Link to Dashboard: https://app.powerbi.com/reportEmbed?reportId=e9c3e00c-2d27-4bc3-9049-909da5eb64b0

Adventure Works Dashboard: Power BI

For this project, I worked for a global manufacturing company that produces cycling equipment and accessories to track KPIs (sales, revenue, profit, returns), compare regional performance, analyze product-level trends, and identify high-value customers.

Used Power BI:

- Connect and transform the raw data
- Build a relational data model
- Create calculated columns and measures with DAX
- Design an interactive dashboard to visualize the data

The Data

I began by Loading my Data and transforming it in the power Query Editor then I made my data model by creating a star schema building relationships between the sales, Calendar, Customer, Product, and Territories tables. after learning about relational models, cardinality, and filter flow
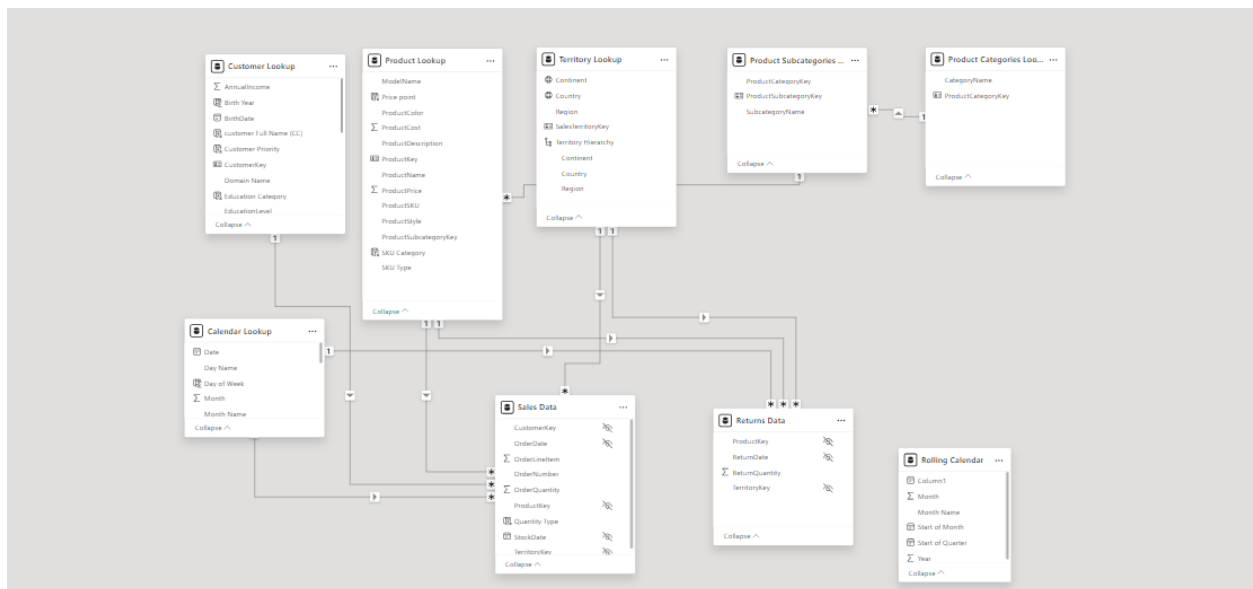
Some Exciting Dax Functions used:

CALCULATE (): It allows you to overrule existing report filters and "force" new filter context.

RELATED (): Returns related values in each row of a table based on relationships with other tables.

ALL (): Returns all rows in a table, or all values in a column, ignoring any filters that have been applied.

Iterator Functions: Iterator (or "X") functions allow you to loop through the same expression on each row of a table, then apply some sort of aggregation to the results (SUM, MAX, etc.)

I Created 4 dashboards with in-depth knowledge of visualization skills. I am attaching screenshots of the dashboard to share details and findings

Executive Dashboard:

- Inserted card visuals to executive-level KPIs, which show total revenue, profit orders, and return rate of products. I also added three more KPI cards to give an idea about how the company manages to achieve monthly targets compared to the previous month. I set a monthly target of 10% more than last month for revenue, orders, and returns. Here we can see that only the orders category fell short of achieving its monthly target. I tried to highlight this achievement using conditional formatting.
- I was able to include some drill-through functionality after introducing the table with the top 10 products and the orders, revenue, and return rate linked to them. This indicates that you may examine more information about a single product by clicking on it to access a different dashboard (the Product Detail Dashboard).
- The introduction of the filter at the top right corner allows users to filter through different years and continents. Here is the result of the dashboard showing numbers for the Year 2022 and the Europe continent.
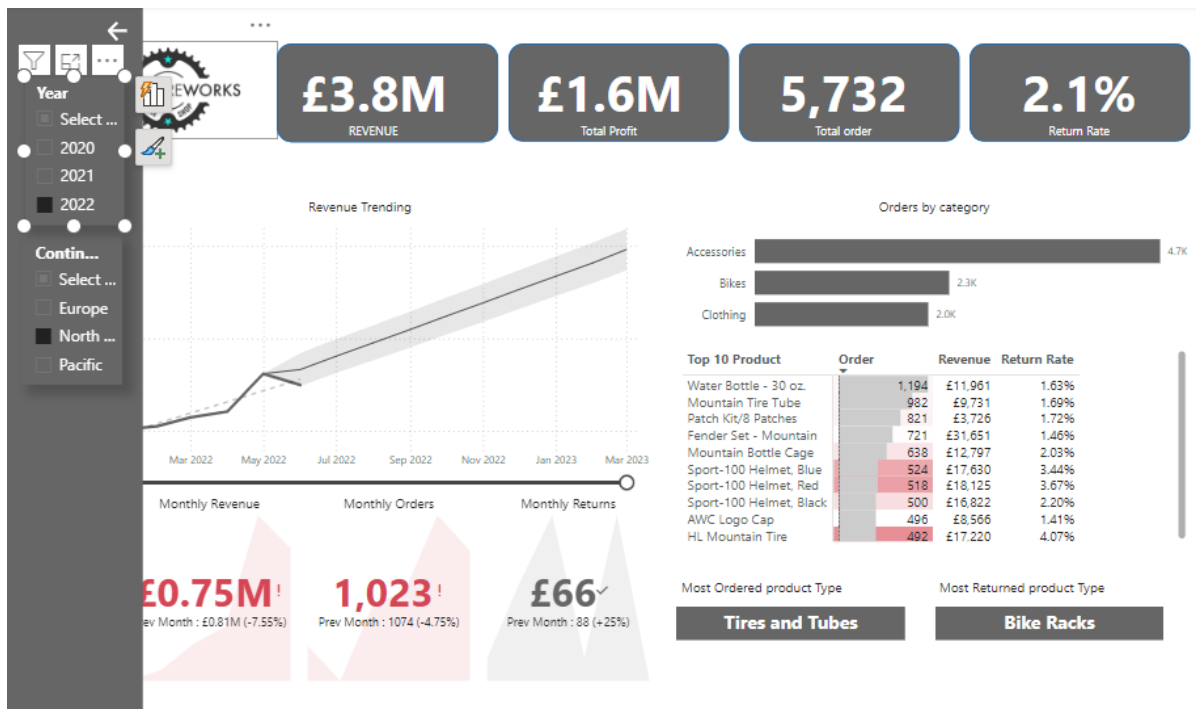
Map: Assigned categories to geospatial fields, added multiple location fields, and used latitude and longitude when possible.
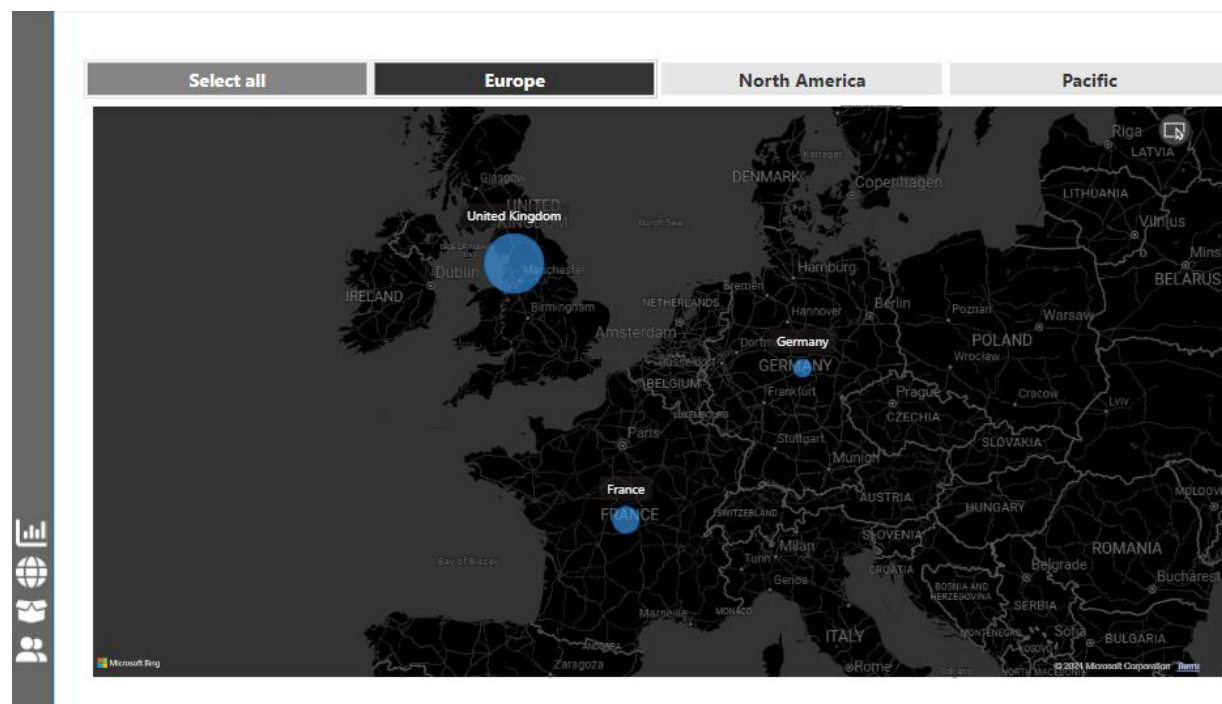
Product Dashboard: This dashboard is drilled through Type, which shows more details for products shown in the top 10 tables of the executive dashboard.
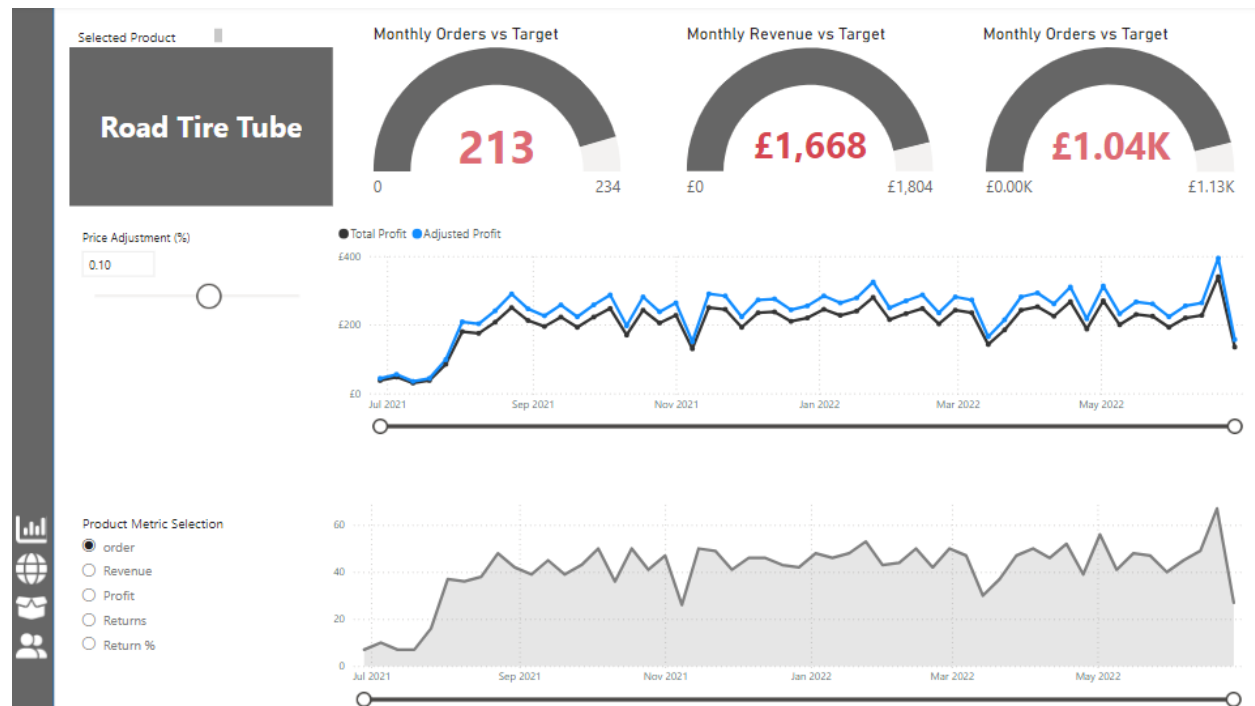
- In the product dashboard the inclusion of gauge bars to show KPI numbers against the target for selected products.
- Also, there is an adjusted price displayed using numeric parameters to compare weekly profit and adjusted profit.
- Lastly, I added different product metrics using field parameters to showcase the weekly trend of selected metrics.
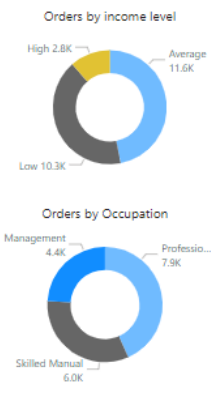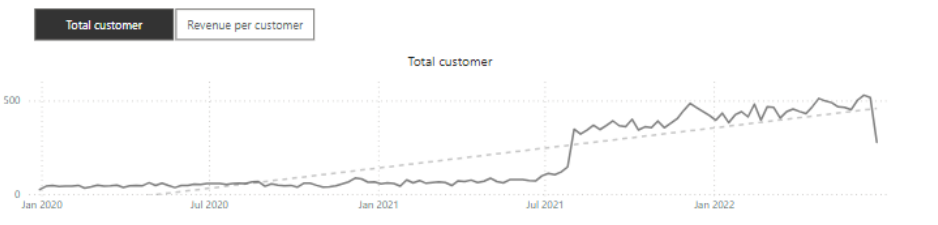
Customer Details: This dashboard displays customer-level KPIs. I made use of the line chat to show the total number of customers by week. Added two donut charts showing total orders by income level and total orders by occupation. Implemented a visual level filter to display the three occupations with the most orders.

17.4K
Total customer

£1.4K
Revenue per customer

| Total customer | Revenue per customer |

Total customer

500

0

Jan 2020   Jul 2020   Jan 2021   Jul 2021   Jan 2022

Orders by income level

High 2.8K   Average 11.6K

Low 10.3K

Orders by Occupation

Management 4.4K   Professio... 7.9K

Skilled Manual 6.0K

Top 100 customer s

CustomerKey	Full Name	order	Revenue
11433	Mr. Maurice Shan	6	£12,408
11439	Mrs. Janet Munoz	6	£12,015
11241	Mrs. Lisa Cai	7	£11,330
11417	Mrs. Lacey Zheng	7	£11,086
11420	Mr. Jordan Turner	7	£11,022
11242	Mr. Larry Munoz	7	£10,852
13263	Mrs. Kate Anand	4	£10,437
12655	Mr. Larry Vazquez	4	£10,395
11425	Mrs. Ariana Gray	6	£10,391
12631	Mr. Clarence Gao	4	£10,332
12650	Mr. Aaron Wright	4	£10,329
13405	Mr. Ethan Bryant	4	£10,309
11429	Mr. Marco Lopez	6	£10,290
12632	Mrs. Bonnie Nath	4	£10,283
11245	Mr. Ricky Vazquez	4	£10,166
11237	Mr. Clarence Anand	4	£10,065
Total		**1,272**	**£615,329**

2020   2022

Top Customer (by Revenue)

Mr. Maurice Shan

Orders
6

Revenue
£12.4K

Among Customer in skilled manual roles in 2022
Ruben Suarez droves the most revenue at 4,683