

Questions:

What are the Number of Orders for Each Country?

What is the Sales trend for Each Country?

What are the most popular 10 items?

What are the least popular 10 items?

Who are the 10 Most Valuable Customers?

How much is the revenue for each month?

How many customers are the Best Customers?

How many customers are the Loyal Customers?

How many customers are the Big Spenders?

How many customers are at risk of churning?

How many customers are Almost Churned Customers?

How many customers are Churned Customers?

Data Description:

This dataset can be found at Kaggle, which contains all the transactions occurring between 01/12/2010 and 09/12/2011 for a UK-based and registered non-store online retail. The company mainly sells unique all-occasion gifts. Many customers of the company are wholesalers.

Data shape (542k,8)

- **InvoiceNo:** Invoice number that consists of 6 digits.
- **StockCode:** Product code that consists of 5 digits.
- **Description:** Product name.
- **Quantity:** The quantities of each product per transaction.
- **InvoiceDate:** Represents the day and time when each transaction was generated.
- **UnitPrice:** Product price per unit.
- **CustomerID:** Customer number that consists of 5 digits. Each customer has a unique customer ID.
- **Country:** Name of the country where customer receive the item.

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Tools:

- Jupyter notebook
- Pandas
- Numpy
- Matplotlib
- Sklearn

MVP Goal:

Answering the above questions, and finding the best performing model based on Silhouette score.