

Adidas US Sales Dashboard Project — Analysis Report

Prepared By: Muhammed Jaseem VT

Date: 24 October 2025

Project Overview

The Adidas US Sales Dashboard Project aims to analyze and visualize Adidas sales performance across different regions, retailers, and product categories in the United States. The primary objective is to uncover actionable insights that can support business decisions regarding product performance, retailer partnerships, and regional growth opportunities.

The dataset contains detailed transactional sales information including sales dates, product categories, retailer names, units sold, prices, total sales, and operating profits. The project focuses on transforming raw sales data into meaningful business intelligence through Power BI dashboards and well-structured data models.

Dataset Summary

The dataset comprises several thousand records, representing sales transactions across multiple Adidas retailers and product categories. It includes key business fields such as Date, Product, Retailer, Region, State, Units Sold, Price per Unit, Total Sales, and Operating Profit.

Key characteristics:

- Covers multiple time periods (spanning several months or years of US sales data).
- Includes a mix of categorical (Retailer, Region, Product Category) and numerical (Sales, Profit, Units Sold) variables.
- Designed for star-schema modeling, with clean relationships between fact and dimension tables.

Data Cleaning and Preparation Steps:

- Standardized date formats and created time intelligence fields (Year, Quarter, Month).
- Handled missing or inconsistent values in Retailer and Product columns.
- Converted financial metrics to numeric types and validated totals.
- Removed duplicates and ensured referential integrity across lookup tables.

Column-wise Assessment Summary

The dataset underwent a thorough column-level assessment to ensure accuracy and consistency across all fields.

Highlights:

- **Date Columns:** Verified for continuous coverage with correct formatting; derived hierarchy for Year, Quarter, and Month.
- **Product Category:** Standardized naming conventions to align with Adidas product taxonomy.
- **Retailer:** Cleaned to remove duplicates and ensure consistency across multiple states.
- **Region and State:** Validated against official U.S. region mappings to ensure proper geographic aggregation.
- **Units Sold, Total Sales, Operating Profit:** Checked for outliers and non-numeric values; statistical validation confirmed data integrity.
- **Profit Margin and Profit per Unit:** Calculated fields validated against base metrics for accuracy.

Data Model Overview

The data model follows a **star schema design**, enabling efficient data querying and DAX calculations in Power BI.

Structure Overview:

- **Fact Table:** Sales — contains transactional data such as Product, Retailer, Units Sold, Total Sales, and Profit.
- **Dimension Tables:**
 - Product: includes Product Name, Category, and Product Type.
 - Retailer: contains Retailer Name, City, State, and Region.
 - Calendar: includes Date, Year, Quarter, Month for time-based analysis.

Relationships:

- Product[Product Name] → Sales[Product Name]
- Retailer[Retailer ID] → Sales[Retailer ID]
- Calendar[Date] → Sales[Invoice Date]

Key Calculations and Measures:

- Total Sales = SUM(Sales[Total Sales])
- Total Profit = SUM(Sales[Operating Profit])
- Units Sold = SUM(Sales[Units Sold])
- Profit Margin = DIVIDE(SUM(Sales[Operating Profit]), SUM(Sales[Total Sales]))
- Profit per Unit = DIVIDE(SUM(Sales[Operating Profit]), SUM(Sales[Units Sold]))

Analysis & Insights

The dashboards provide comprehensive insights into Adidas sales and profitability performance:

- **Overall Sales Performance:** Total sales exceed \$899 million with a profit of approximately \$332 million, reflecting a strong operational margin.
- **Product Analysis:** Men's Street Footwear and Men's Apparel lead in total sales, while Women's Athletic Footwear shows lower performance.
- **Retailer Analysis:** West Gear, Foot Locker, and Sports Direct rank among top-performing retailers, with West Gear showing the highest sales volume and profit.
- **Regional Trends:** The Northeast region delivers the highest profit, while the West and South show moderate performance.
- **Temporal Trends:** Monthly analysis reveals a gradual decline in sales and profit over time, possibly due to seasonality or shifting market demand.

Conclusions

- The Adidas US sales data demonstrates strong overall performance, though with noticeable month-over-month variation.
- The star-schema data model provides a scalable structure for expanding future analyses (e.g., customer or marketing data).
- Key profitability is concentrated within specific products and retailers, which can inform marketing and stocking strategies.
- Declining sales trends suggest potential seasonality or external market influences that merit further investigation.

Recommendations

- 1. Investigate Seasonal Sales Patterns:** Identify whether the observed decline in sales is cyclical or structural.
- 2. Strengthen Partnerships with Top Retailers:** Focus marketing efforts and promotions with high-performing partners such as West Gear and Foot Locker.
- 3. Boost Underperforming Categories:** Review Women's Footwear and related categories for redesign, promotion, or discontinuation strategies.
- 4. Enhance Regional Targeting:** Expand in profitable regions (Northeast) and improve awareness in lower-performing areas.
- 5. Expand Data Integration:** Include inventory, marketing spend, or customer demographic data for deeper insights.
- 6. Monitor Profit Margins:** Track unit-level profitability regularly to maintain healthy margins while scaling sales.

Dashboard Overview

The project includes a series of interactive Power BI dashboards providing a clear, visual summary of Adidas sales data.

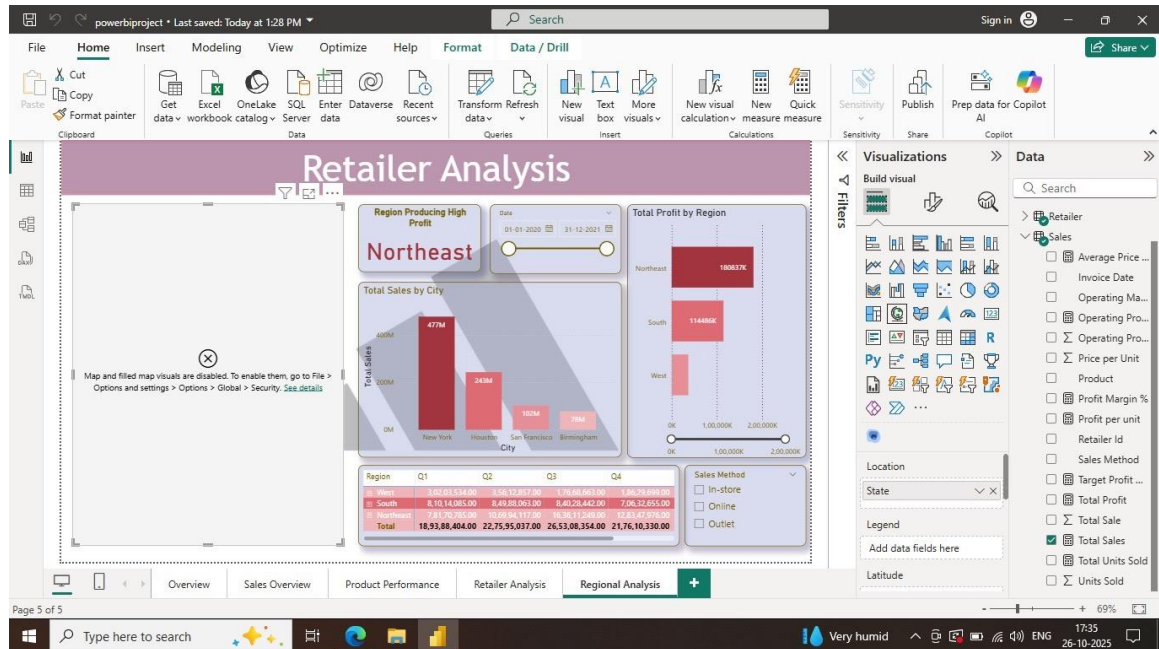
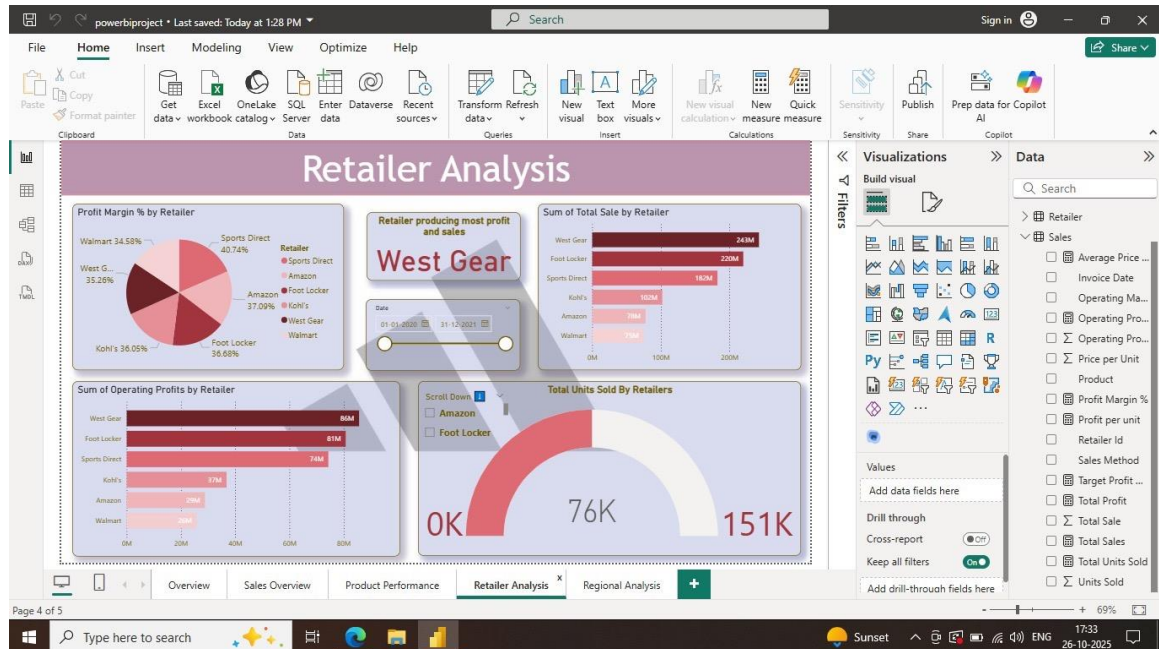
Dashboard Sections:

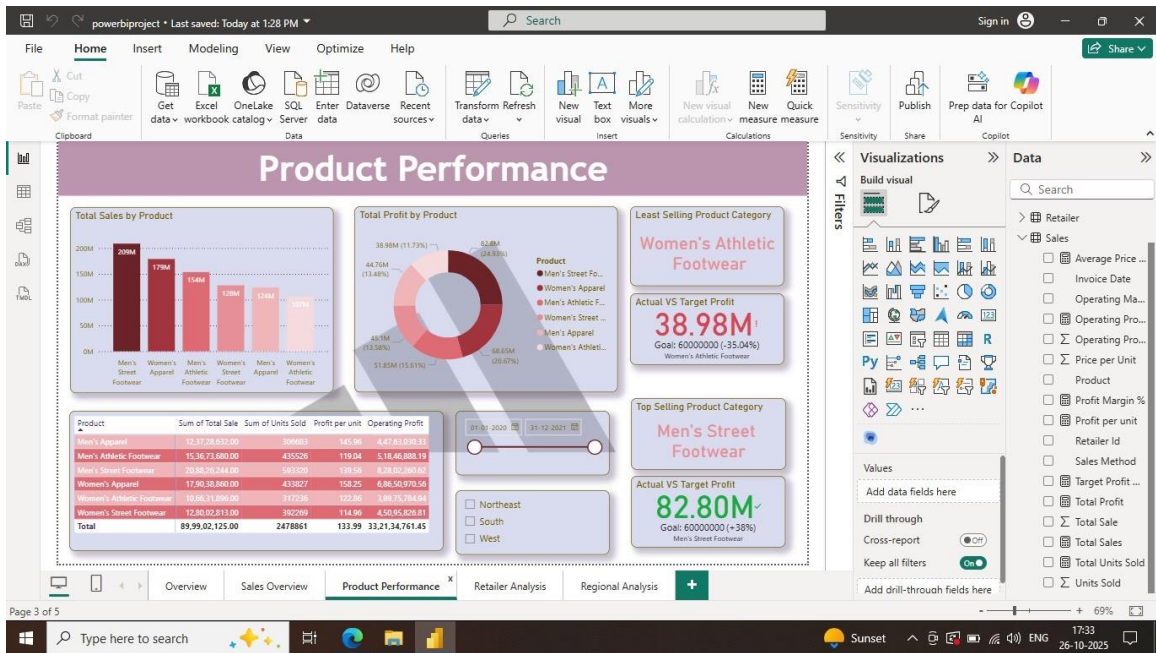
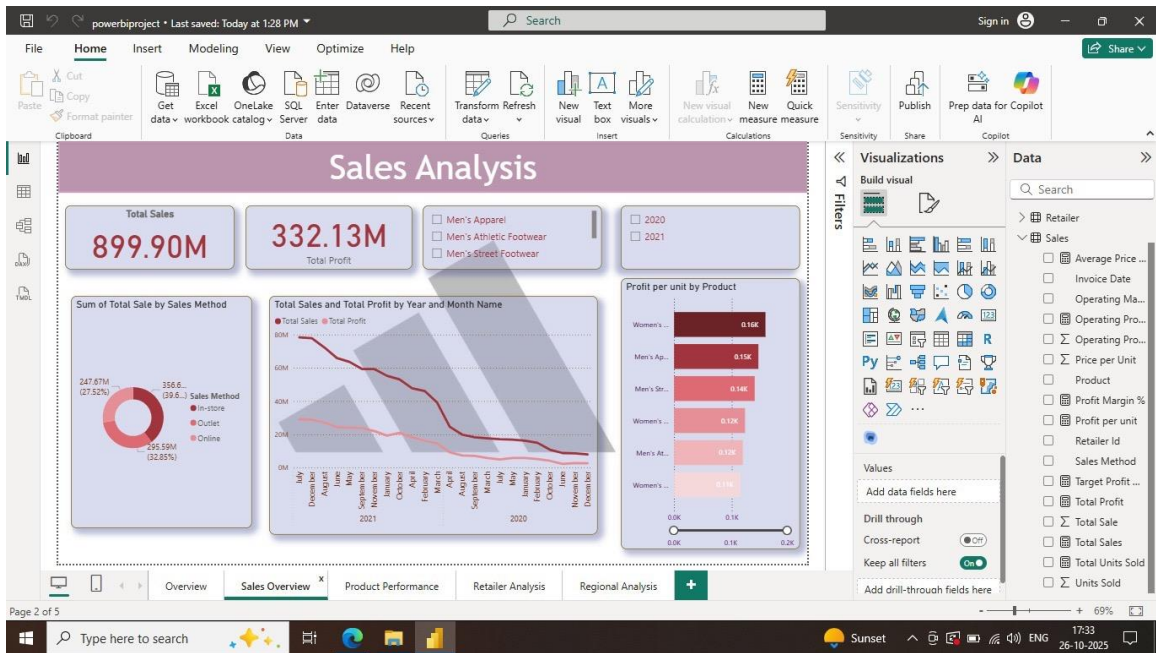
- **Sales Overview:** Tracks trends in total sales and profits over time.
- **Product Performance:** Displays top and bottom product categories based on sales and profit.
- **Retailer Analysis:** Compares retailer performance across various metrics.
- **Regional Analysis:** Shows geographical distribution of sales and profit across the U.S.

Filters and Slicers:

- Date range selector (Invoice Date)
- Product category and retailer filters
- Region and sales method (In-store, Online, Outlet)

Below are sample dashboard visuals from the project:





Notes / Limitations

- The dataset represents a specific period and geographic region; insights may not generalize globally.
- Seasonal variations and market disruptions (e.g., supply chain issues) could impact sales trends.
- Data quality assumptions include accurate recording of transactional values and consistent retailer identifiers.
- Dashboard results are based on the data available at the time of reporting and may change as new data is integrated.