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DATA MODELING AND VISUALISATION

- The given datasets are orders, retailers, returns, products. First open powerbi and load the necessary datasets. On the left, click the icon “model view” for data modeling. Using data modeling we can understand the relationships between the datasets.
- By analyzing these datasets, there are relationships between all the tables with the “Orders” table as a center table or a fact table. The relationships of tables is given in the picture below.

Manage relationships

Active	From: Table (Column)	To: Table (Column)
<input checked="" type="checkbox"/>	Orders (Product_SKU)	Product_ID (Products) (Product_SKU)
<input checked="" type="checkbox"/>	Orders (Retailer)	Table 1 (Retailers) (Retailer_ID)
<input checked="" type="checkbox"/>	Table 1 (Returns) (Order_ID)	Orders (Order_ID)

New...

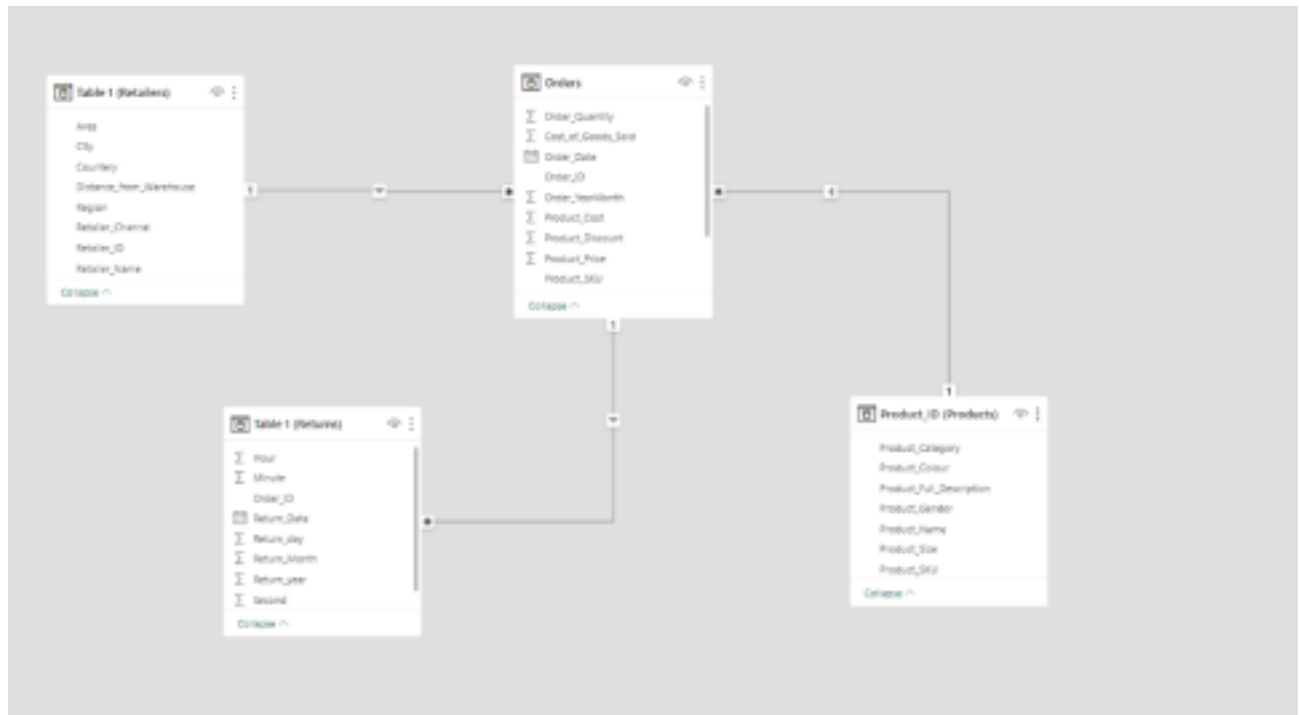
Autodetect...

Edit...

Delete

Close

Before finding the connections, there were few problems with the column names. For that using the option “Use column name as header” we can set the column name as the header name. After the data modeling, in the model view panel the output of the model is as given in the below image.

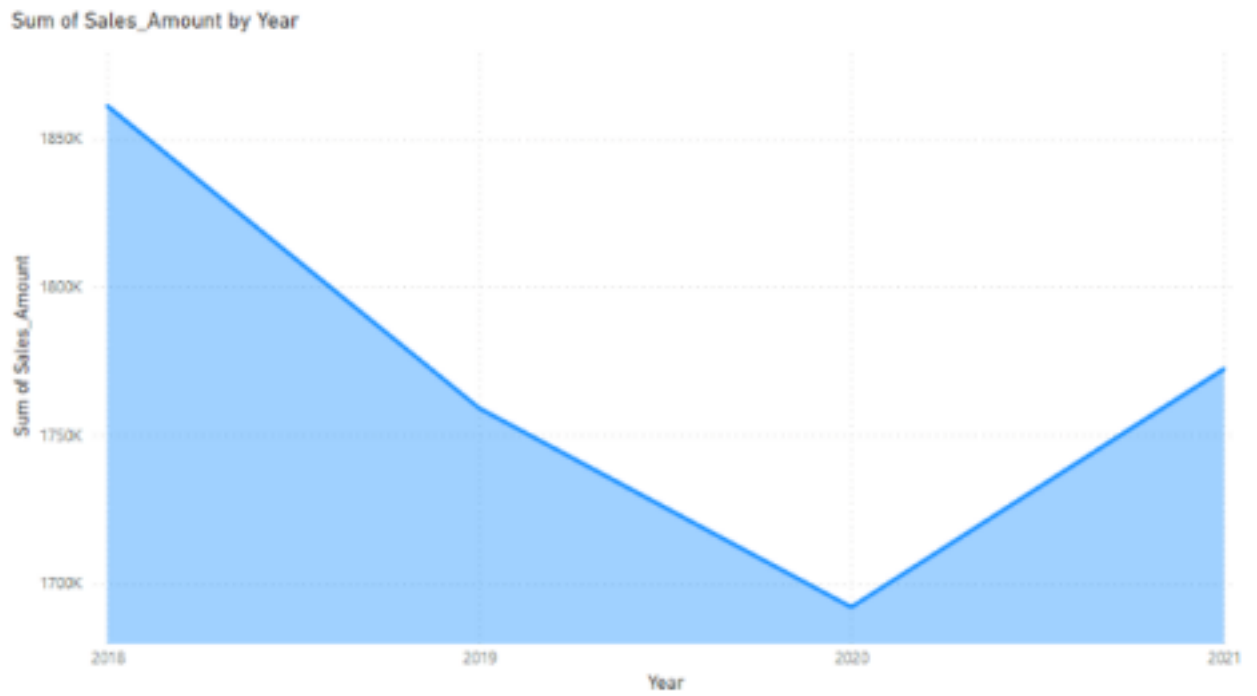


Data Visualization:

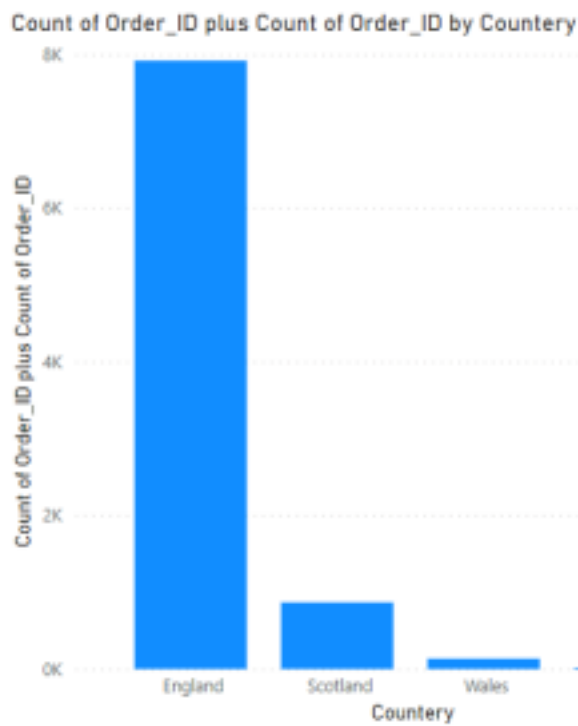
The first chart created by me is a simple card, which clearly shows the sum of “Sales Amount”. This helps us to present the total value of sales in a clear and direct way. The card looks like,

7M
Sum of Sales_Amount

The next chart shows the ups and downs of Sales in different years. This chart is made to see the trend of sales by the year, which helps for time series analysis too. The chart is given below,



The next chart shows the orders that are ordered in different countries. Using this chart, we can see the highest number of orders made in which country. The chart is given below,



The next chart tells about the profit scale made on the sales. We can find the profit made on sales.

127,670.25
Sum of Product_Cost

3,822,375.85
Sum of Profit