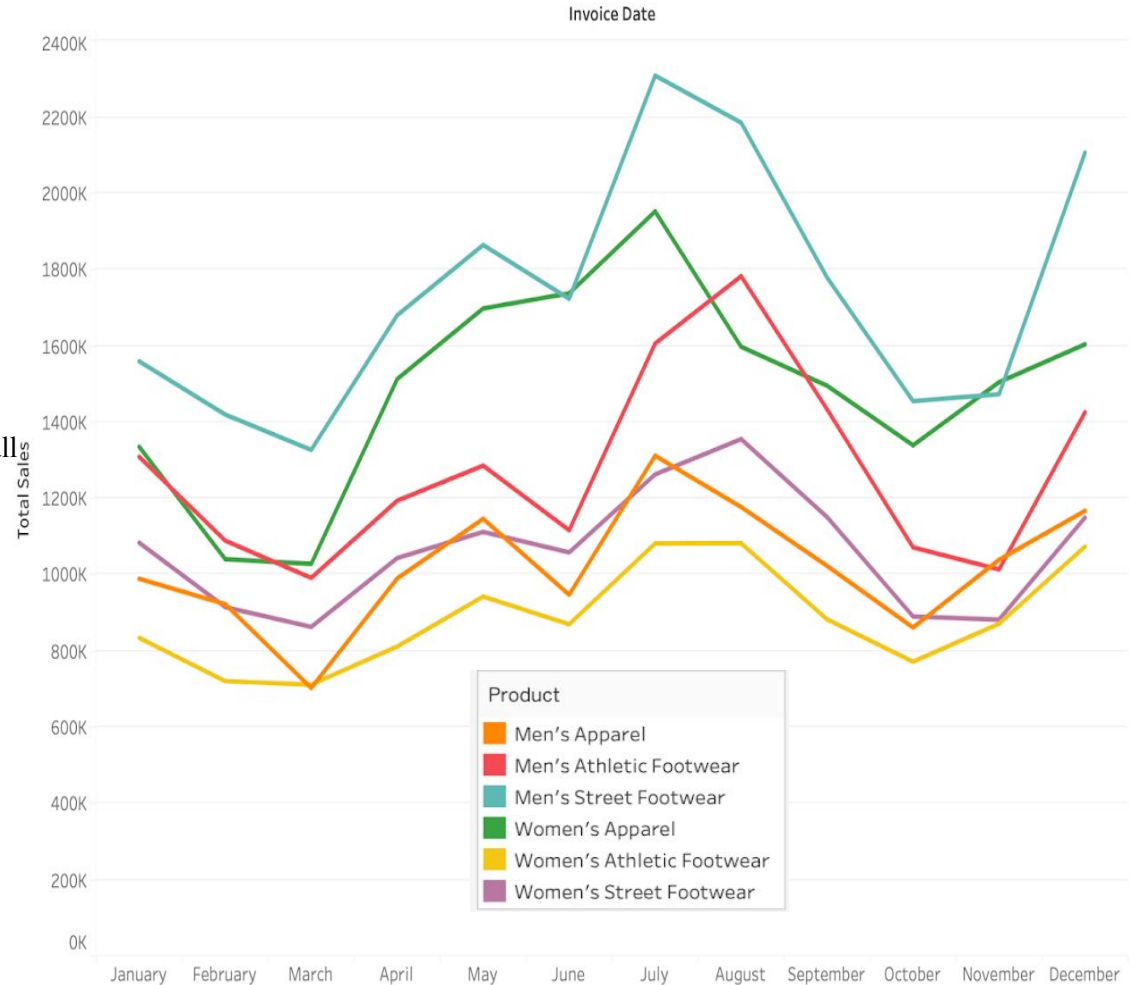

Product Sales Across Regions

WHAT ARE THE MONTHLY SALES TRENDS BY PRODUCT CATEGORY?

- Men's Street Footwear peaks July-Aug, dips March & Oct, rebounds in Dec
- Women's Apparel rises March-July, strong in Nov
- Women's Athletic Footwear lags all year

To know if there are any uptrends or downtrends

Monthly Sales Trend By Product Category

WHICH US STATES DELIVER HIGH PROFITS DESPITE LOW UNIT SALES

- States like Nebraska, Vermont, and Missouri show high profit margins despite lower sales.
- Smaller markets outperform in profitability, revealing untapped potential.
- Growth possible with low-cost expansion in these regions.

To know if unit sales corresponds to profit

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

Profit by State
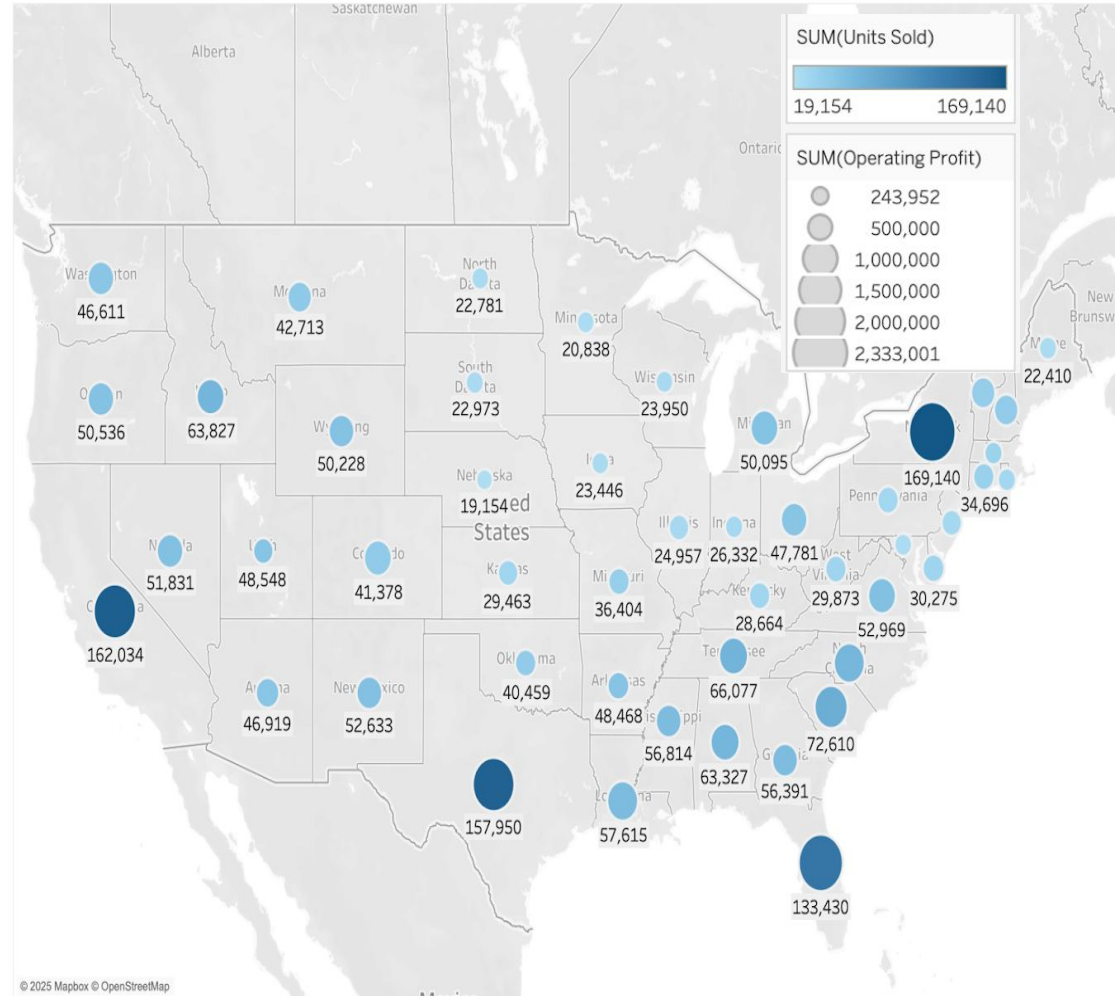
Regional Performance By Sales Method

WHICH PRODUCTS AND REGIONS GENERATE THE HIGHEST SALES?

- In-store sales dominate Total Sales and Operating Profit, especially in the Northeast, Southeast, and West, highlighting the strength of brick-and-mortar channels.

- Outlet sales drive high unit volumes but lower margins, with the West and South leading in units sold but contributing modestly to profits.

- Online sales underperform across regions, with minimal contribution to profit, particularly in the Midwest and Northeast.

- The West emerges as the top region overall, fueled by strong In-store and Outlet sales performance.

To know if some sales methods outperform other methods

WHICH PRODUCT CATEGORIES HAVE THE HIGHEST AVG PRICE PER UNIT

- Women's and Men's Apparel have the highest average prices
- Women's Street and Athletic Footwear, have lower average unit prices
- Average unit prices across categories range from around $40.26 to $51.58, indicating moderate price variation.

To know if pricings need to be adjusted

Unit Pricing Per Category

Recommendations Summary

In-store sales focus: Strengthen in-store retail operations in high-profit regions (West, Northeast, Southeast).

Outlet strategy optimization: Revisit pricing and product mix at outlet locations to improve margins.

Online channel growth: Launch targeted advertising and exclusive online promotions, especially in underperforming regions.

Regional campaigns: Align promotions with regional strengths (e.g., outlet clearance in West, in-store drops in Northeast).

Seasonal planning: Concentrate product launches and promotions in peak months (July, August, December).

High-margin categories: Maintain premium pricing on Women's and Men's Apparel; explore upselling in lower-priced categories.

Expansion in profitable states: Invest in visibility and campaigns in states with high profit-to-sales ratios (e.g., Nebraska, Vermont).

Top Strategic Actions

Prioritize In-store retail in high-performing regions: Focus investments and promotions where in-store sales deliver the highest profit returns (West, Northeast, Southeast).

Strengthen Outlet profitability: Redesign pricing, cost structure, and product mix at outlet locations to increase margin per unit.

Boost Online performance: Implement exclusive promotions, enhance user experience, and introduce click-and-collect programs to integrate online and in-store channels.

Summary Table

Strategic Action	Focus Area	Expected Impact
Prioritize In-store retail	West, Northeast, Southeast	Maximize profit from high-performing stores.
Strengthen Outlet profitability	Outlet locations nationwide	Improve margins, reduce low-profit sales.
Boost Online performance	Midwest, Northeast	Grow underperforming channel and increase conversion

Main Findings

- In-store sales are the primary driver of profit and total sales, particularly in the West, Northeast, and Southeast.
- Outlet sales generate volume but at lower margins, while online sales underperform across most regions.
- Women's and Men's Apparel categories deliver the highest unit prices and likely stronger margins.
- States like Nebraska and Vermont offer high profitability with room for sales growth.

Conclusion

The analysis supports Adidas's goal to optimize profitability by identifying top-performing regions, channels, and categories.

Insights provide a roadmap to enhance regional allocation, product strategy, and channel effectiveness.

Next Steps:

- Conduct deeper customer segmentation in high-margin states to refine marketing.
- Test and implement new outlet pricing strategies.
- Explore partnerships or influencer campaigns for low-performing categories like Women's Athletic Footwear.
- Monitor profit-to-sales ratios quarterly to track progress as strategies roll out.

Reference
Abbas, A. (2023). *Adidas Sales*. Kaggle. https://www.kaggle.com/datasets/ahmedabbas757/dataset

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