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 time series chart displays the monthly revenue trend for the year 2011. Here are some key observations:

• Fluctuations in the First Half of the Year

- a. The revenue starts at **\$0.69M** in **January** but drops significantly to **\$0.52M** in **February**.
- b. There is a slight recovery in **March (\$0.72M)**, followed by another dip in **April (\$0.54M)**.
- c. From May onwards, the revenue stabilizes around \$0.76M to \$0.77M, showing a moderate upward trend.

• Stagnation in the Middle of the Year

- a. June to August show relatively stable revenue, fluctuating between \$0.72M and \$0.77M.
- b. This period may indicate a seasonal plateau where revenue remains steady without significant growth.

• Significant Growth in the Last Quarter

- a. A strong upward trend begins in September (\$0.76M) and accelerates in October (\$1.06M), reaching \$1.11M in November.
- b. The peak occurs in **December with \$1.51M**, the highest revenue of the year.

• Sharp Decline Post-Holiday Season

a. After reaching the highest point in December, revenue drops sharply in **January** (**\$0.64M**), suggesting a post-holiday season slowdown.

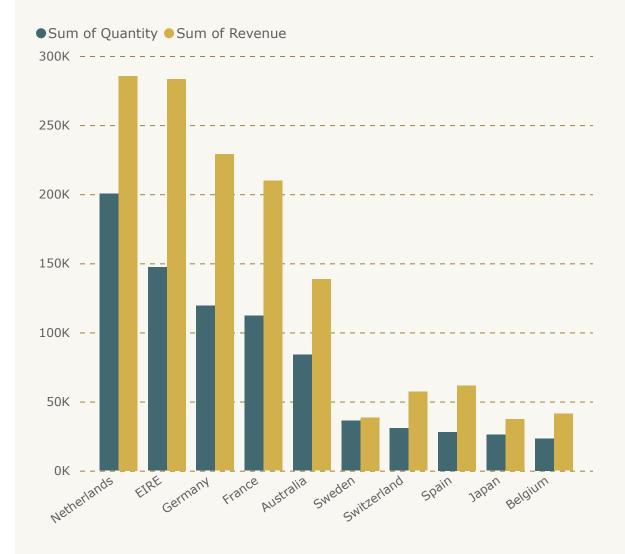
Interpretation and Possible Explanations

- The surge in revenue from **September to December** may be driven by seasonal demand, likely due to holiday shopping, year-end promotions, or increased consumer spending.
- The decline in February and April could be attributed to post-holiday low consumer spending or off-season effects.
- The relatively stable revenue in the middle of the year suggests a period where no major promotions or seasonal events drive significant changes in sales.

Recommendations for Forecasting 2012

- The CEO should focus on leveraging the **peak season (September to December)** by planning promotions and inventory accordingly.
- Strategies should be implemented to **mitigate revenue drops in the early months** by introducing targeted marketing campaigns or off-season promotions.
- A deeper analysis of external factors like market trends, customer behavior, and competitor strategies would help explain the observed seasonality and improve forecasting accuracy.

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 bar chart presents the **top 10 countries** (excluding the United Kingdom) generating the highest revenue, along with the quantity sold. The key observations are:

1. Top Performing Countries

- The **Netherlands and Ireland (EIRE)** have the highest revenue and quantity sold, with revenue slightly exceeding quantity in both countries.
- **Germany, France, and Australia** follow, showing high revenue and significant quantity sold.

2. Quantity vs. Revenue Trends

- In **most countries**, revenue is **higher than the quantity sold**, indicating either higher unit prices or a product mix with more premium items.
- Sweden, Switzerland, Spain, Japan, and Belgium show lower revenue and quantity, but they still make it into the top 10 list.

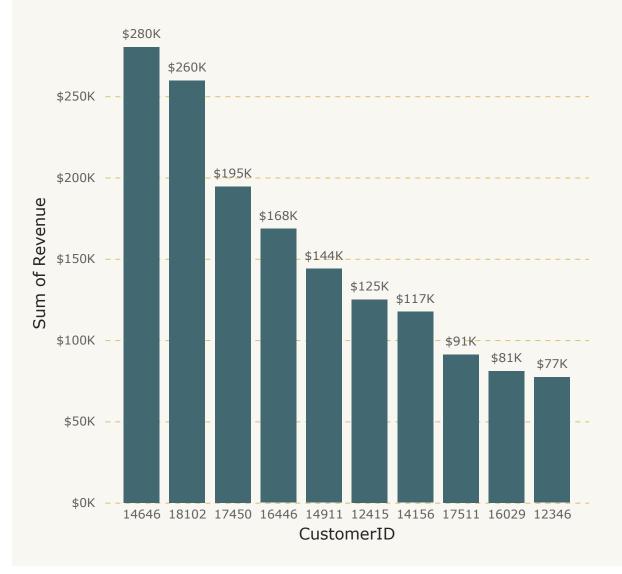
3. Market Insights for the CMO

- **Netherlands, Ireland, and Germany** are key revenue-driving markets, making them a priority for sales and marketing strategies.
- If increasing revenue is the goal, **France and Australia** also offer strong potential for expansion.
- Countries with lower revenue but high quantity sales (such as Sweden and Switzerland) might indicate markets where lower-priced products are popular.

Recommendations:

- **Identify high-revenue but low-quantity countries** to explore opportunities for expanding product variety.
- **Analyze pricing strategies** in high-quantity but lower-revenue regions to improve profitability.
- Leverage seasonality or promotions in top-performing countries to sustain and grow revenue.

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 bar chart displays the **top 10 customers** ranked by revenue in descending order. Here are the key insights:

- 1. Highest Revenue Generating Customers
- Customer 14646 contributes the highest revenue at \$280K, followed closely by Customer 18102 with \$260K.
- Customer 17450 (\$195K) and Customer 16446 (\$168K) also generate significant revenue, indicating their high purchasing activity.
- 2. Gradual Decline in Revenue
- As we move from left to right, revenue gradually decreases, with the lowest among the top 10 being **Customer 12346 with \$77K**.
- The revenue drop between customers is relatively steady, suggesting a strong but varied customer base.
- 3. Strategic Insights for the CMO
- **High-value customers (Top 3-5)** should be prioritized for loyalty programs, exclusive offers, or personalized marketing strategies to ensure retention.
- Customers generating between \$100K-\$150K still contribute significantly and might respond well to targeted engagement.
- Customers below \$100K revenue could be incentivized to increase their purchases through promotions, upselling, or customized product recommendations.

Recommendations:

- Customer Relationship Management (CRM) strategies should be developed for top customers, ensuring their satisfaction with products and services.
- **Personalized marketing** for each segment could boost retention and increase customer lifetime value.
- **Analyzing customer behavior** (e.g., frequency of purchases, preferred product categories) will help tailor better engagement strategies.

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.

