

PROJECT

B9DA106 - DATA VISUALISATION

DATA DESCRIPTION:

An Adidas sales dataset contains detailed information about the sales of Adidas products, such as units sold, revenue, product types, and sales locations.

This data is valuable for analyzing sales trends, evaluating marketing campaigns, and forming future sales strategies.

It can also help compare Adidas's performance with competitors or assess different sales channels' effectiveness.

The dataset may come from sources like Adidas, market research firms, or government agencies, with data points varying based on the source and purpose.

The Adidas US Sales Dataset is available at: <https://data.world/stellabigail/adidas-us-sales-datasets>.

NUMBER OF FIELDS AND ROWS: 9652 Rows and 14 Fields

PART – A

TABLEAU

DOCUMENTATION ON THE VISUALS

STORY REPRESENTATION

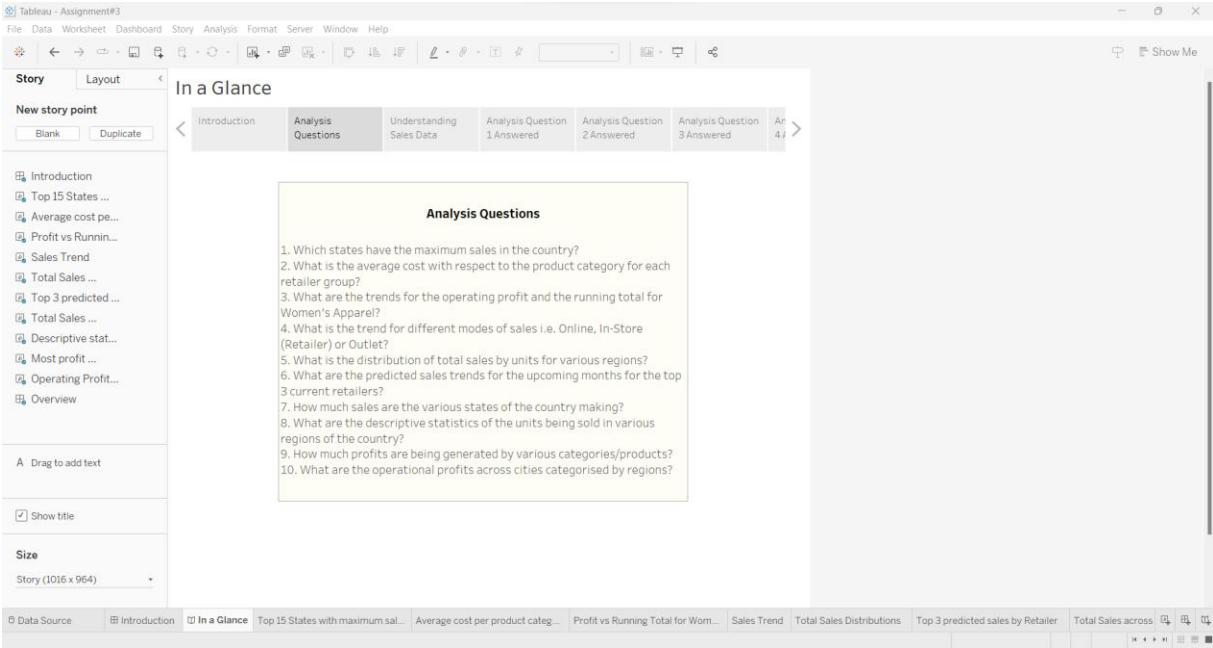


Figure 1

Figure 1 presents the workbook in a story-driven format, beginning with an introduction, followed by analysis questions, visualizations, and a concluding summary.

The map shows the Total sales data across the states of US.

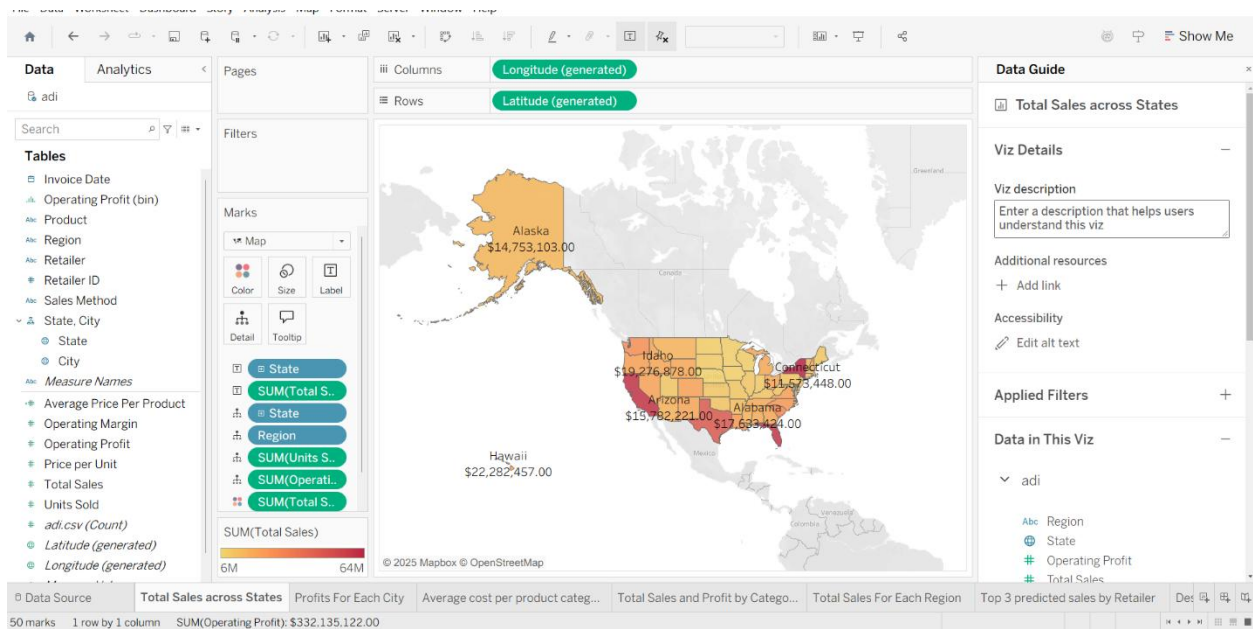


Figure 2: Tableau

Figure 3: Power BI

This horizontal bar chart displays the states with the highest total sales, sorted in descending order. The 'Total Sales' values are plotted along the columns, while the states are listed on the rows. A filter is applied to show only the top 15 states, and sorting is used to arrange them from highest to lowest sales.

Average cost per product category by retailer

This visualization presents the average price per unit across different product categories, segmented by retailer group. It allows for comparison of pricing strategies among retailers and highlights which product categories tend to be more expensive depending on the retailer. The chart helps identify pricing trends and potential premium segments within the Adidas product range

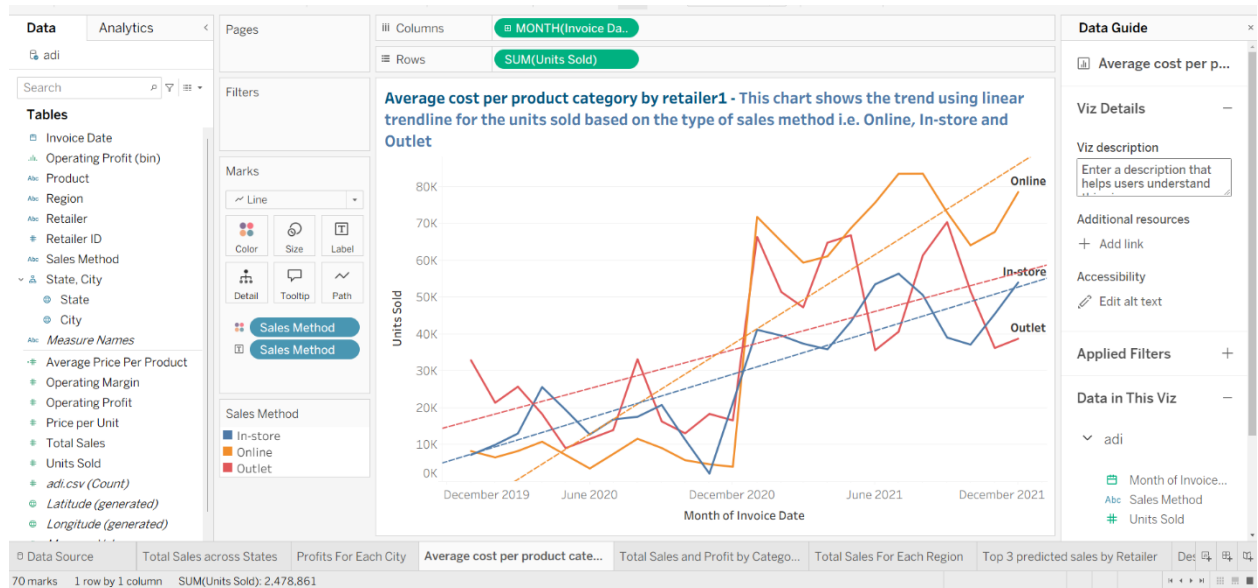
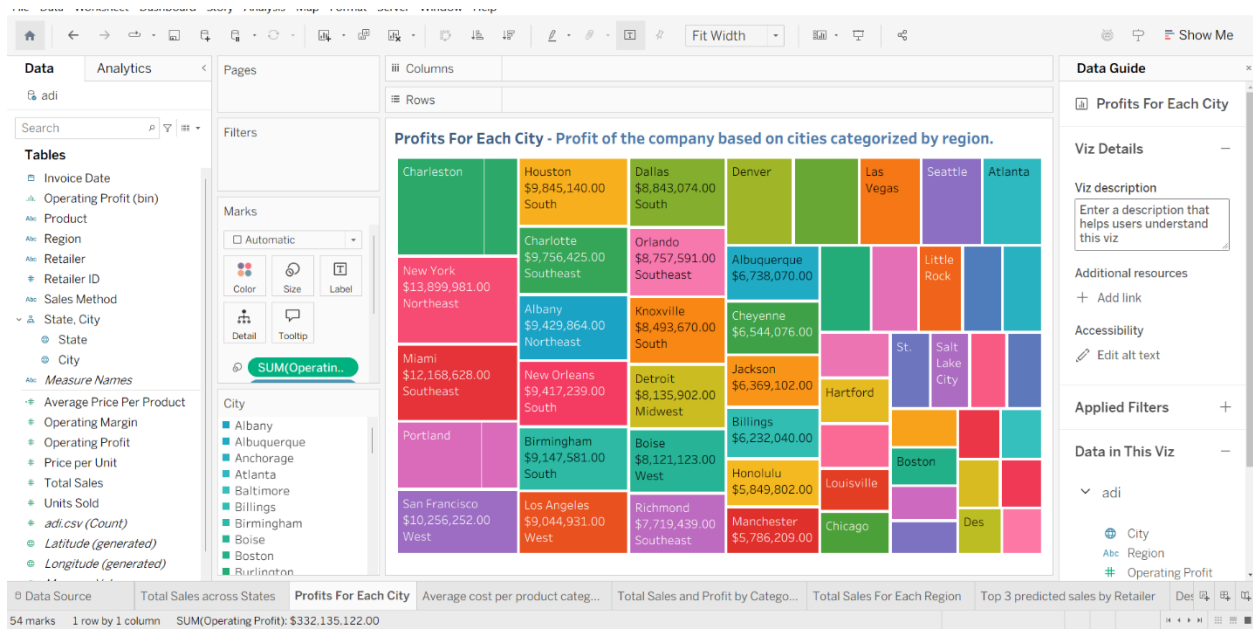


Figure 3

This vertical bar chart illustrates the average cost per product for each retailer, segmented by product category. 'Retailer' and 'Product' are placed on the columns shelf, while a calculated field named 'Average Price per Product' defined as $\text{AVG}([\text{Total Sales}]) / \text{AVG}([\text{Units Sold}])$ —is placed on the rows. This setup generates a comparative view of pricing across retailers and product types

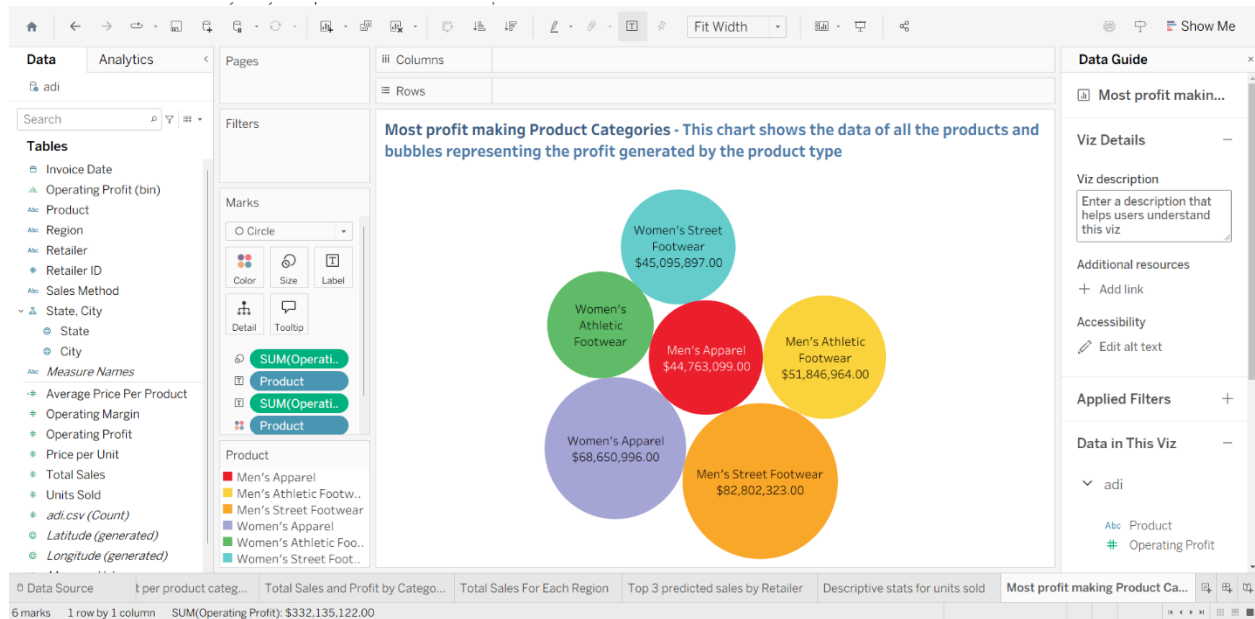
Profits For Each City



This chart visualizes the operating profits generated by various product categories. Each bubble represents a category, with its size indicating the magnitude of profit, allowing for an intuitive comparison of category-level profitability.

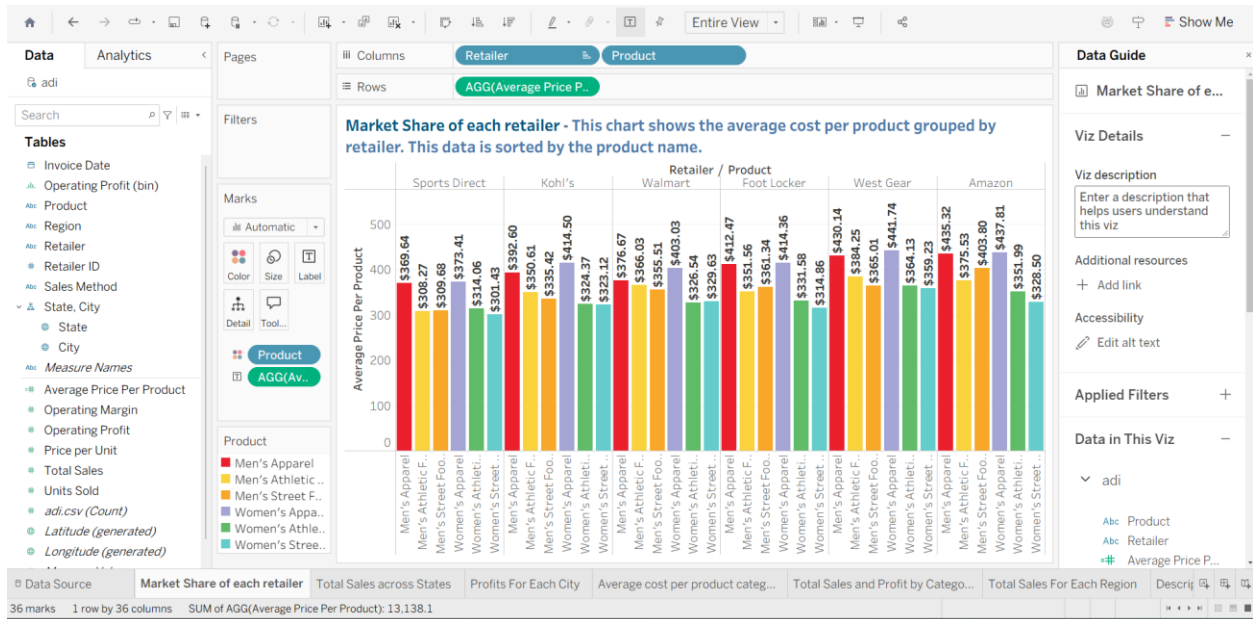
Total Sales and Profit by Category of Products

This bubble chart visualizes the operating profits generated by various product categories. Each bubble represents a category, with its size indicating the magnitude of profit, allowing for an intuitive comparison of category-level profitability.



This bubble chart visualizes the operating profits generated by various product categories. Each bubble represents a category, with its size indicating the magnitude of profit, allowing for an intuitive comparison of category-level profitability.

Market Share of each retailer



OVERVIEW - DASHBOARD

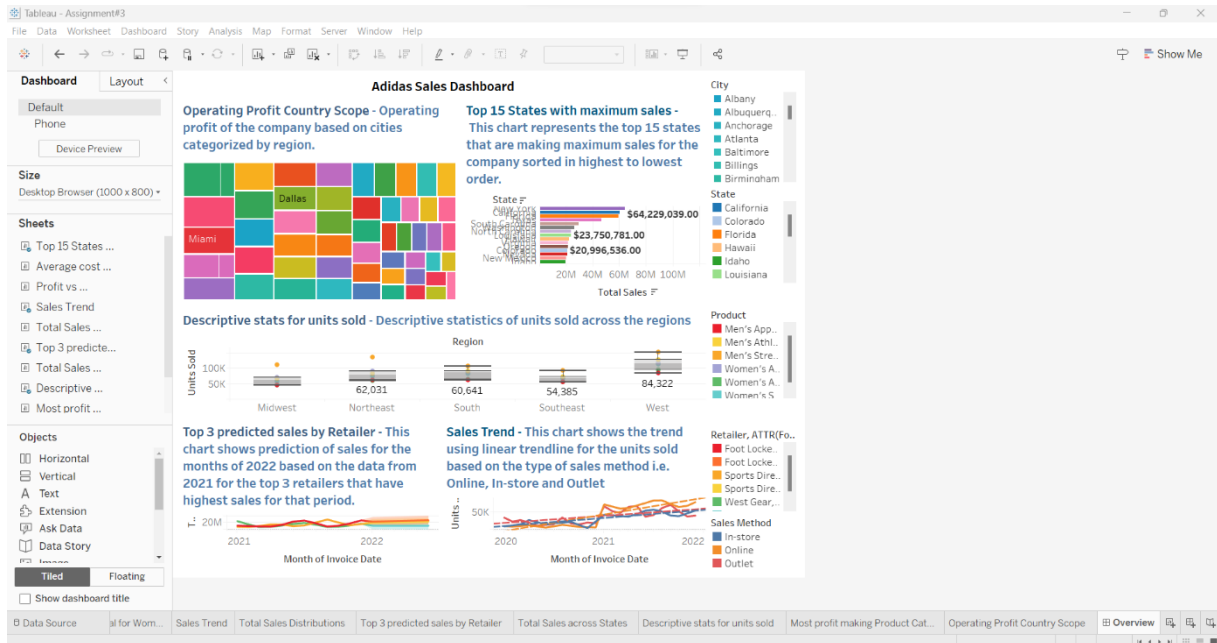


Figure 11

The Overview is a dashboard layout of the workbook that displays key visualizations, accompanied by their respective legends positioned on the right for clarity and reference.

PART – B

POWER BI

VISUALS

Table: adi (9,648 rows)

Retailer	Retailer ID	Invoice Date	Region	State	City	Product	Price per Unit	Units Sold	Total Sales	Operating Profit	Operating Margin	Sales Meth
Foot Locker	1185732	October 26, 2021	Northeast	Pennsylvania	Philadelphia	Men's Apparel	\$55	125	\$68,750	\$24,063	0.35	Outlet
Foot Locker	1185732	October 27, 2021	Northeast	Pennsylvania	Philadelphia	Women's Apparel	\$45	225	\$101,250	\$30,375	0.3	Outlet
Foot Locker	1185732	October 28, 2021	Northeast	Pennsylvania	Philadelphia	Men's Street Footwear	\$45	475	\$213,750	\$117,563	0.55	Outlet
Foot Locker	1185732	October 29, 2021	Northeast	Pennsylvania	Philadelphia	Men's Athletic Footwear	\$45	125	\$56,250	\$19,688	0.35	Outlet
Foot Locker	1185732	October 30, 2021	Northeast	Pennsylvania	Philadelphia	Women's Street Footwear	\$35	175	\$61,250	\$24,500	0.4	Outlet
Foot Locker	1185732	October 31, 2021	Northeast	Pennsylvania	Philadelphia	Women's Athletic Footwear	\$40	50	\$20,000	\$8,000	0.4	Outlet
Foot Locker	1185732	November 1, 2021	Northeast	Pennsylvania	Philadelphia	Men's Apparel	\$55	125	\$68,750	\$24,063	0.35	Outlet
Foot Locker	1185732	November 2, 2021	Northeast	Pennsylvania	Philadelphia	Women's Apparel	\$45	225	\$101,250	\$30,375	0.3	Outlet
Foot Locker	1185732	November 3, 2021	Northeast	Pennsylvania	Philadelphia	Men's Street Footwear	\$50	445	\$222,500	\$122,375	0.55	Outlet
Foot Locker	1185732	November 4, 2021	Northeast	Pennsylvania	Philadelphia	Men's Athletic Footwear	\$50	150	\$75,000	\$26,250	0.35	Outlet
Foot Locker	1185732	November 5, 2021	Northeast	Pennsylvania	Philadelphia	Women's Street Footwear	\$40	175	\$70,000	\$28,000	0.4	Outlet
Foot Locker	1185732	November 6, 2021	Northeast	Pennsylvania	Philadelphia	Women's Athletic Footwear	\$45	25	\$11,250	\$4,500	0.4	Outlet
Foot Locker	1185732	November 7, 2021	Northeast	Pennsylvania	Philadelphia	Men's Apparel	\$60	75	\$45,000	\$13,500	0.3	Outlet
Foot Locker	1185732	November 8, 2021	Northeast	Pennsylvania	Philadelphia	Women's Apparel	\$50	175	\$87,500	\$21,875	0.25	Outlet
Foot Locker	1185732	November 9, 2021	Northeast	Pennsylvania	Philadelphia	Men's Street Footwear	\$50	450	\$225,000	\$112,500	0.5	Outlet
Foot Locker	1185732	November 10, 2021	Northeast	Pennsylvania	Philadelphia	Men's Athletic Footwear	\$50	150	\$75,000	\$22,500	0.3	Outlet
Foot Locker	1185732	November 11, 2021	Northeast	Pennsylvania	Philadelphia	Women's Street Footwear	\$40	150	\$60,000	\$21,000	0.35	Outlet
Foot Locker	1185732	November 12, 2021	Northeast	Pennsylvania	Philadelphia	Women's Athletic Footwear	\$45	75	\$33,750	\$11,813	0.35	Outlet
Foot Locker	1185732	November 13, 2021	Northeast	Pennsylvania	Philadelphia	Men's Apparel	\$60	75	\$45,000	\$13,500	0.3	Outlet
Foot Locker	1185732	November 14, 2021	Northeast	Pennsylvania	Philadelphia	Women's Apparel	\$50	200	\$100,000	\$25,000	0.25	Outlet
Foot Locker	1185732	November 15, 2021	Northeast	Pennsylvania	Philadelphia	Men's Street Footwear	\$60	470	\$282,000	\$141,000	0.5	Outlet
Foot Locker	1185732	November 16, 2021	Northeast	Pennsylvania	Philadelphia	Men's Athletic Footwear	\$60	175	\$105,000	\$31,500	0.3	Outlet
Foot Locker	1185732	November 17, 2021	Northeast	Pennsylvania	Philadelphia	Women's Street Footwear	\$55	150	\$82,500	\$28,875	0.35	Outlet
Foot Locker	1185732	November 18, 2021	Northeast	Pennsylvania	Philadelphia	Women's Athletic Footwear	\$55	100	\$55,000	\$19,250	0.35	Outlet
Foot Locker	1185732	November 19, 2021	Northeast	Pennsylvania	Philadelphia	Men's Apparel	\$65	125	\$81,250	\$24,375	0.3	Outlet
Foot Locker	1185732	November 20, 2021	Northeast	Pennsylvania	Philadelphia	Women's Apparel	\$70	250	\$175,000	\$52,500	0.3	Outlet
Foot Locker	1185732	November 21, 2021	Northeast	Pennsylvania	Philadelphia	Men's Street Footwear	\$65	500	\$325,000	\$178,750	0.55	Outlet

Figure 1

Properties

Cards

Show the database in the header when applicable

No

Show related fields when card is collapsed

Yes

Pin related fields to top of card

No

Figure 2

Relationship View in Power BI

The map shows the sales data across the states of US.

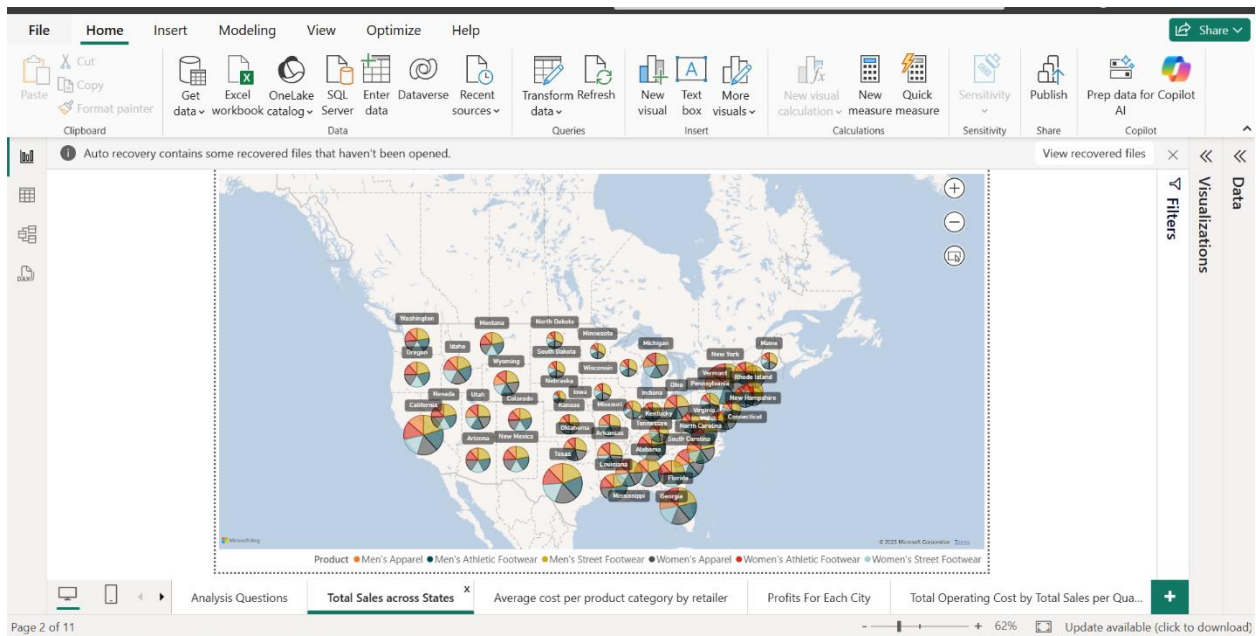
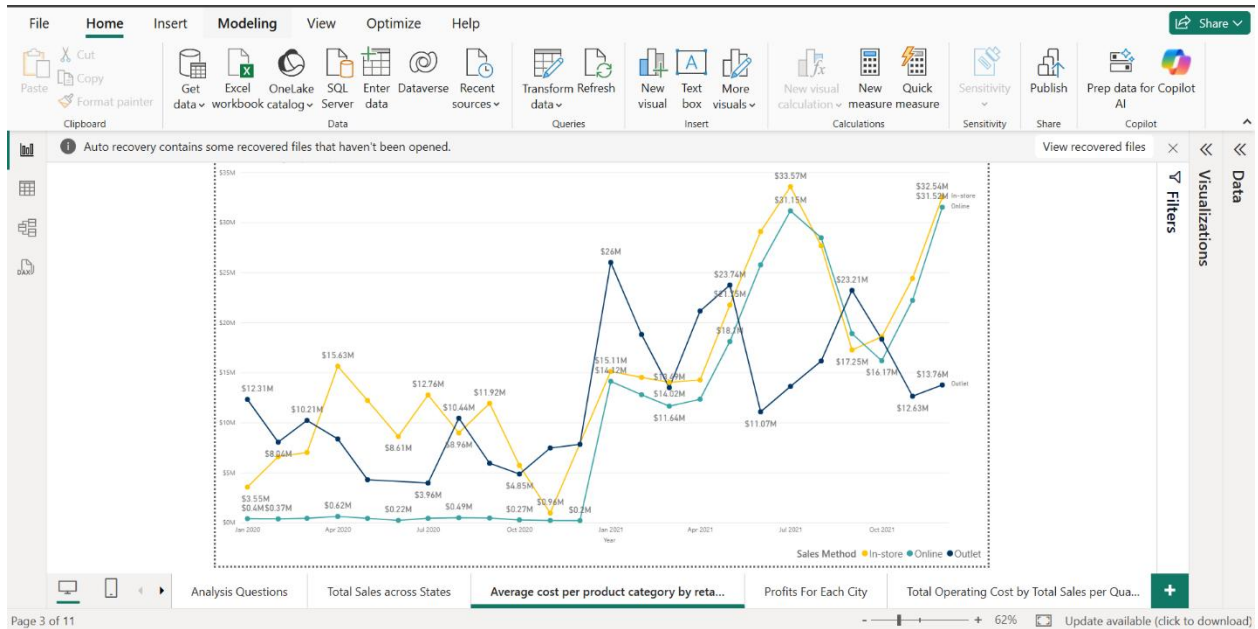


Figure 3

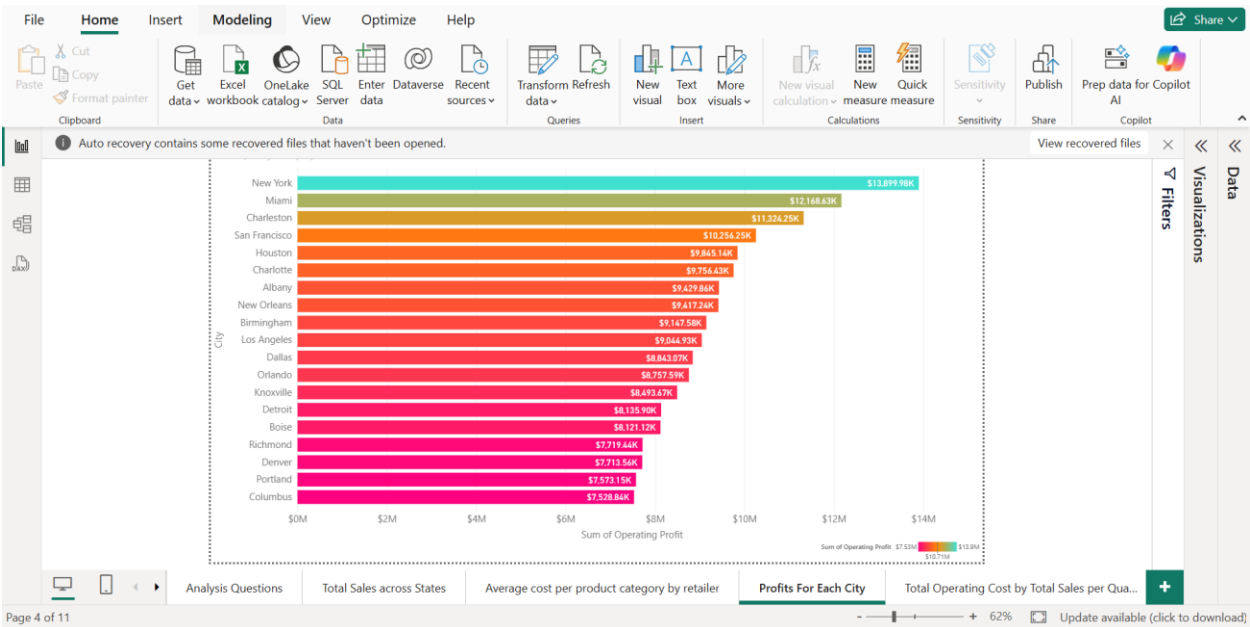
This chart highlights the states with the highest operating profits for Adidas during the period. The cities are ranked in descending order, providing a clear view of the most profitable urban markets over the two-year timeframe.

Average cost per product category by retailer



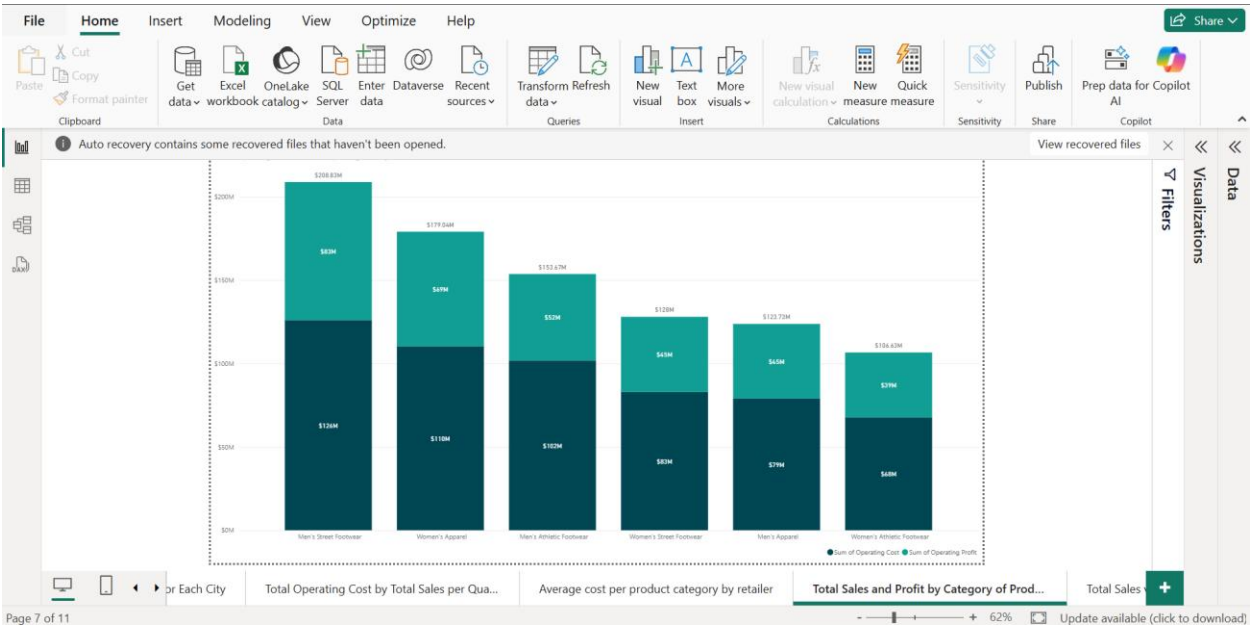
This combined line chart presents Adidas's operating costs and total sales per quarter for the years 2020 and 2021. Total sales are represented by bars, while operating costs are shown as a line, allowing for a clear comparison of revenue versus expenses over time.

Profits For Each City

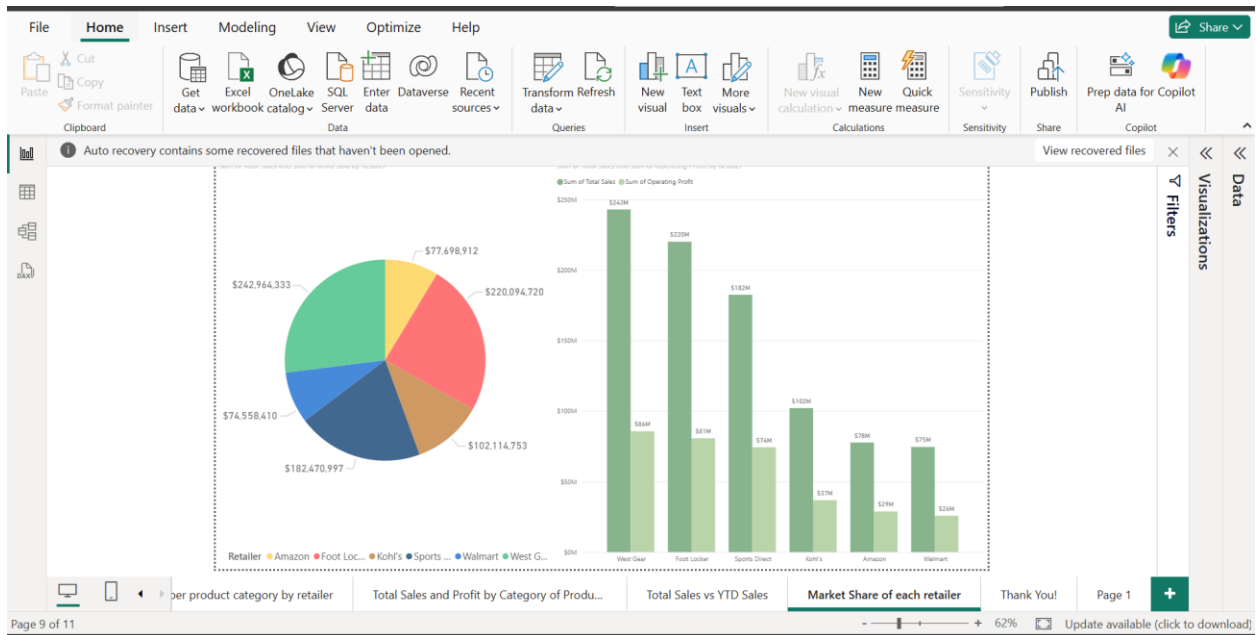


This chart illustrates operating profit and total sales for each city category during the years 2020 and 2021. It provides a side-by-side comparison, highlighting both revenue and profitability contributions by category over the two-year period.

Total Sales and Profit by Category of Products



Market Share of each retailer



Conclusion

Based on the analysis, Tableau provides better results for this project compared to Power BI. It offers more advanced visualizations, forecasting features, and an effective storytelling format that helps present insights in a clearer and more engaging way. While Power BI is efficient and good for basic reporting, Tableau's richer visuals and interactive dashboards make it more suitable for in-depth sales analysis.

