

-- By Jiping Wang

TATA
Data
Visualization

Introduction

- Analyze the data from an online retail store data and provide insights to the CEO and CMO to understand the key drivers of their current success and inform strategic planning for next year's expansion.
- To see operational and marketing metrics, identify high-performing areas, and understand performance based on demographics.

Dataset: Online Retail.xlsx

Steps

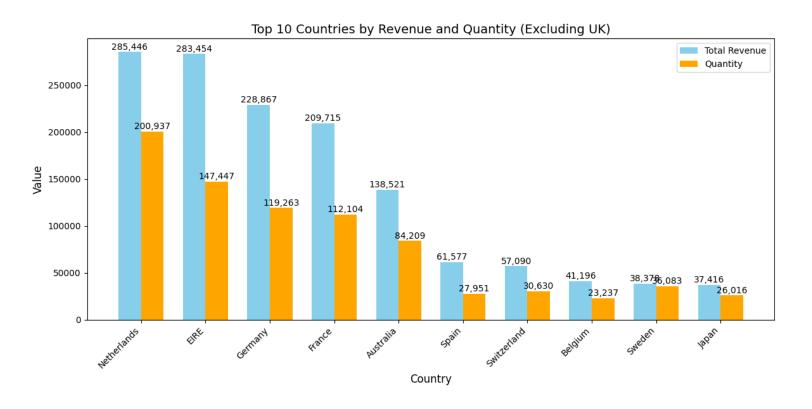
- Load Dataset and gain basic info
- Data cleaning
 - > check that the quantity should not be below 1 unit
 - > check that the Unit price should not be below \$0
- Data Visualization
- Summarize the key findings

Revenue in the Months of 2011

- Overall Revenue Trend: Total revenue shows an increasing trend over time (visualized with a fitted line).
- 2011 Revenue Highlights:
- ➤ Highest revenue in 2011 was in November (1.51 million).
- ➤ Lowest revenue in 2011 was in February (0.52 million).
- First 8 Months Revenue stable.
- August to November Growth



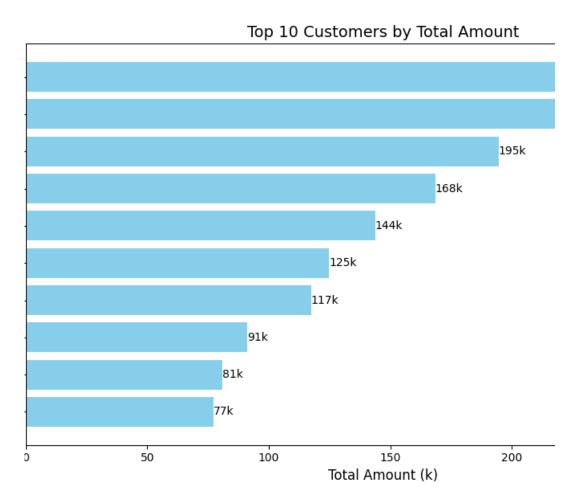
Top 10 Countries by Revenue && their Quantity



In conclusion, the Netherlands and EIRE are the dominant markets in terms of both revenue and quantity (excluding the UK). While there's a general positive correlation between these two metrics, the average purchase value appears to vary across the different countries.

Top 10 Customers by Revenue

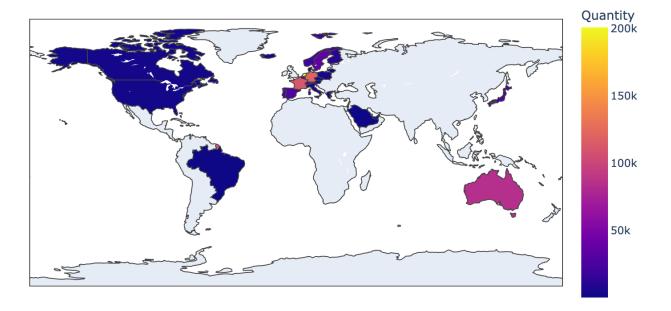
- Revenue generation is relatively similar among the top 10 customers.



Revenue by Countries

Product Quantity by Country (Excluding UK)

- The majority of sales occur in the European zone, with a small number in the American region.
- There is no market for the items in Africa or Asia, including Russia.
- The company should focus more on the European market.



Suggestions

- Focusing on the Strong Market, like European market.
- Localized Marketing with High-Potential European Countries.
- ❖ Leveraging the Small American Presence.
- ❖ Analyze Existing Performance: Understand what is currently driving sales in Australia and Japan.
- E-commerce Optimization.
- Actively solicit and analyse customer feedback.

