

EMPOWERING ONLINE RETAIL BUSINESS WITH EFFECTIVE INSIGHTS

The Project is based on the Online Retail Revenue for TATA Company

- The Company sells different categories of products.
- The company has stores at different locations.
- We also have details regarding the products in the inventory
- Total Revenue is calculated by Quantity and Unit Price
- Predicted the Revenue generates for next year and Analysis of major contributing factor through the various Regions.

So, with these details in hand, we can find answers to the following questions:

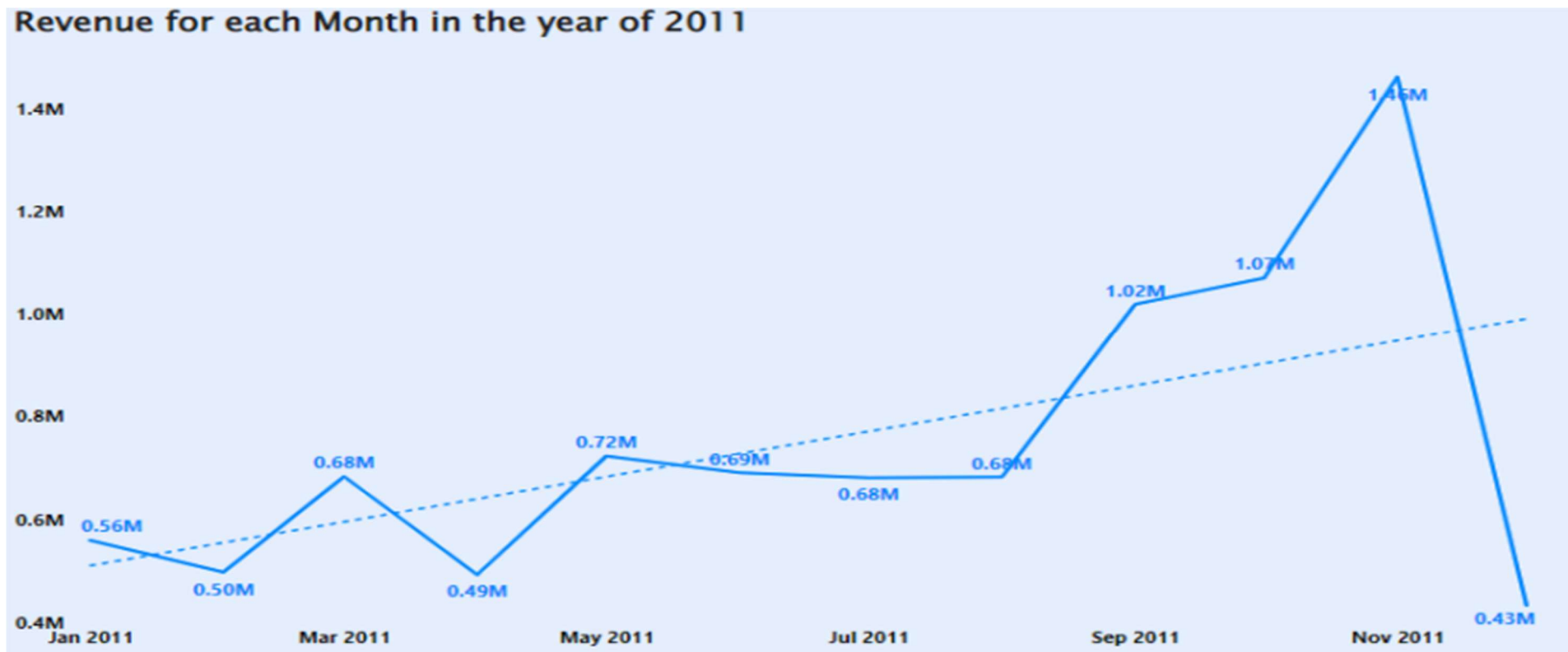
- The retail store has data about how much money it made each month in the year 2011. They want to see if there are patterns in how the money changes each month. They also want to figure out why these patterns happen. This will help the boss predict how much money the store might make next year.
- List the top 10 countries which are generating the highest revenue. Additionally, the quantity sold along with the revenue generated and does not want to have the United Kingdom in this visual.
- Design a visual that exhibits the leading ten customers responsible for the highest spending in the online store. Arrange them with the customer contributing the most revenue at the forefront, followed by a gradual decrease in spending from one customer to the next. Concentrate on ensuring the contentment of these valuable high-spending customers with their shopping experience.
- The CEO is looking to gain insights on the demand for their products. He wants to look at all countries and see which regions have the greatest demand for their products. Once the CEO gets an idea of the regions that have high demand, he will initiate an expansion strategy which will allow the company to target these areas and generate more business from these regions. He wants to view the entire data on a single view without the need to scroll or hover over the data points to identify the demand. There is no need to show data for the United Kingdom as the CEO is more interested in viewing the countries that have expansion opportunities.

Overview of the Dataset

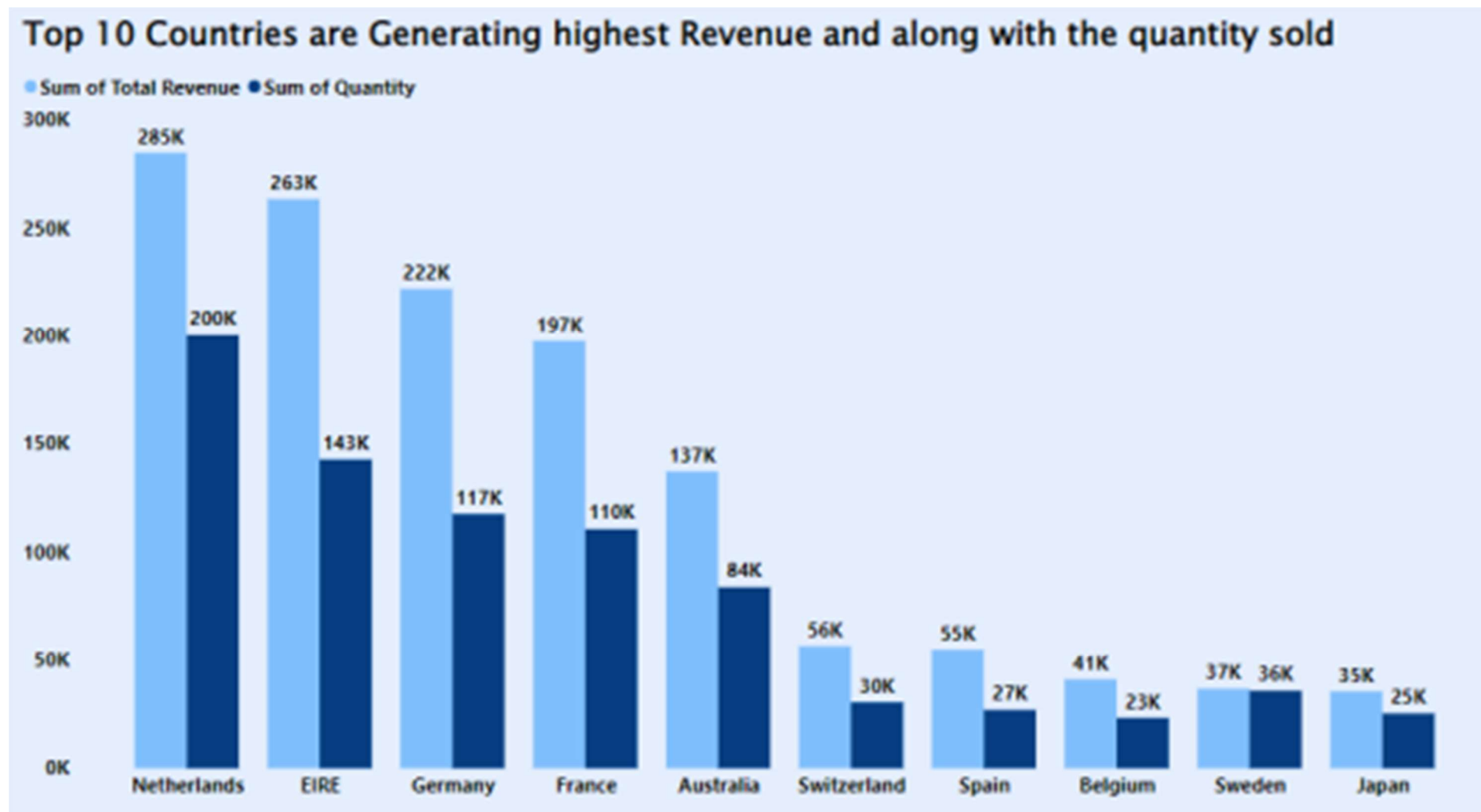
By looking at the different datasets of this project we can say that:

- The dataset contains 541910 Rows and 8 Columns
- We observed that there are 50 countries in the dataset customers who has ordered with different Products.
- We have details about the Customer id, invoice date, invoice no, stock code, Description, Quantity, Unit price, Country.

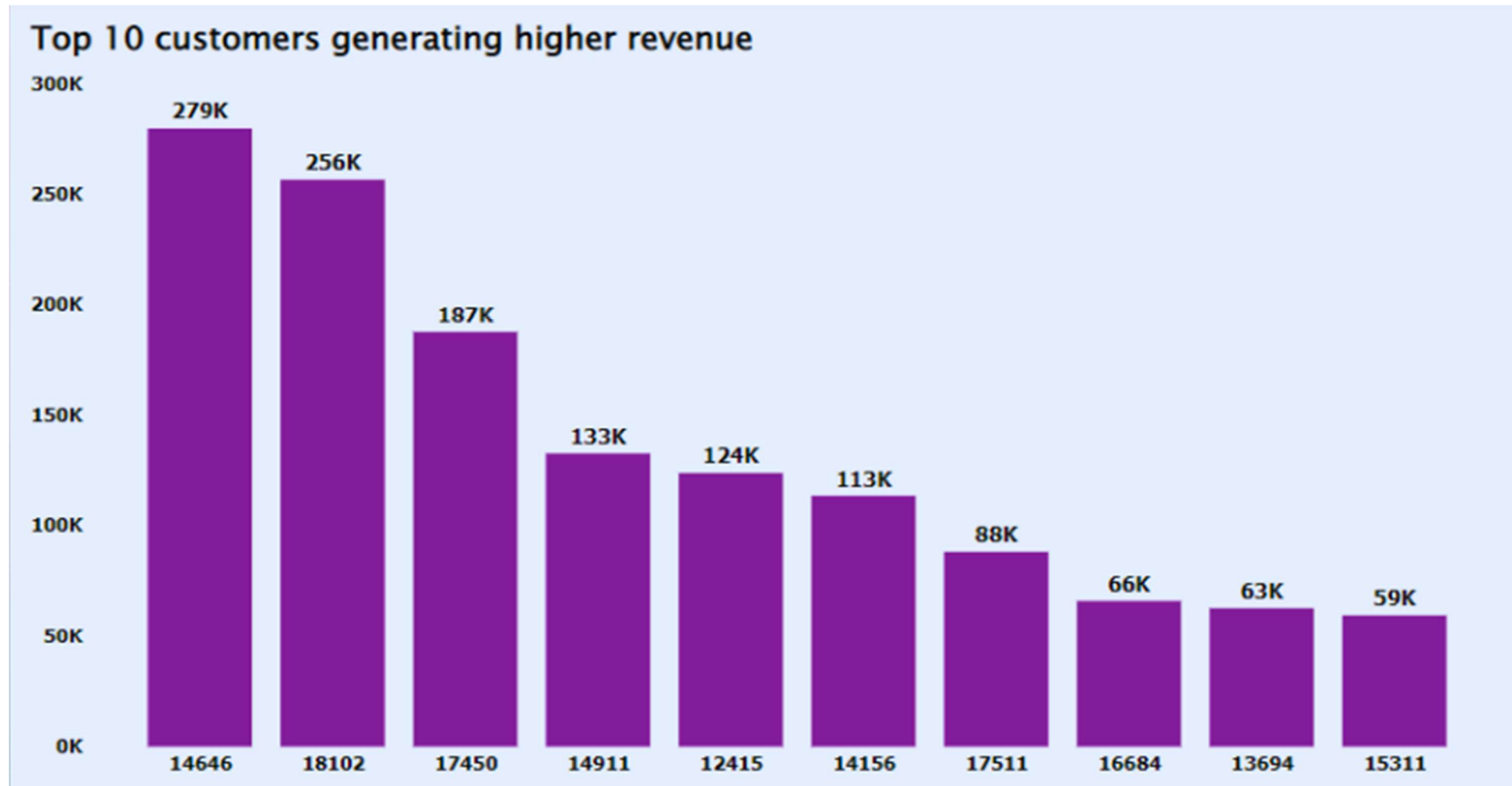
The CEO has requested a trend of the revenue to see if there is any seasonality in the store sales. My analysis shows that there are some months of the year where exceptional growth is witnessed. The data shows that the revenue in the first 8 trend continues till the month of November where it reached 1.5 million USD, the highest during the entire year. The data is incomplete for the month of December, therefore, no conclusion can be drawn from it, unfortunately. This analysis shows that the retail store sales are impacted by the seasonality which usually occurs in the last 4 months of the year. Months is fairly constant as the average revenue generated for these 8 months is around \$685k. The increase in revenue starts in the month of September, where the revenue increases by 40% over the previous month. This trend continues till the month of November where it reached 1.5 million USD, the highest during the entire year. The data is incomplete for the month of December, therefore, no conclusion can be drawn from it, unfortunately. This analysis shows that the retail store sales are impacted by the seasonality which usually occurs in the last 4 months of the year.



The top 10 countries which have opportunities for growth are performing. This data does not include the UK as the country already has high demand and I've been told you're more focused on the countries where demand can be increased. The analysis shows that countries such as the Netherlands, Ireland, Germany and France have high volumes of units bought and revenue generated. I would suggest that these countries should be focused on to ensure that measures are taken to capture these markets even more.



The third analysis has been performed on the top 10 customers who have purchased the most from the store. The data shows that there is not much of a difference between the purchases made by the top 10 customers. The highest revenue generating customer only purchased 17% more than the 2nd highest which shows that the business is not relying only on a few customers to generate the revenue. This shows that the bargaining power of customers is low and the business is in a good position.



The map chart shows the regions that have generated the most revenue compared with the regions that have not. It can be seen that apart from the UK, countries such as Netherlands, Ireland, Germany, France and Australia are generating high revenue and the company should invest more in these areas to increase demand for products. The map also shows that most of the sales are only in the European region with very few in the American region. Africa and Asia do not have any demand for the products, along with Russia. A new strategy targeting these areas has the potential to boost sales revenues and profitability.

