

# Empowering Business with Effective Insights

A VIRTUAL INTERNSHIP POWERED BY TATA ON FORAGE



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# INTRODUCTION

This is a project concerning an online retail store who hired me to review their data and provide insights that would be valuable to the CEO and CMO of the business. The business has been performing well and the management wants to analyze what the major contributing factors are to the revenue so they can strategically plan for next year.

The leadership is interested in viewing the metrics from both an operations and marketing perspective. Management also intends to expand the business and is interested in seeking guidance into areas that are performing well so they can keep a clear focus on what's working. They would also like to view different metrics based on the demographic information that is available in the data.



*Figure 1*



## BUSINESS PRIORITIES

- Factors contributing to revenue?
- Business growth



## ADDED PRIORITIES

- Top customers of the Firm?
- Client retention rate?

# THE BUSINESS SCENARIO

Given the business objectives of the online retail store, the following questions were asked by the senior-level management:

- The CEO of the retail store is interested to view the time series of the revenue data for the year 2011 only. He would like to view granular data by looking into revenue for each month. The CEO is interested in viewing the seasonal trends and wants to dig deeper into why these trends occur. This analysis will be helpful for the CEO to forecast for the next year.
- The CMO is interested in viewing the top 10 countries which are generating the highest revenue. Additionally, the CMO is also interested in viewing the quantity sold along with the revenue generated. The CMO does not want to have the United Kingdom in this visual.
- The CMO of the online retail store wants to view the information on the top 10 customers by revenue. He is interested in a visual that shows the greatest revenue generating customer at the start and gradually declines to the lower revenue generating customers. The CMO wants to target the higher revenue generating customers and ensure that they remain satisfied with their products.
- 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.

# THE BUSINESS INSIGHTS DERIVED

First Case Scenario: Do we have seasonality in revenue?

## REVENUE FOR THE YEAR 2011

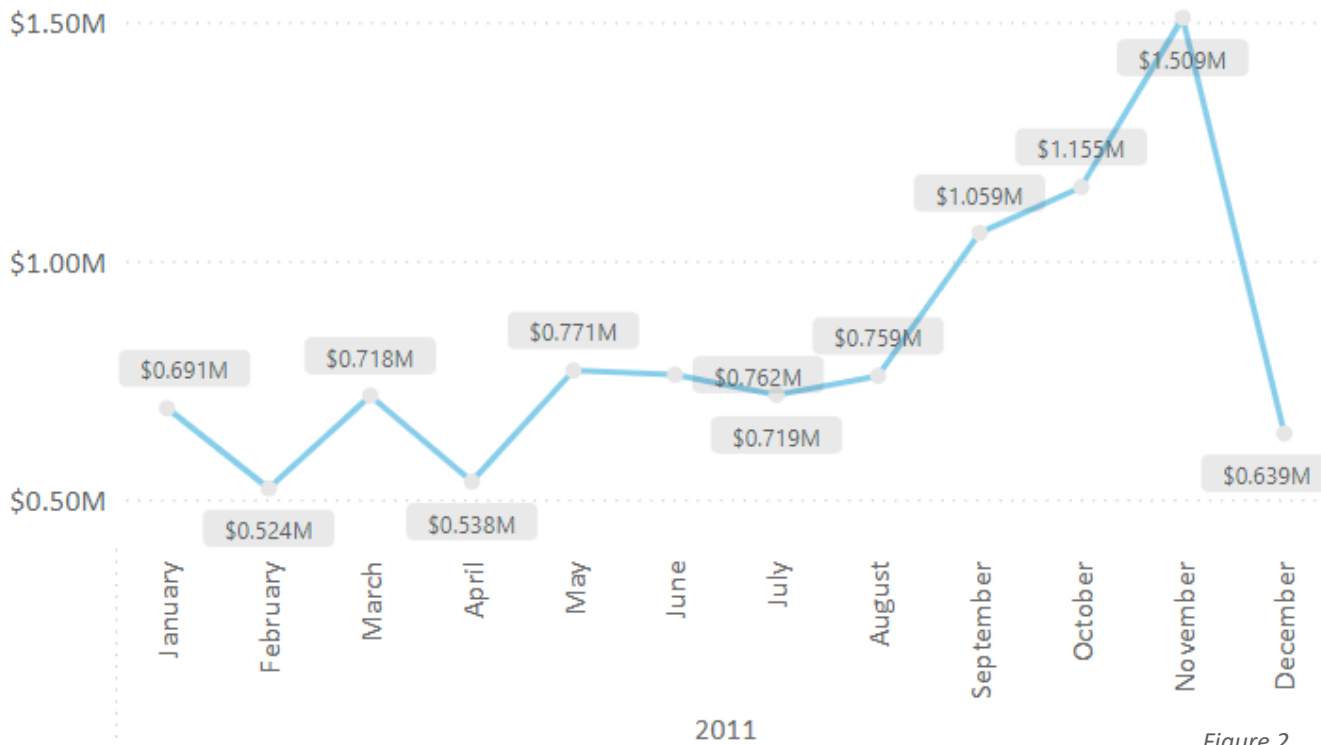


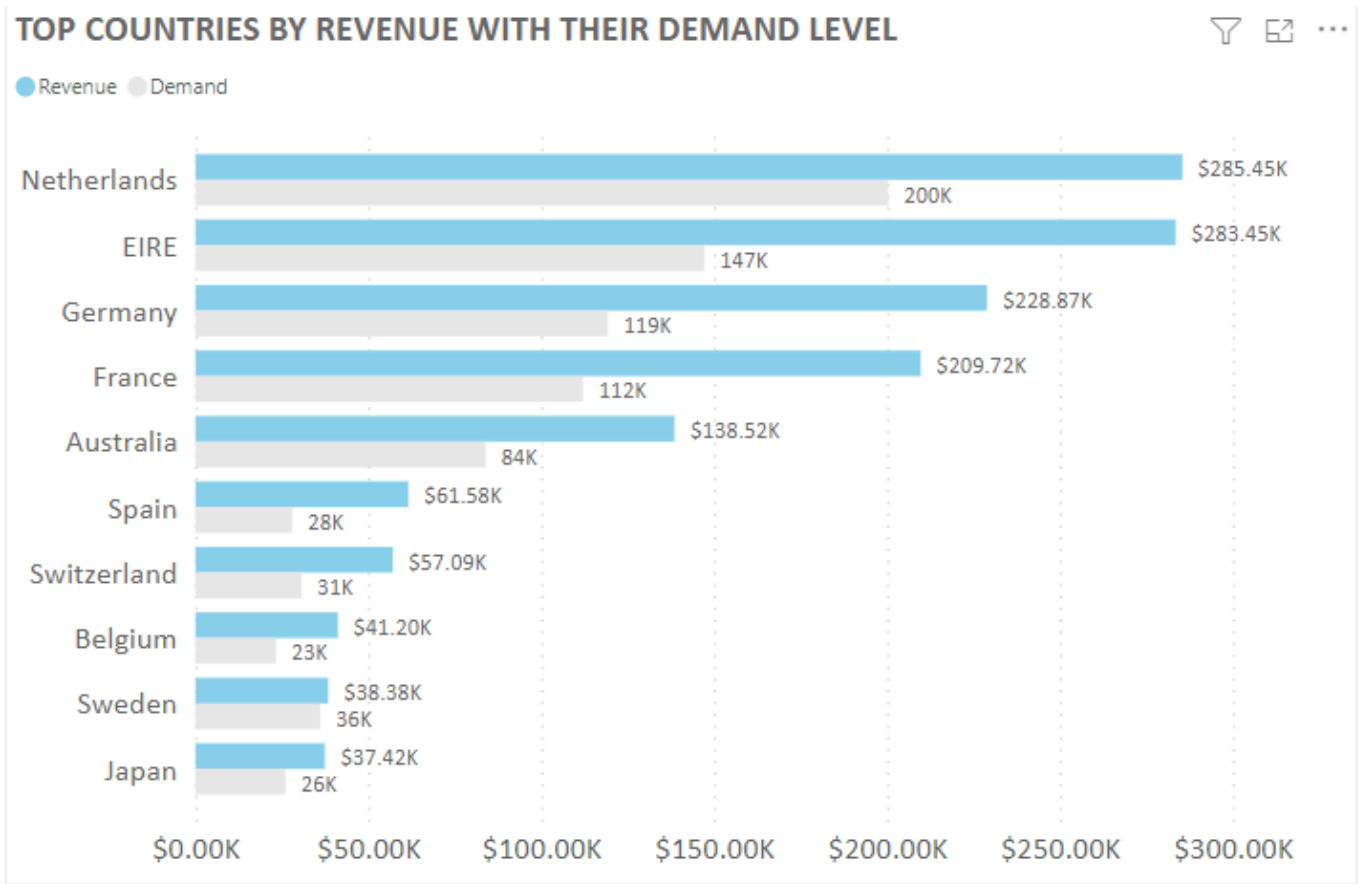
Figure 2

The first case scenario was to provide insights on the revenue trend in the year 2011 and establish if there were any seasonal trends in the year 2011. My analysis above shows that revenue was stable in the first 8 months with the average revenue around \$685K. However, we had a 40% increase in the month of September which took the revenue to approximately \$1.1Million and this upward trend continued into the November where we had an all-time high revenue of \$1.5Million.

The data for December 2011 was incomplete as I received records for the first 9 days only. Therefore, I will conclude that the month of December would have an uptrend as well due to the high revenue generated in the first nine days of the Month.

Also, we can conclude from the chart that the business does have a peak period in the year 2011 which was the last four months of the year.

Second Case Scenario: Who are the top countries in respect to revenue (excluding UK) and their respective demands?



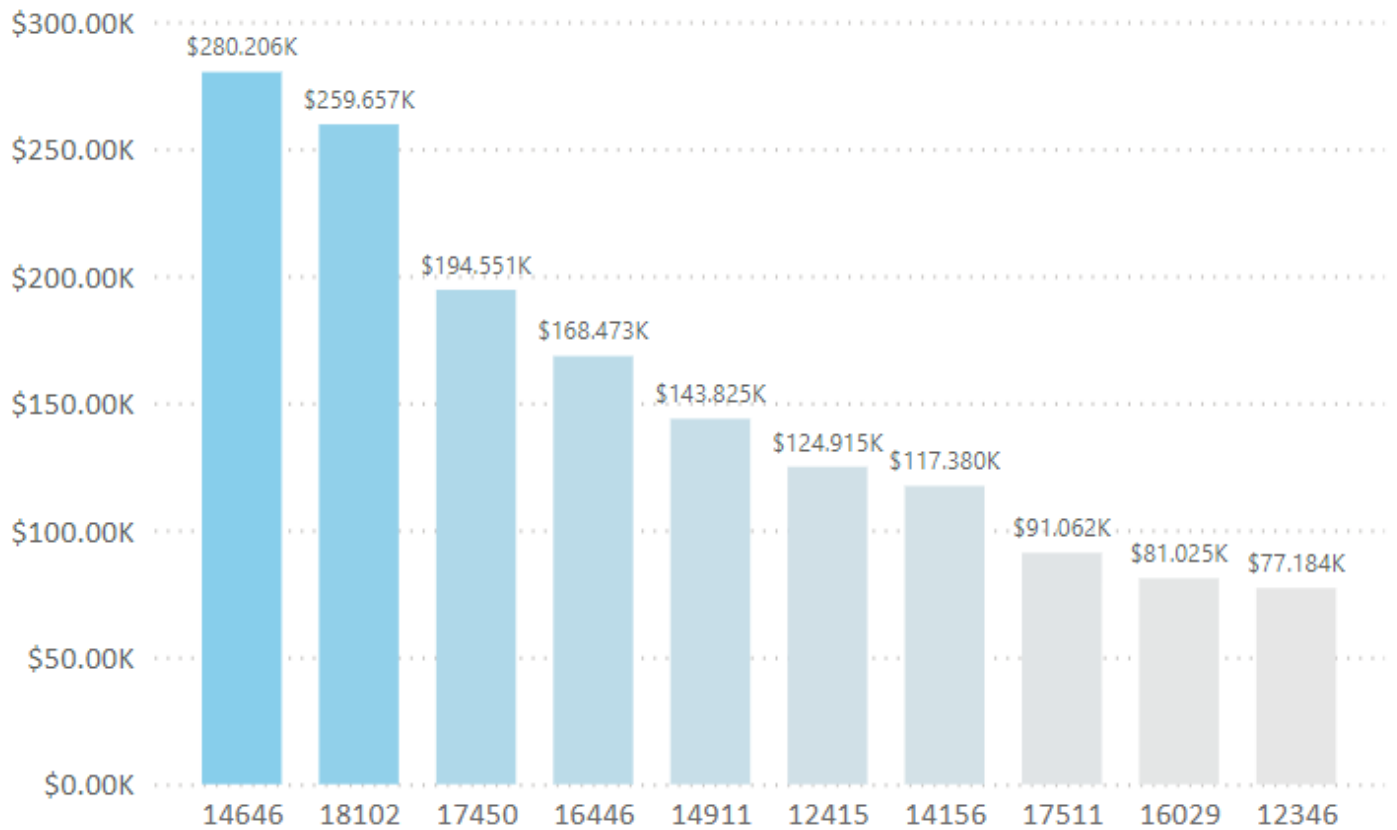
The second visual shows the revenue generated from countries and their respective demands. It is worthy to mention the visual does not contain the records from United Kingdom as we already have high demands and revenue in this location. As displayed in the visual above, countries including Netherlands, Ireland, Germany, and France generated the highest revenue and goods purchased for the business. I would advise that the company should invest more in these regions to generate more revenue and demands.

Also, the European continent made up 80% of the top 10 countries with the highest revenue and goods purchased; therefore, looking to expand in this region would be a good decision for the business as the population from this region already have a knack for our products.

***“...European countries had 80% of the revenue generated, expand more in this region...”***

### Third Case Scenario: Who are the top customers of the business?

#### TOP 10 CUSTOMERS OVER THE YEARS



The business is clearly not relying on a few customers to generate revenue as the top 10 customers contributed on 14% of the entire revenue generated for the year.

While the top customers are well-appreciated and the business would always work to retain them, the top customers bargaining power is low and the business is in a good position.

**“...The Business is in a good Position...”**



#### Fourth Case Scenario: Demand Level on the world map?

##### A LOOK AT DEMAND ACROSS ALL REGIONS



Finally, the map chart shows the regions that have generated the most revenue compared with the regions that have not. 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.