

Overview of the Online Retail Store Dataset

The CEO and CMO requested that I provide them with some analysis and visuals that would help answer their questions. Both, the executives are interested in viewing and understanding how they can use the data to make more meaningful decisions. The major objective is to provide insights which they can use to create the expansion strategy. The executives want to analyse the trends and the breakdown by different categories so that they have clarity on how the revenue is being generated and what are the main factors affecting the online store.





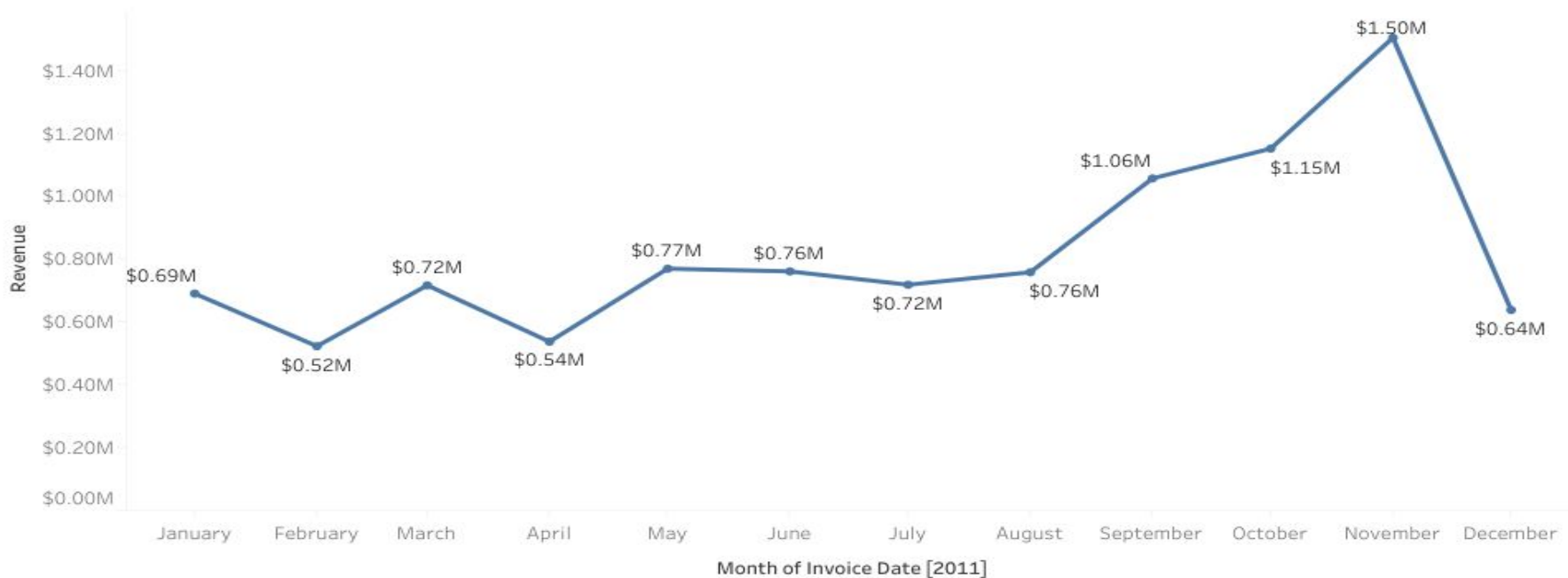
Data Analysis

The Online Retail Store dataset received was quite unclean and need to be cleaned before analysis began. Duplicates was removed, then I noticed that some of the data contains some returns to the store which are provided in negative quantities and there are unit prices which were input in error. I created a check that the quantity should not be below 1 unit and the Unit price should not be below \$0. I then created a new column called Revenue by multiplying the Quantity by Unit price.



Question 1 Dataviz

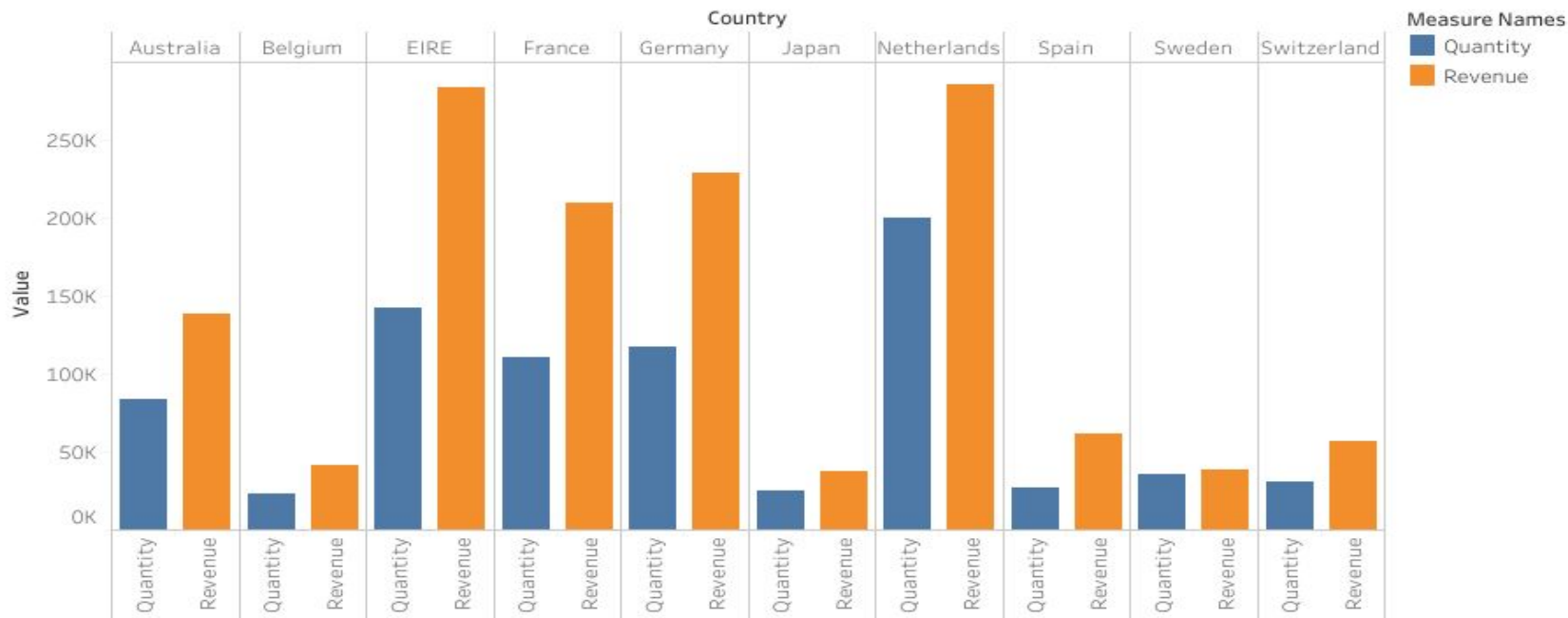
Revenue by Month 2011





Question 2 Dataviz

Top 10 Countries by Revenue & Quantity

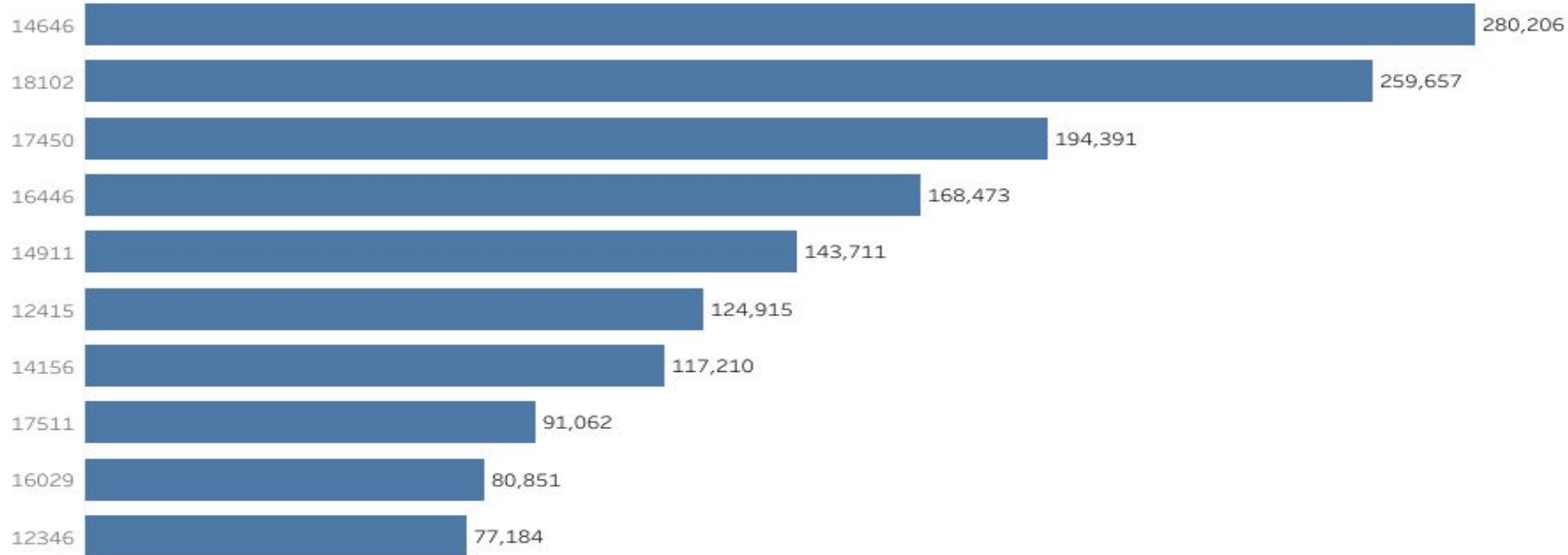




Question 3 Dataviz

Top 10 Customers by Revenue

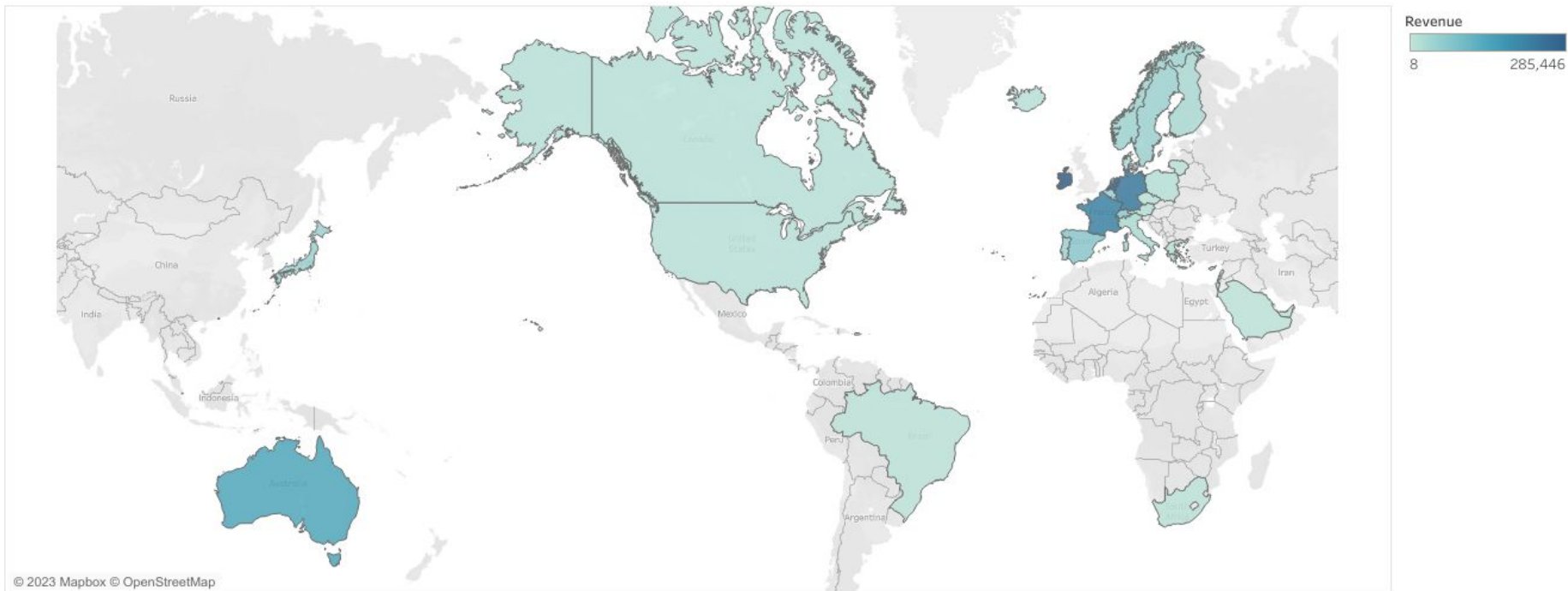
Customer ID





Question 4 Dataviz

Revenue by Country





Data Findings

1. The Line chart showing the revenue generated for each month in 2011 reveals that February generated the least amount of revenue in that year.
2. There was a significant increase in revenue from September with the revenue peaking at \$1.5M in November. This depicts that revenue is affected by seasonal trend and sales are mostly made in Autumn.
3. The Bar chart shows the top 10 countries generating the highest revenues and quantity sold excluding United Kingdom. With Netherlands topping the list with \$285,446 in revenue and 200,128 quantity of items sold.
4. The Column chart shows the top 10 customers generating the most revenue. The customer with ID 14646 generates the most revenue of about \$280,206.

5. The World Map chart shows the list of all the countries excluding United Kingdom and their revenue.

6. It depicts that the majority of sales occur in the European region compared to other regions with African and Middle-east region been the least.



Recommendations

1. The company should come up with strategies that aim at stocking and advertising seasonal products to maximize sales when the demands for these goods go up.
2. The company should focus more on selling items that are in high demand during low sales month
3. The company should expand the European market in order to maximize the its potential for growth and the revenue generated.
4. Incentivizing the top revenue generating customers should be paramount to foster the relationship between the company and its customers.
5. The company should figure out ways to promote sales in regions that are not generating enough revenue.