

Tata Data Visualization Internship Report

Powered By - Forage

P
by Pranay Jadhav



Purpose of the Project

The purpose of the project is to draw meaningful insights & visuals to answer the following questions :

1. Time series of revenue generated in 2011
2. Top 10 countries generating the highest revenue excluding the United Kingdom
3. Customers that generate the highest revenue for the company
4. Countries with the highest demand for their products

Process :

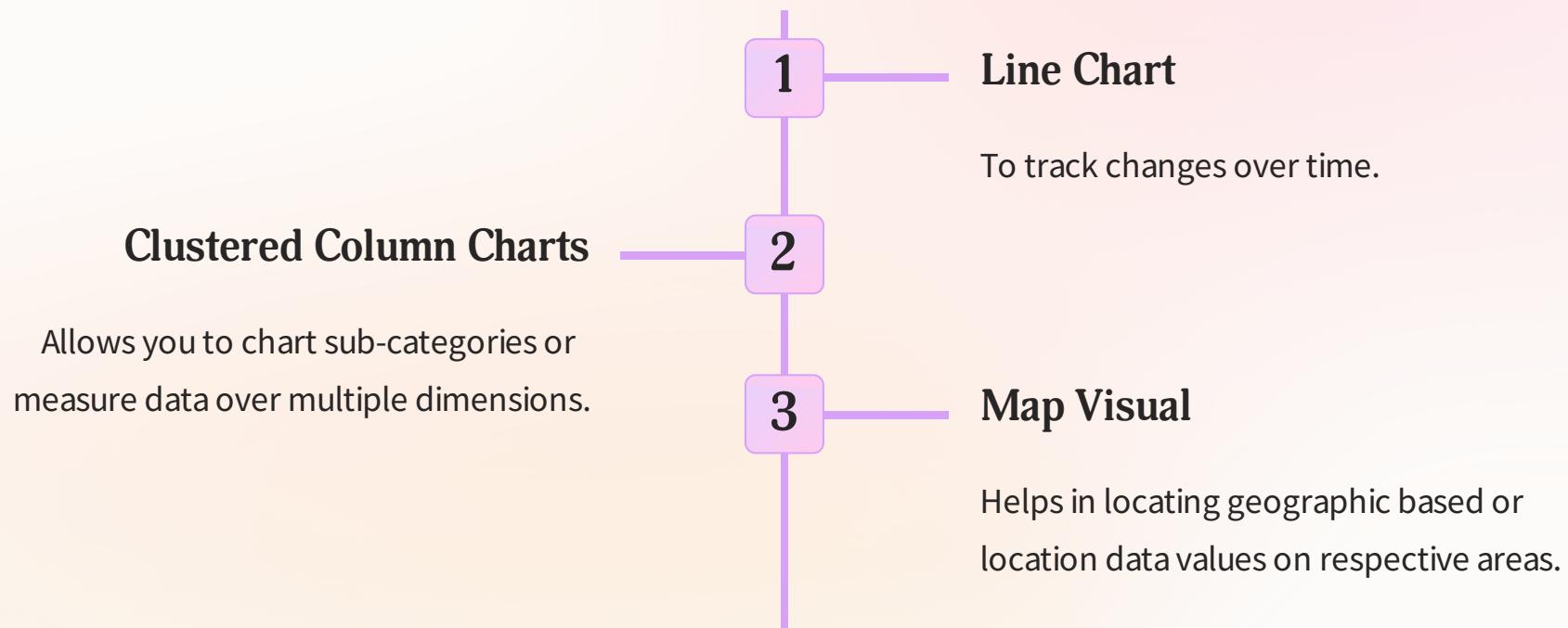
All the necessary steps were taken in order to analyze the data provided by the firm.

Data cleaning such as :

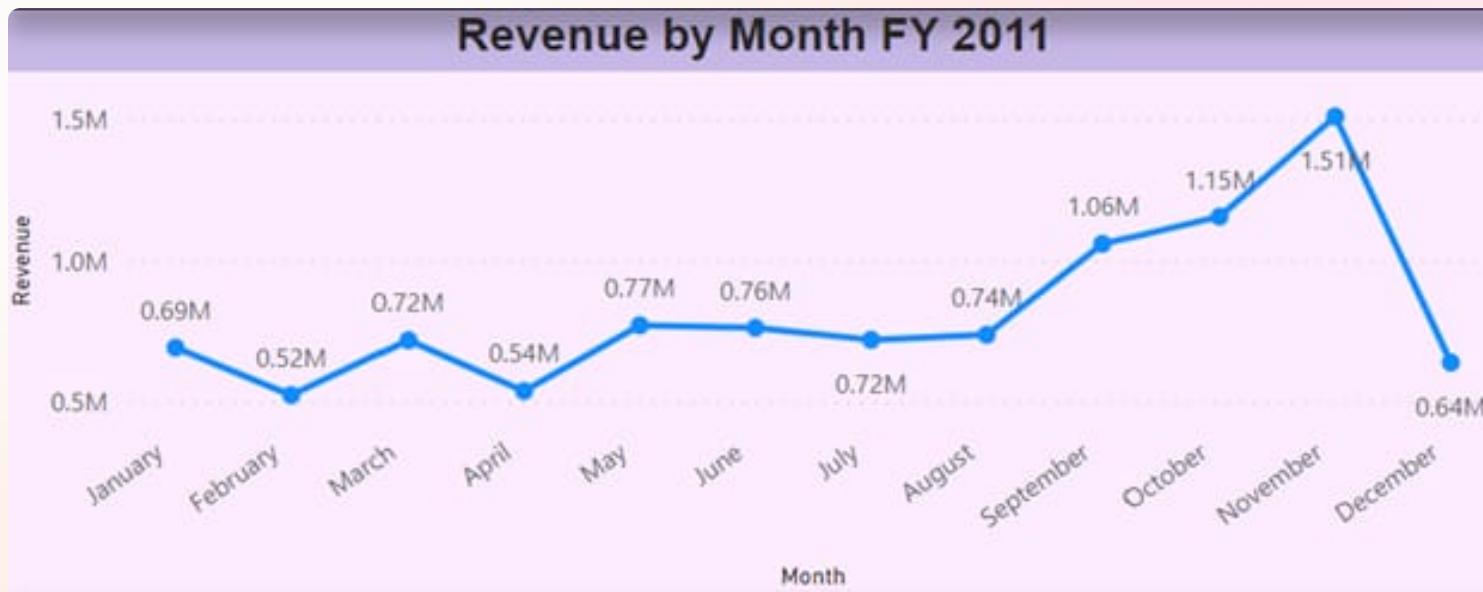
1. Removing the null values
2. Eliminating the negative values from the Unit Price and Quantity columns
3. Filtering the data as per requirement

was done so as to ensure the analysis and visualizations are accurate and to the point to draw meaningful insights.

Types of Visualizations

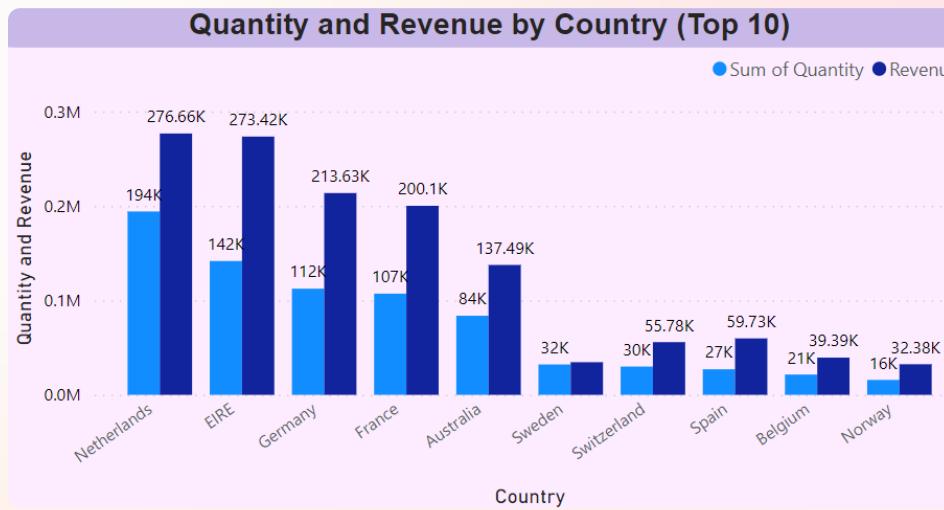


Revenue generated each month for FY 2011



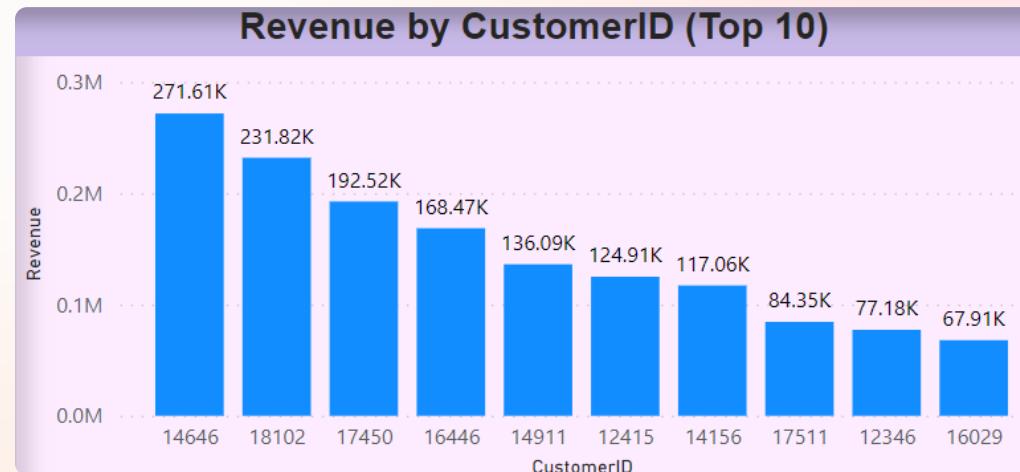
- The first 8 months had stable monthly revenues with minor fluctuations.
- We had a significant increase in revenue from September with the revenue peaking at \$1.15 Million in November and an average of 21.18% increase in revenue from August to November.
- The revenue trend from August to December demonstrates how seasonality affects retail store sales.

Top 10 Countries by Revenue & Quantity



- This chart represents the top 10 countries in the revenue and the quantities bought in these countries except The United Kingdom .
- There is no major difference between the revenue and the quantity of goods sold in these countries, showing a high purchasing power in these countries .
- These countries represent regions with the highest potential to generate more revenue that management needs to focus more on in terms of marketing strategies.

Revenue by Top 10 Customers



- This chart shows that there is no major difference between the top 10 customers in terms of revenue generated.
- The average difference in revenue between the top 10 customers is 15.8%.
- The company can aim to strengthen the relationship with these customers to increase customer loyalty and retention and ultimately drive more sales and revenue for the company.

Revenue by Countries



- The map chart concludes by comparing the places that have produced the greatest revenue to those that have not.
- The map also reveals that the majority of sales occur only in the European region, with a small number in the American region. Along with Russia, there is no market for the items in Africa or Asia.
- The company can concentrate on the European market more and dive deeper into countries in the region to come up with strategies that will maximize sales from each country in the region alongside Australia and Japan.

Data Sources and Analysis Tools

1 Data sources

The dataset was provided by Tata Motors for the internship task via Forage. The dataset is in the form of an Excel workbook.

2 Analysis tools

Microsoft Excel and Power BI used to analyze data and create visualizations.



Key Insights / Recommendations

1. To maximize sales when the demand for these products increases, the corporation should develop tactics aimed at stocking and advertising seasonal products.
2. To develop methods for marketing these products, the corporation should do a more thorough investigation of the goods that are often in high demand during slow sales months.
3. For the purpose of directing region-specific marketing strategies, a deeper investigation into the kinds of items and the revenue these products create for each region would be essential.
4. To improve the relationship with its top revenue-generating consumers, the business might think about rewarding them.
5. The European market offers more room for expansion, thus the business should focus on developing market positioning tactics there.

THANK YOU