

Power BI Dashboard for AdventureWorks KPIs and Performance Tracking

Introduction -

As part of the data analysis for AdventureWorks, I have developed an interactive dashboard in Power BI that focuses on key performance indicators (KPIs), product-level insights, customer analysis, and regional performance comparisons. The dashboard enables management to monitor trends in sales, revenue, profit, and returns, while also identifying top-performing products and high-value customers.

To enhance user experience, I have incorporated -

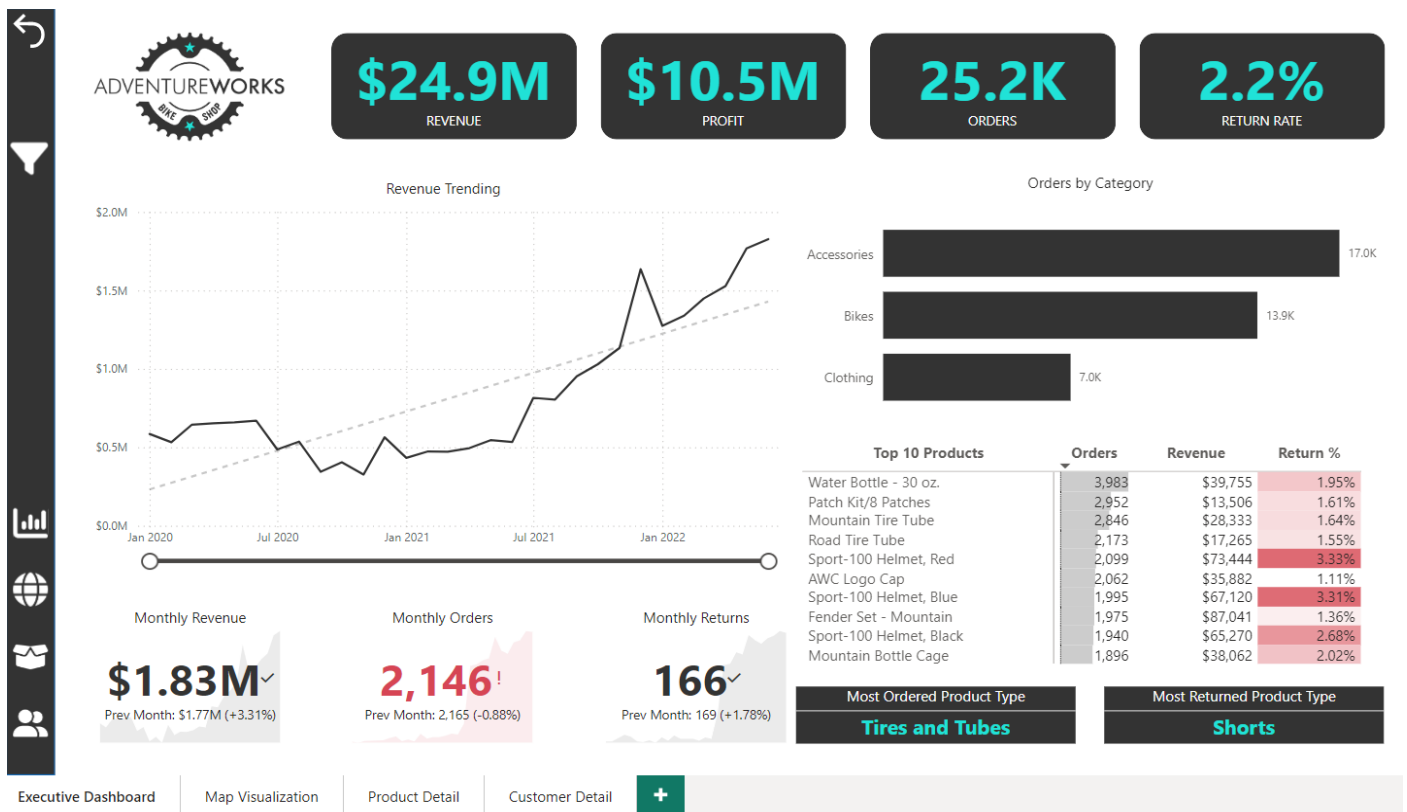
- **Interactive Buttons:** Easy navigation between the different pages of the report, enabling quick access to the desired sections of the dashboard.
- **Slicers and Filters:** Allowing users to drill down data based on multiple timeframes, geographical regions, and product categories.
- **Subtle Design:** I used company logos and colours to ensure a professional and cohesive visual design across the dashboard.

This report outlines the structure and key functionalities of the dashboard.

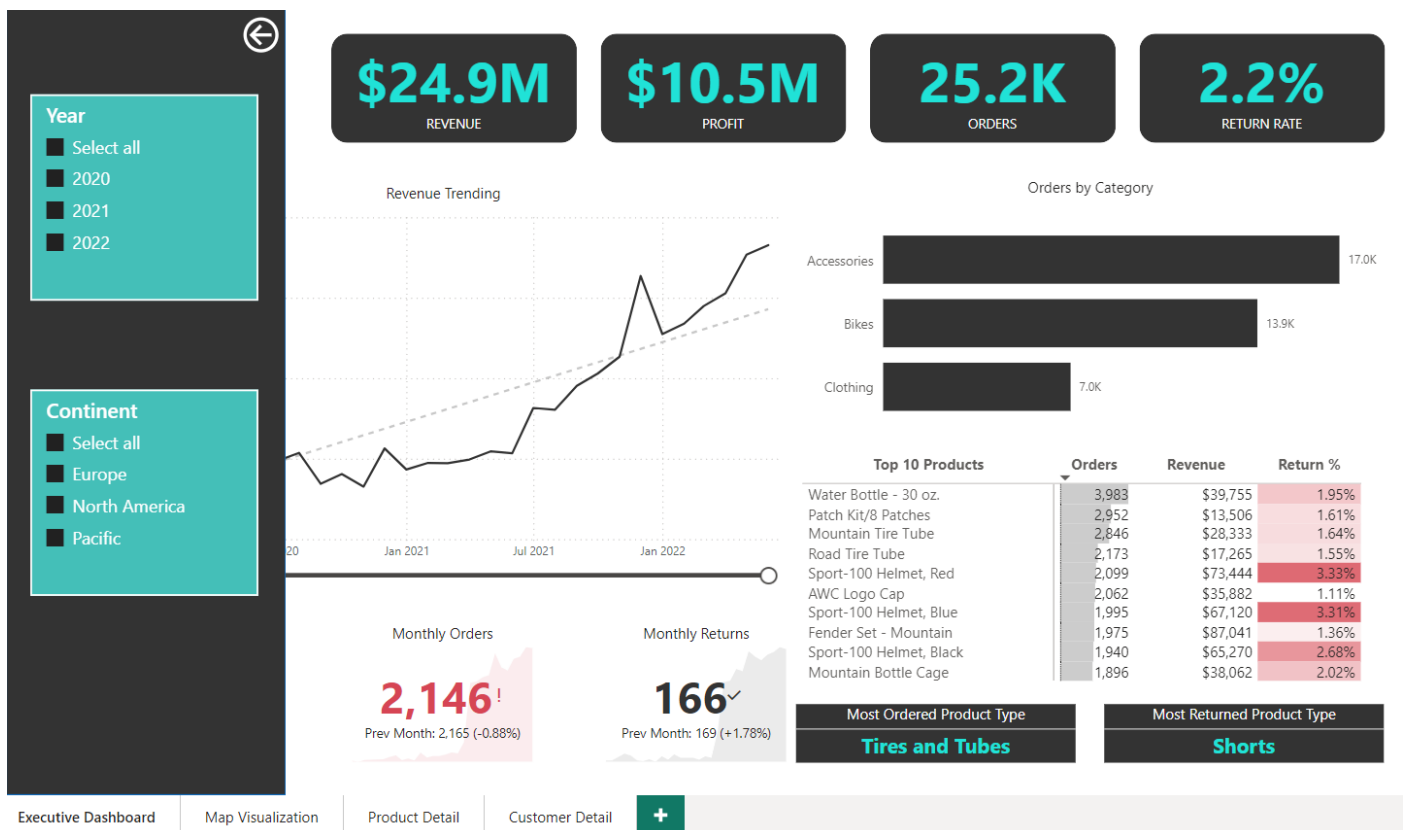
Executive Dashboard -

The Executive Dashboard serves as the high-level overview of company performance. It includes the following elements:

- **KPI Cards:** Displaying the key metrics of *Revenue*, *Profit*, *Orders*, and *Return Rate*.
- **Top Products:** Ranked by *Orders*, *Revenue*, and *Return Rate* to quickly highlight best and worst performers.
- **Product Type Highlights:** A card showcasing the *Most Ordered Product Type* and the *Most Returned Product Type*.
- **Trending Revenue Line Chart:** Provides the ability to analyze revenue trends over time (Year, Quarter, Month), with the option to filter by *Continent*.
- **Bar Chart for Category Names:** Visualizing the number of orders across product categories.
- **Monthly Performance Cards:** Cards summarizing *Monthly Revenue*, *Orders*, and *Returns* to compare with overall performance.



Executive Dashboard showing the KPI Cards and Top Products section, along with the Revenue Trending

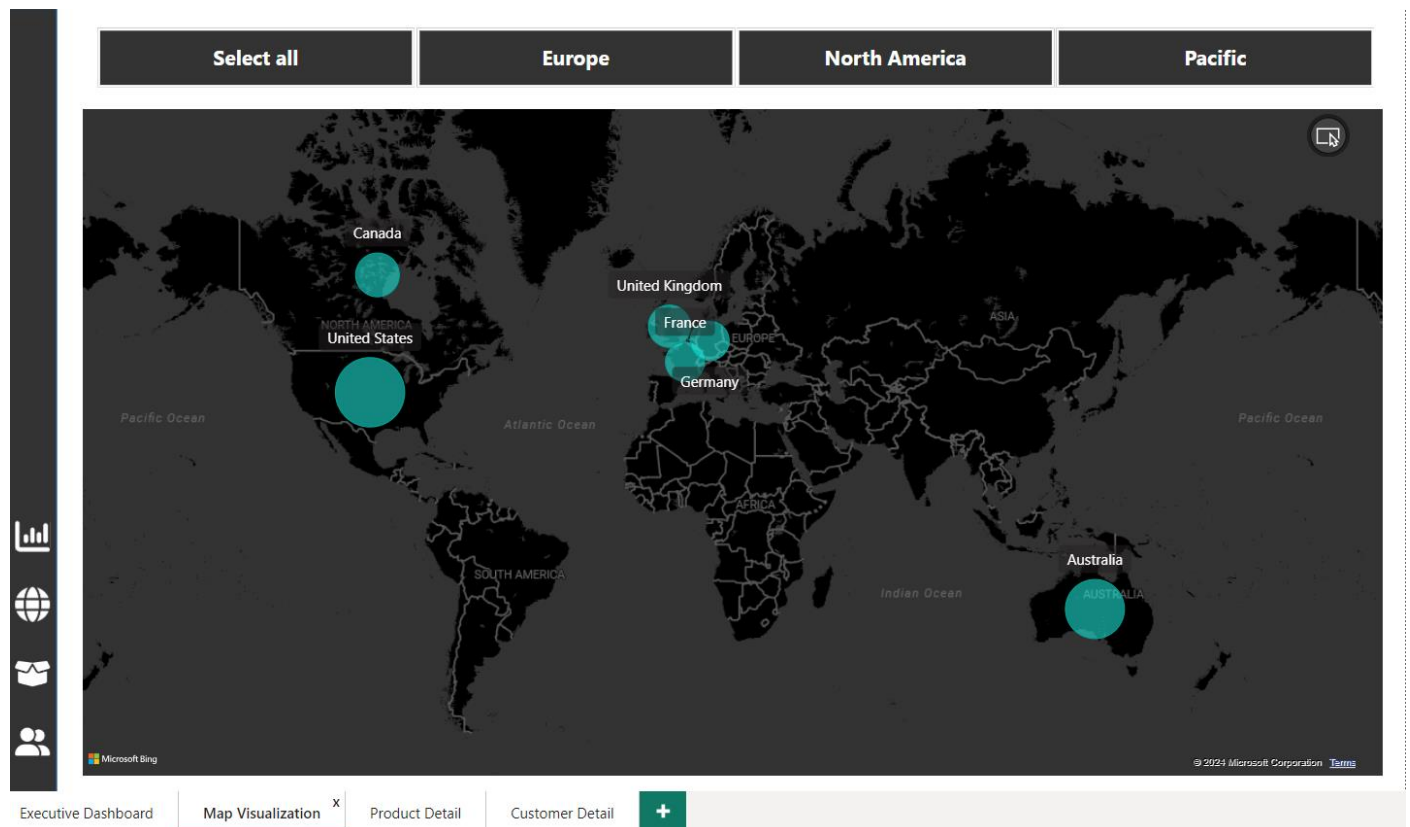


Executive Dashboard showing the KPI Cards and Top Products section, along with the Revenue Trending with Slicer Panel

Map Visualization -

This page visualizes geographical sales data:

- **Map Visual:** Displays *Total Orders* by continent. This map is interactive, allowing the user to filter the data based on the continent selected.

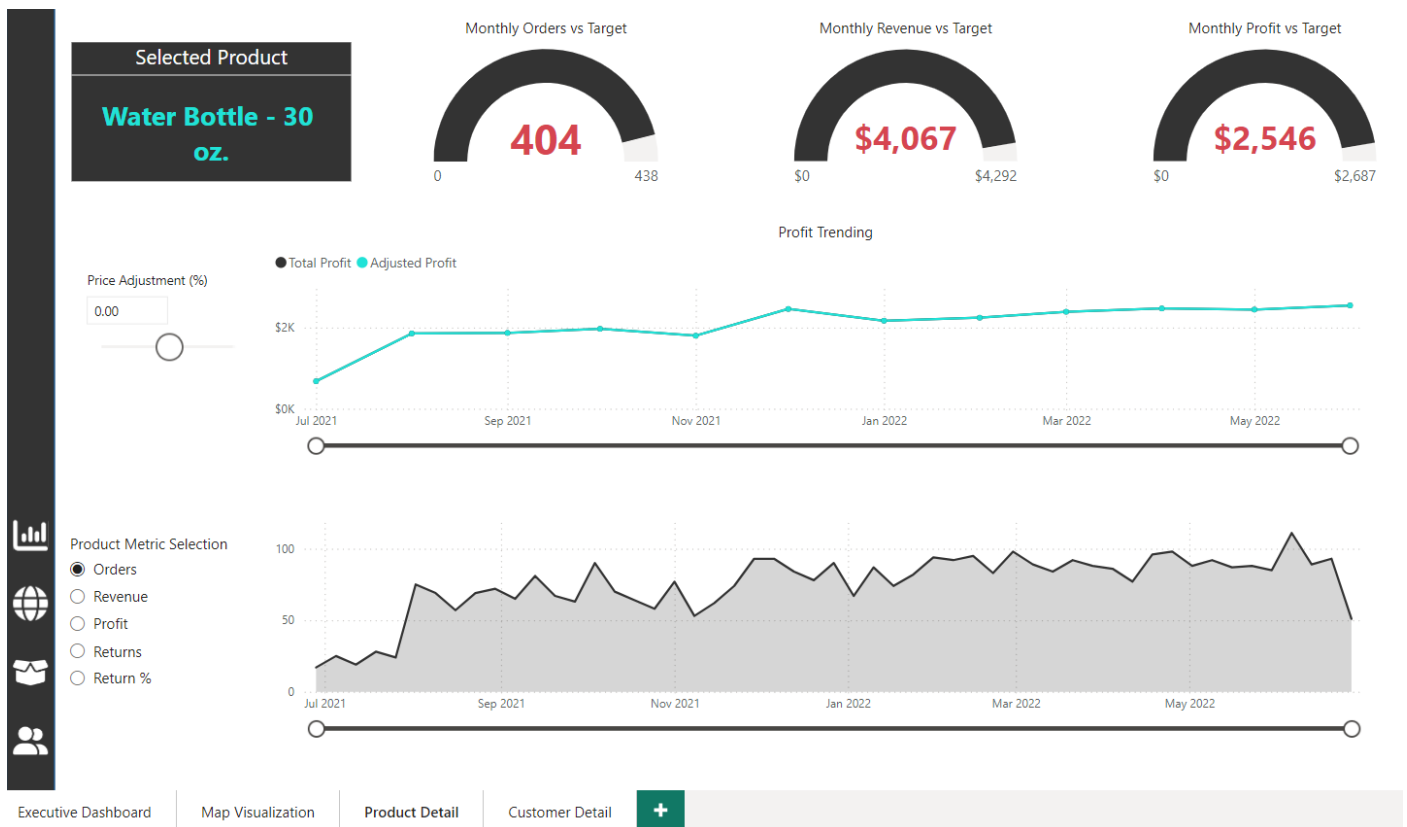


A Map Visualization with orders by continent for different regions

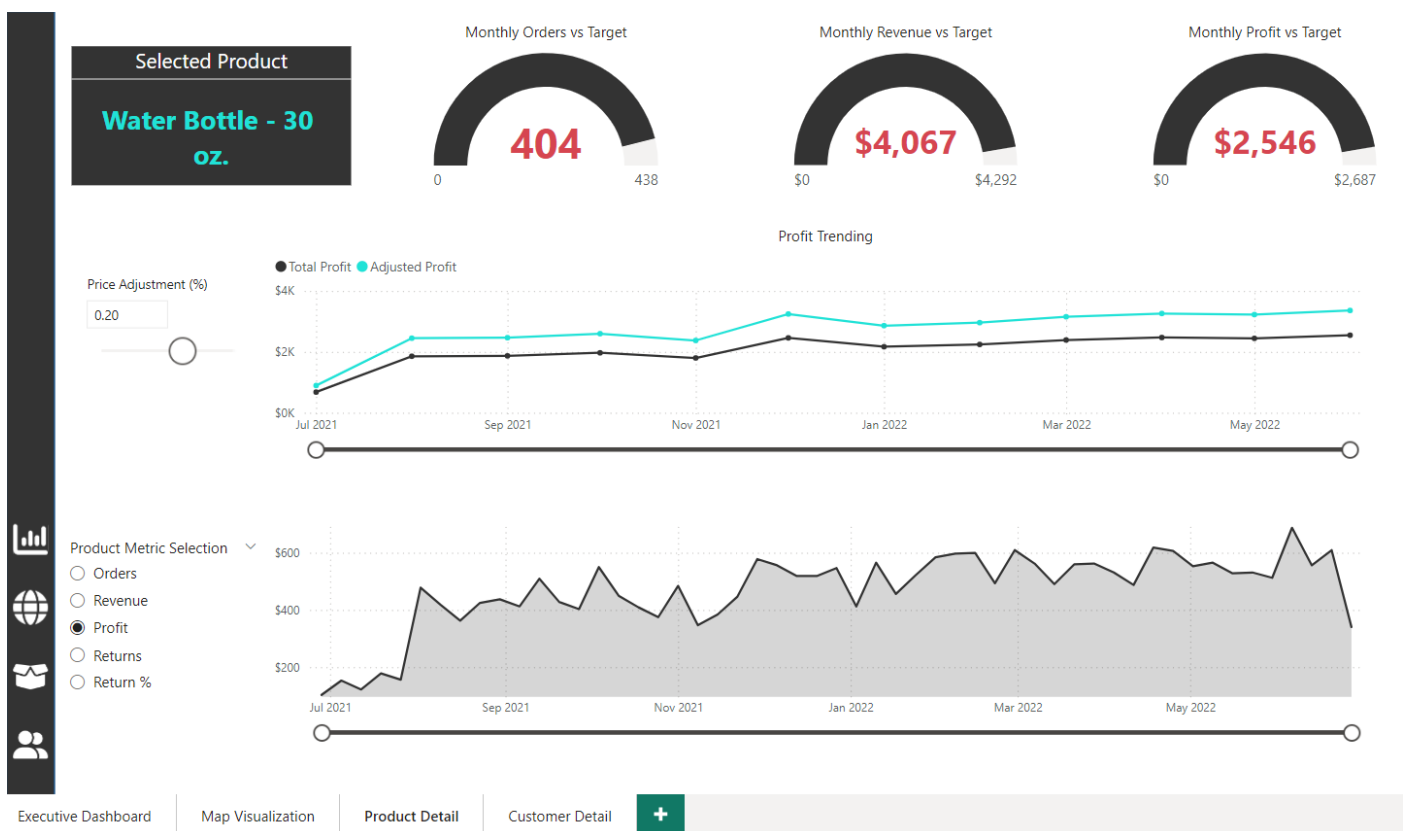
Product Detail -

Detailed insights into individual products are available in this section:

- **Selected Product Card:** Displayed when a product is selected from the Executive Dashboard.
- **Gauge Visual:** Tracking *Monthly Orders*, *Revenue*, and *Profit* against their respective targets to determine performance.
- **Line Chart:** Shows *Total Profit* and *Adjusted Profit*, which can be modified using a slicer to simulate pricing changes.
- **Area Chart:** Comparing various metrics such as *Orders*, *Revenue*, *Profit*, *Returns*, and *Return Percentage* across products.



Product Detail showing view of the Gauge Visual and Line Chart for total product profit, Area Chart for Orders

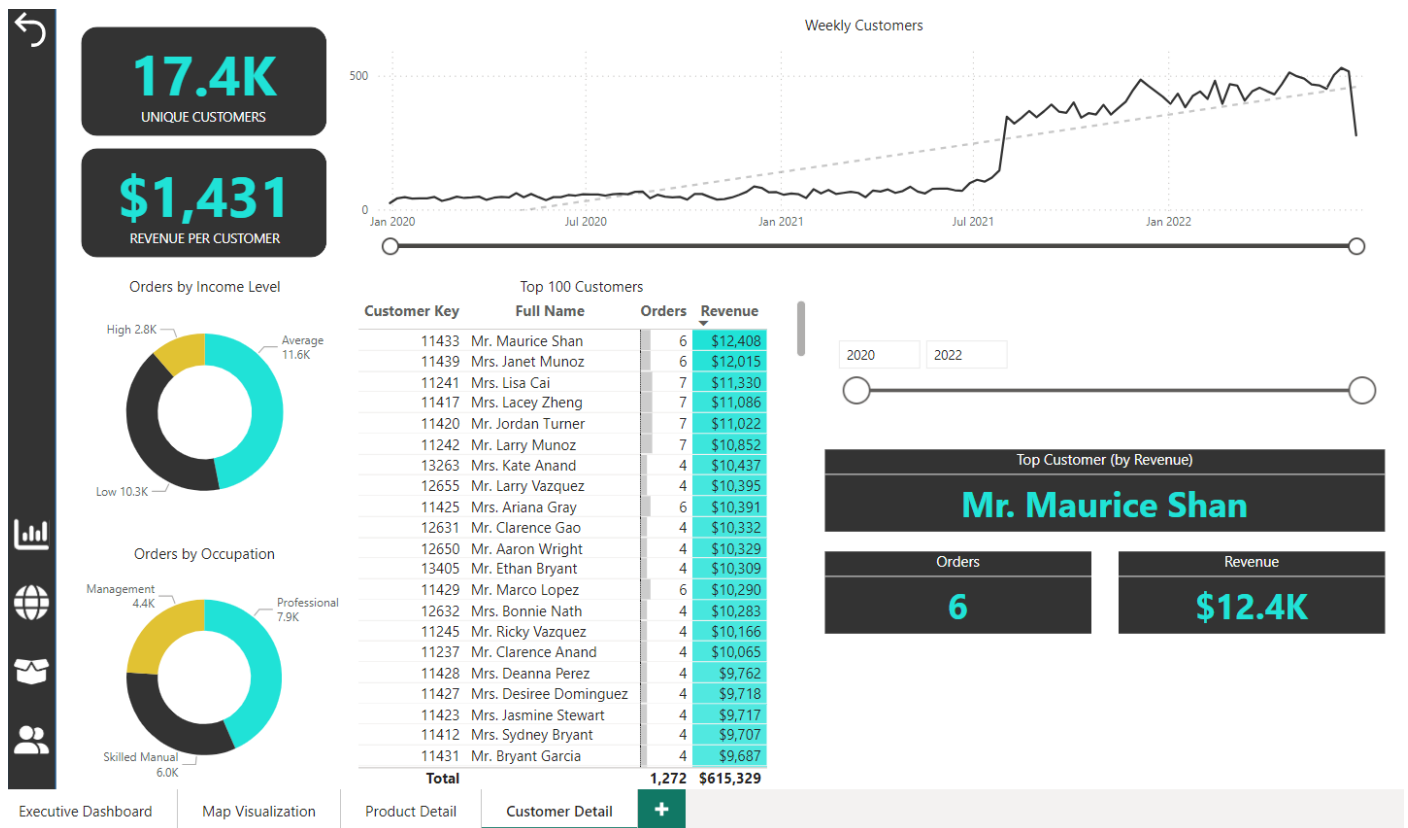


Product Detail showing view of the Gauge Visual and Line Chart for total product profit with Adjusted Price of product, Area Chart for Profit

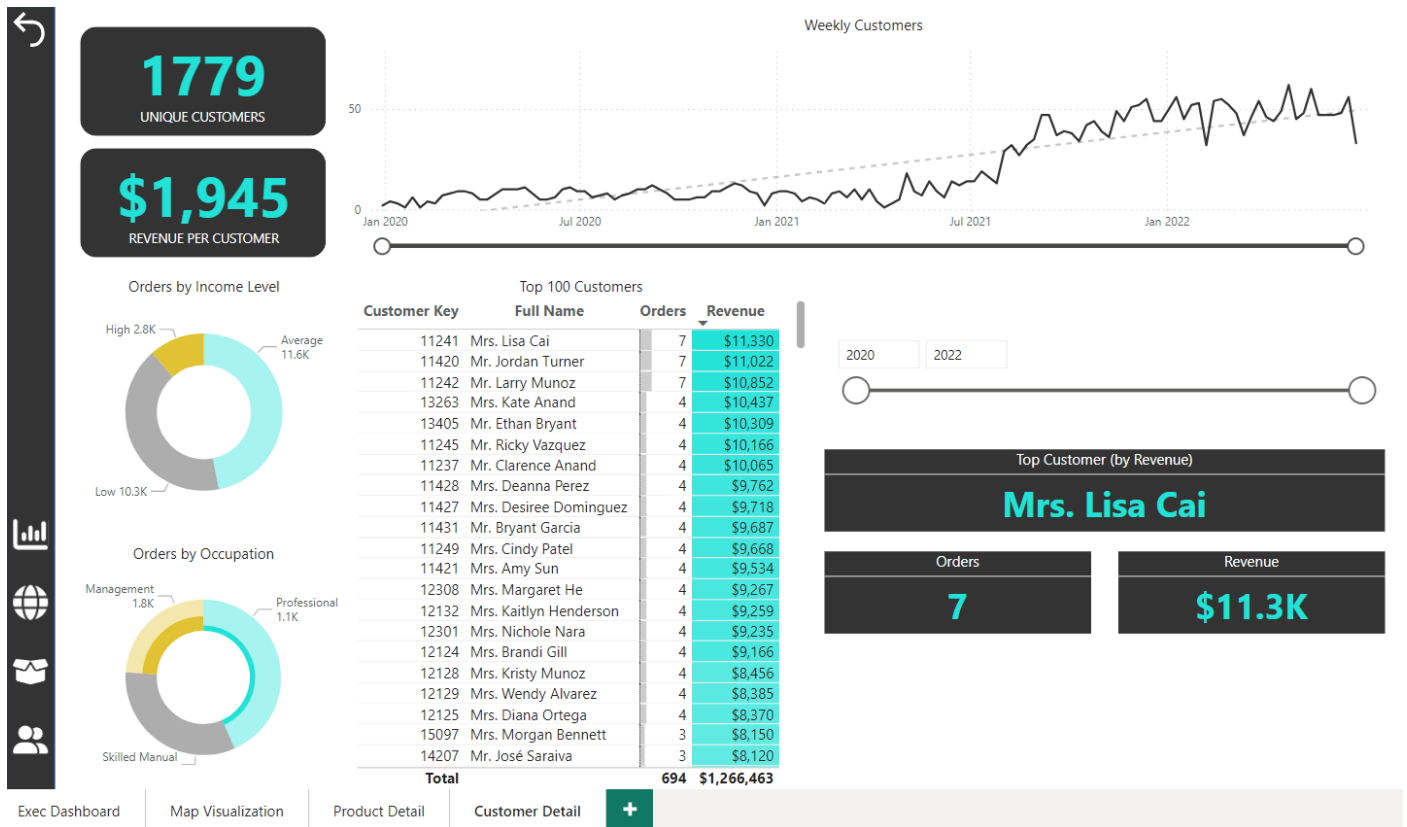
Customer Detail -

A dedicated section for customer analytics -

- **Total Customers & Average Revenue per Customer:** Card to show overall customer metrics.
- **Line Chart:** Displays the trend in the number of customers over time.
- **Pie Charts:** Show *Orders by Income Level* and *Orders by Occupation*.
- **Top 100 Customers Table:** A table listing the top 100 customers with their *Orders* and *Revenue*.
- **Customer Highlight Card:** This card dynamically displays the selected customer's full name, orders, and revenue, allowing deeper insight into individual customer behaviour.



Customer Detail of the Top 100 Customers table by Revenue and a Pie Chart visualizing orders by income level and Occupation



Customer Detail of the Top 100 Customers table by Revenue and a Pie Chart visualizing orders by High Income Level and Occupation

Conclusion -

The Power BI dashboard effectively brings together vital KPIs, product insights, and customer analysis in an interactive and intuitive format. The ability to track performance across different regions, analyze product-level trends, and focus on high-value customers will support AdventureWorks in making data-driven decisions.