

ADVENTURE WORKS BIKE SHOP SALES ANALYSIS

I utilized Power BI to visualize sales and returns data from Adventure Works, a bike shop, on a global scale, incorporating time periods, goods, and customer dimensions. The primary objective was to enhance my skills in visualization and analysis through practical application.

I initiated the project by structuring and organizing tables, ensuring data quality, and establishing a relational data model based on my understanding of relational models, cardinality, and filter flow. I've attached the data model for clarity on available datasets.

Data Modelling using Power BI:

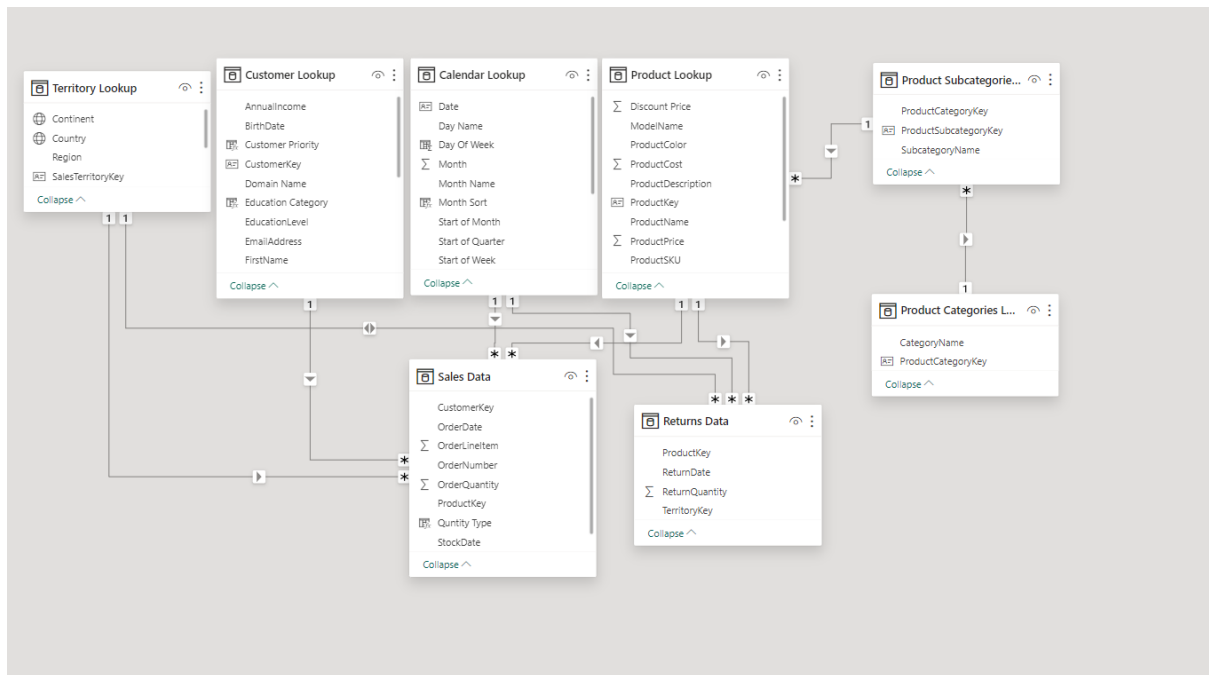
In the process of Data Modelling using Power BI, I proceeded by leveraging a range of DAX functions to craft meaningful measures that enhance the depth of our analysis. Among the notable DAX functions employed were

CALCULATE (): providing the capability to supersede existing report filters,

RELATED (): tasked with retrieving associated values,

ALL (): disregarding any currently applied filters.

Furthermore, iterator functions were essential as they allowed me to process data step by step, making it easier to analyse and manipulate information in a more detailed and thorough manner.

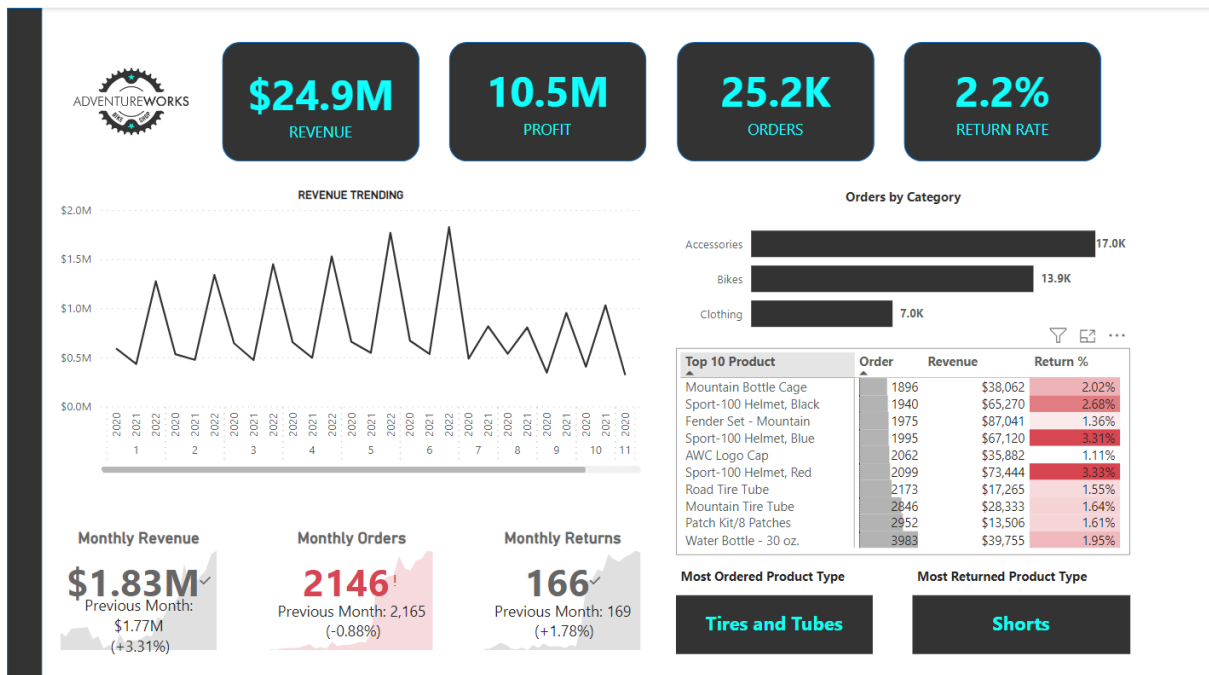


Visualization:

Following the creation of new tables for measures, I delved into visualization, generating four dashboards and a Decomposition Tree, showcasing a depth of visualization skills. I've included screenshots for detailed insights.

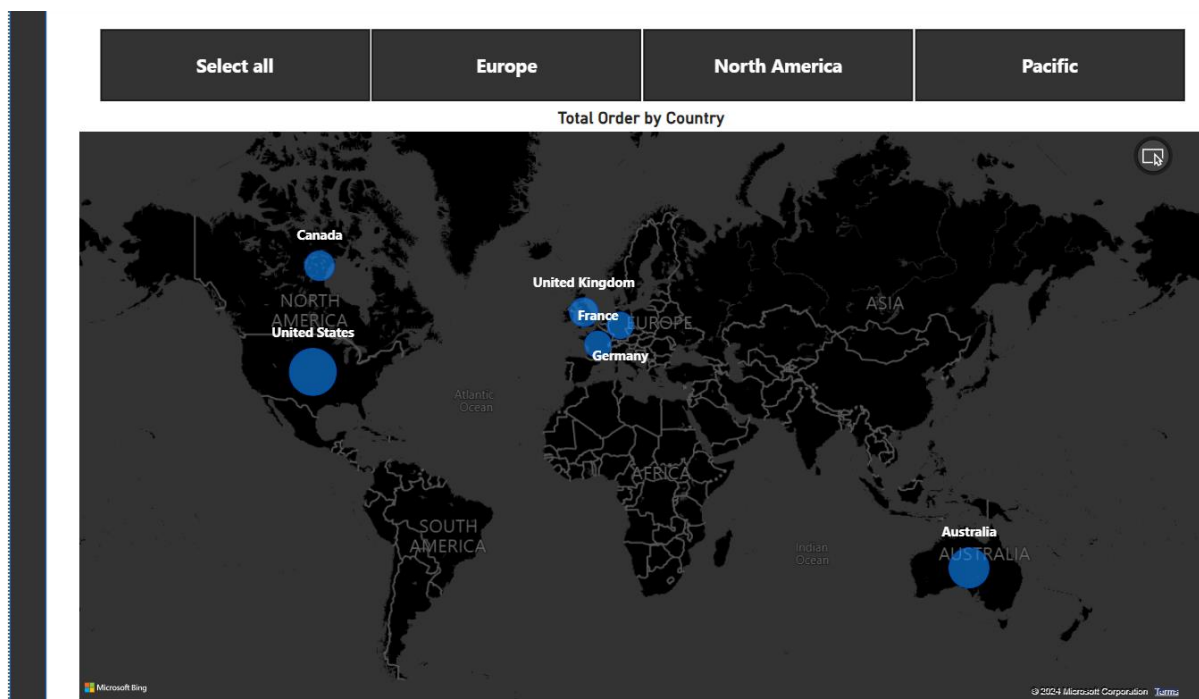
Executive Dashboard:

This high-level summary displays crucial KPIs such as total revenue, profit, orders, and return rates. Monthly targets are set, and conditional formatting emphasizes achievements or shortfalls. Drill-through functionality provides detailed information about the top 10 products.



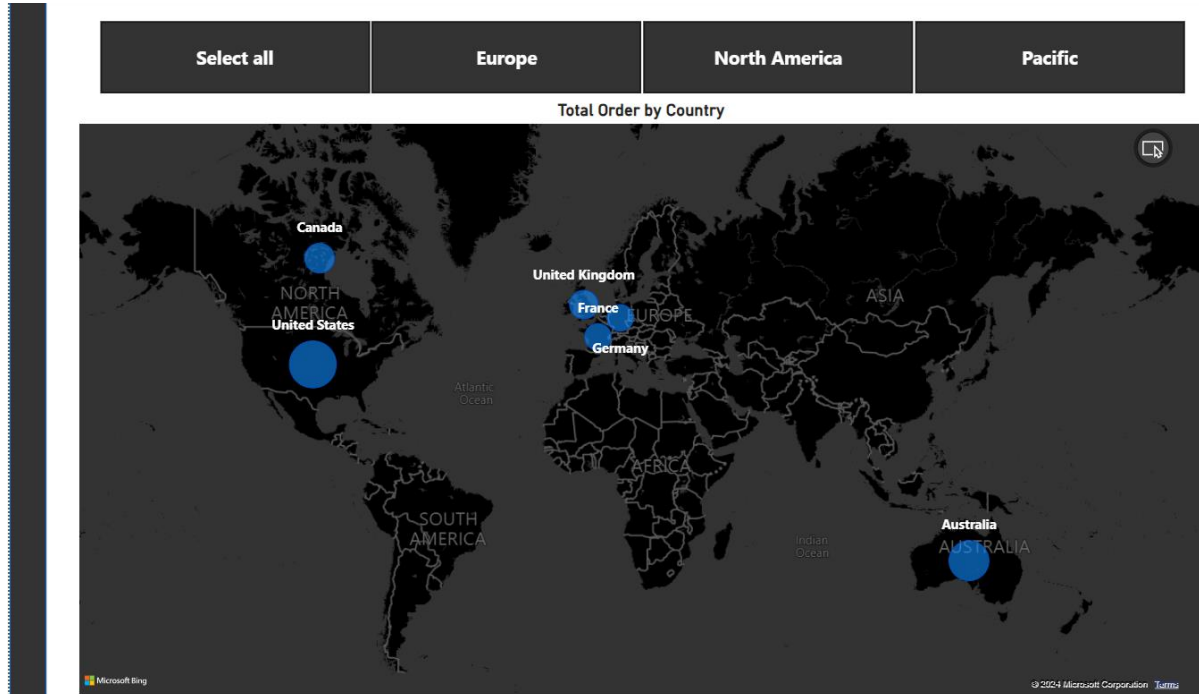
Map:

Focused on geospatial data and tooltips, this dashboard enhances understanding.



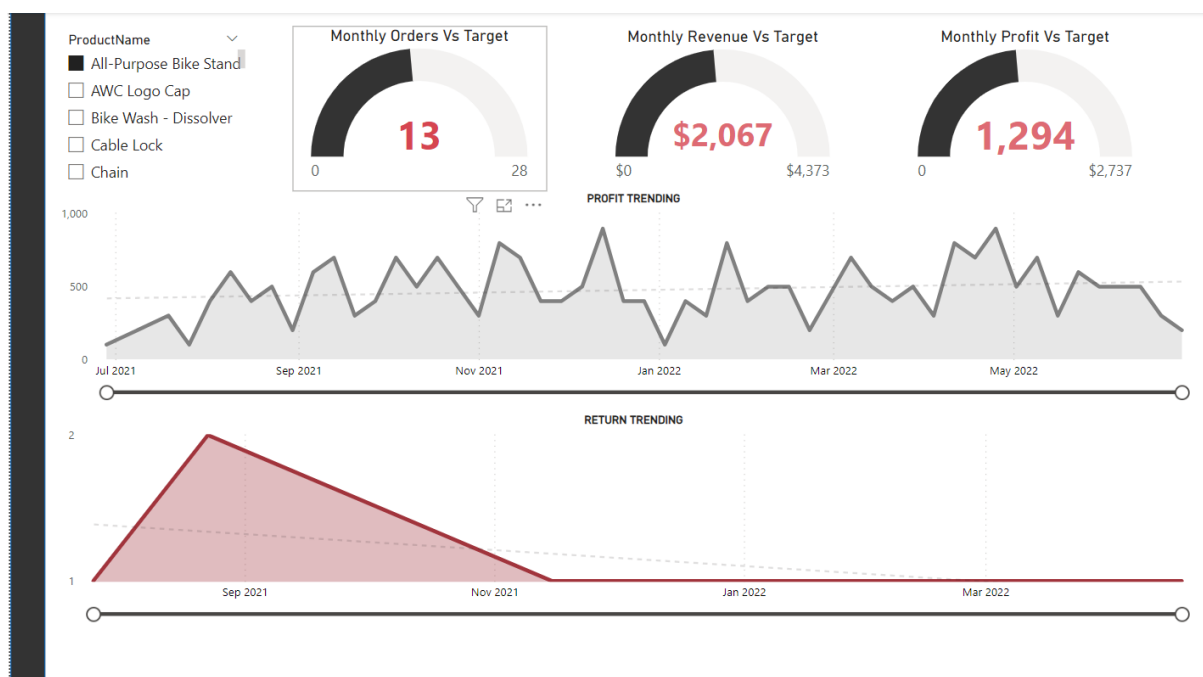
Product Details Dashboard:

A drill-through dashboard detailing specific products from the top 10 table in the Executive Dashboard. It features gauge bars, adjusted prices, and product metrics with field parameters.



Customer Details:

Displays customer-level KPIs.



In conclusion, the project aimed at honing visualization and analysis skills using Power BI, showcasing a comprehensive understanding of data modelling, DAX functions, and advanced visualization techniques.

Here Is the link for the live dashboard:

https://app.powerbi.com/links/Surk4O5DNo?ctid=c986676f-9b39-4d08-b4f8-a668e0e8c6a5&pbi_source=linkShare

Thank you for reading the article.