



# ManyGiftsUK

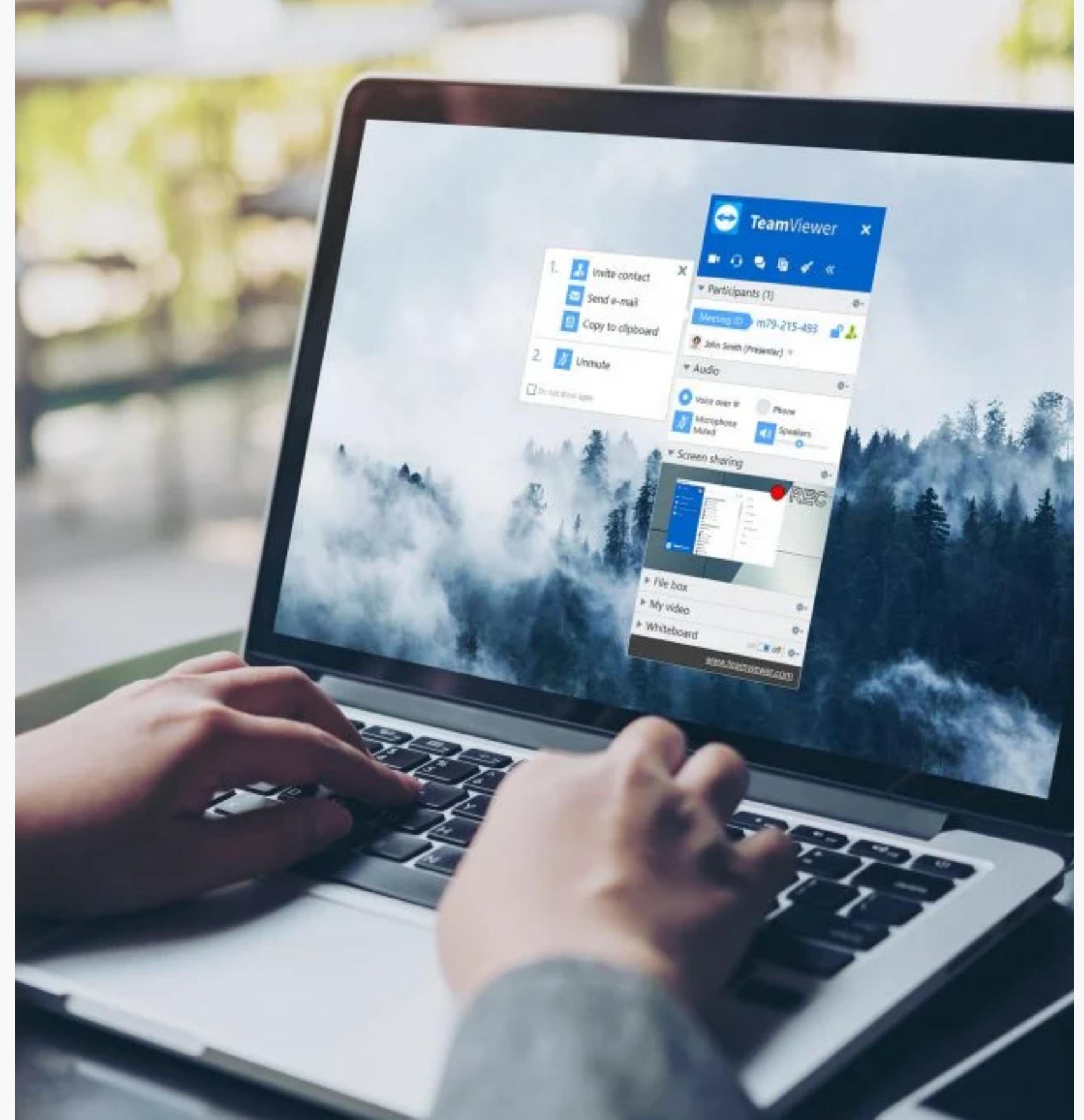
# Agenda

Business Understanding

Exploratory Data Analysis

Recommender System

Deployment



# Business Understanding

## Business Objectives

- Explore data to understand ManyGiftsUK's customers.
- Implement a recommender system that facilitates user choices depending on their preferences.

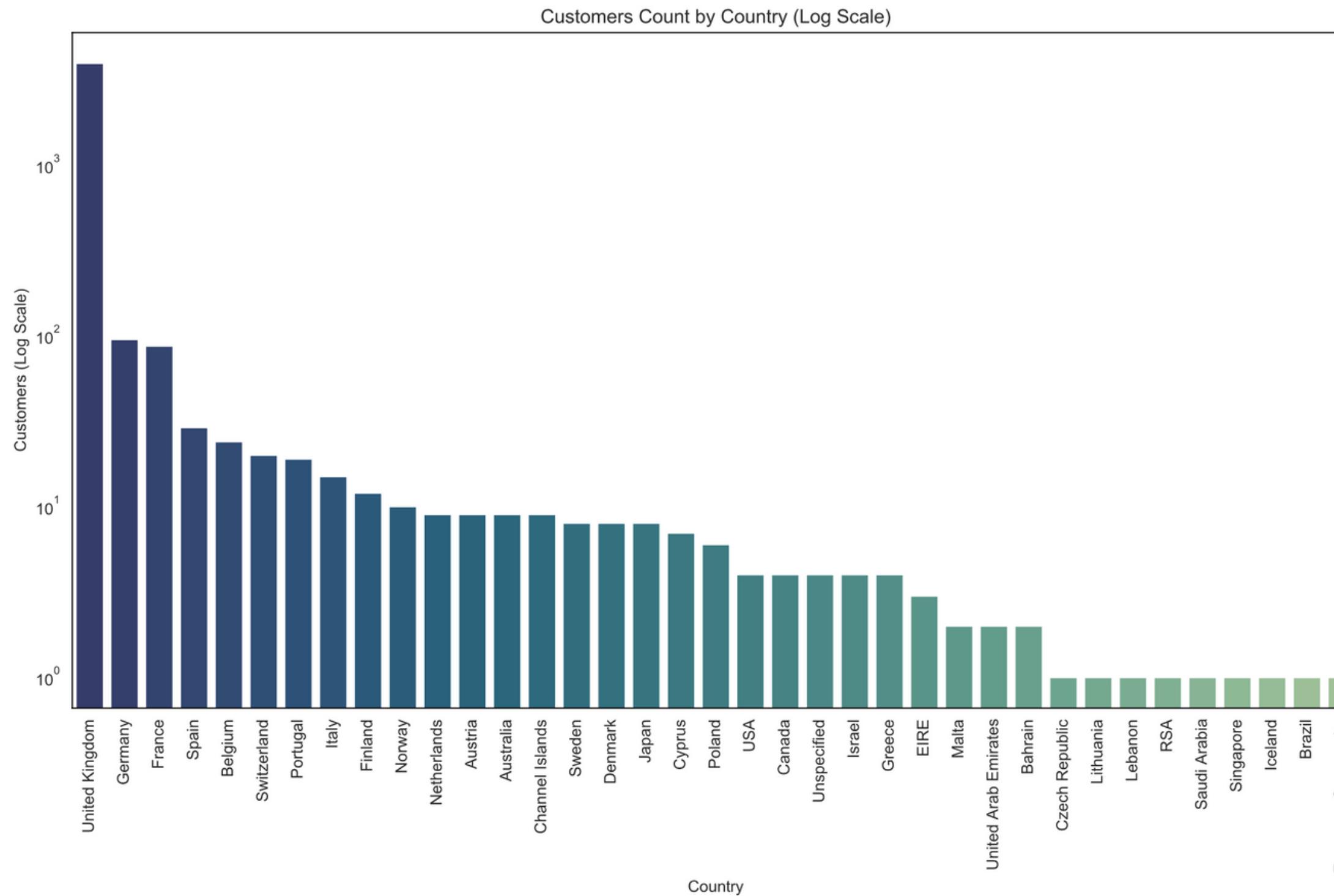
## Data Mining Objectives

- Build the most appropriate model and select adequate evaluation strategies.
- Build and deploy a webapp using Flask that will display the suggested items to the customers.



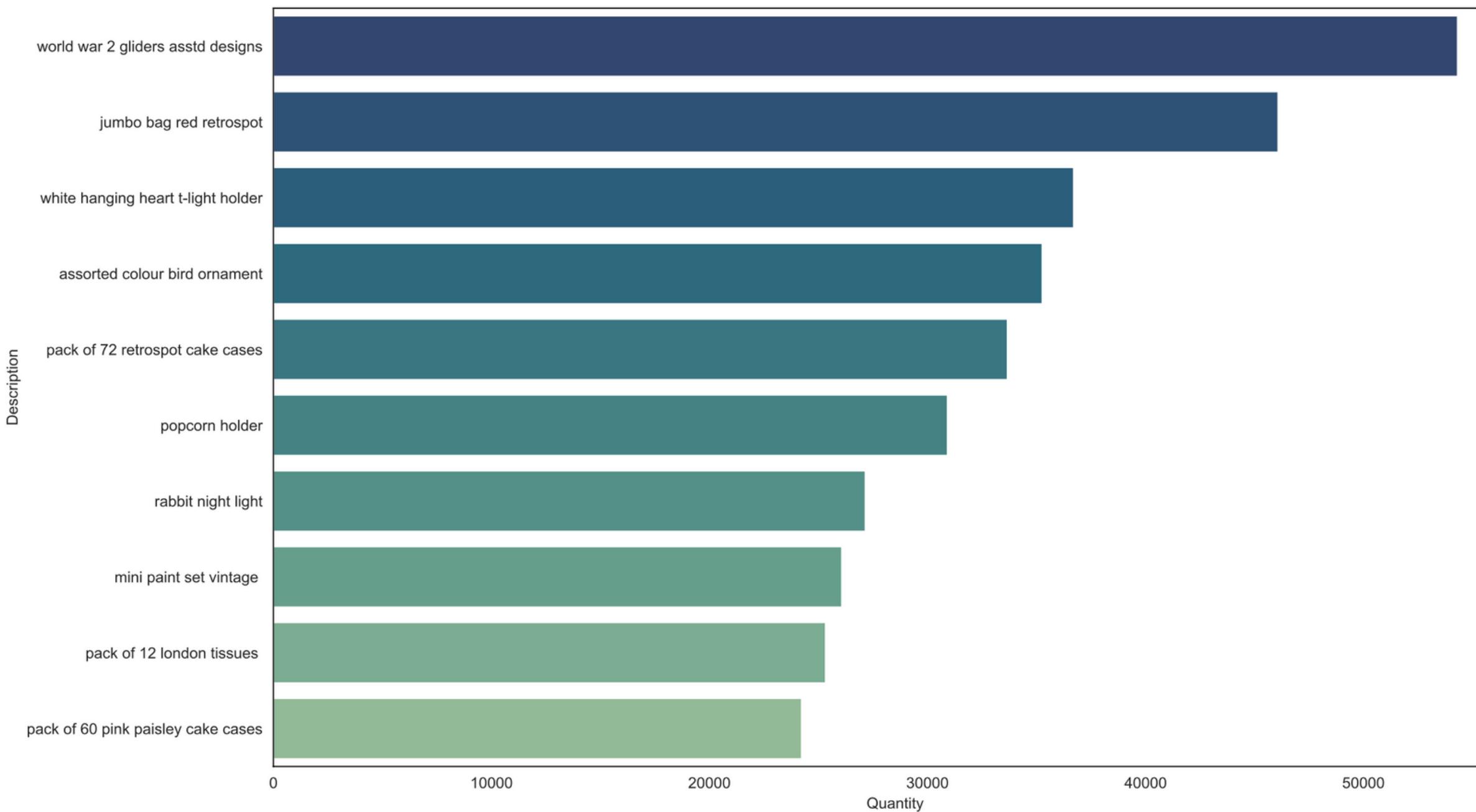
# Exploratory Data Analysis

# Who are our customers?

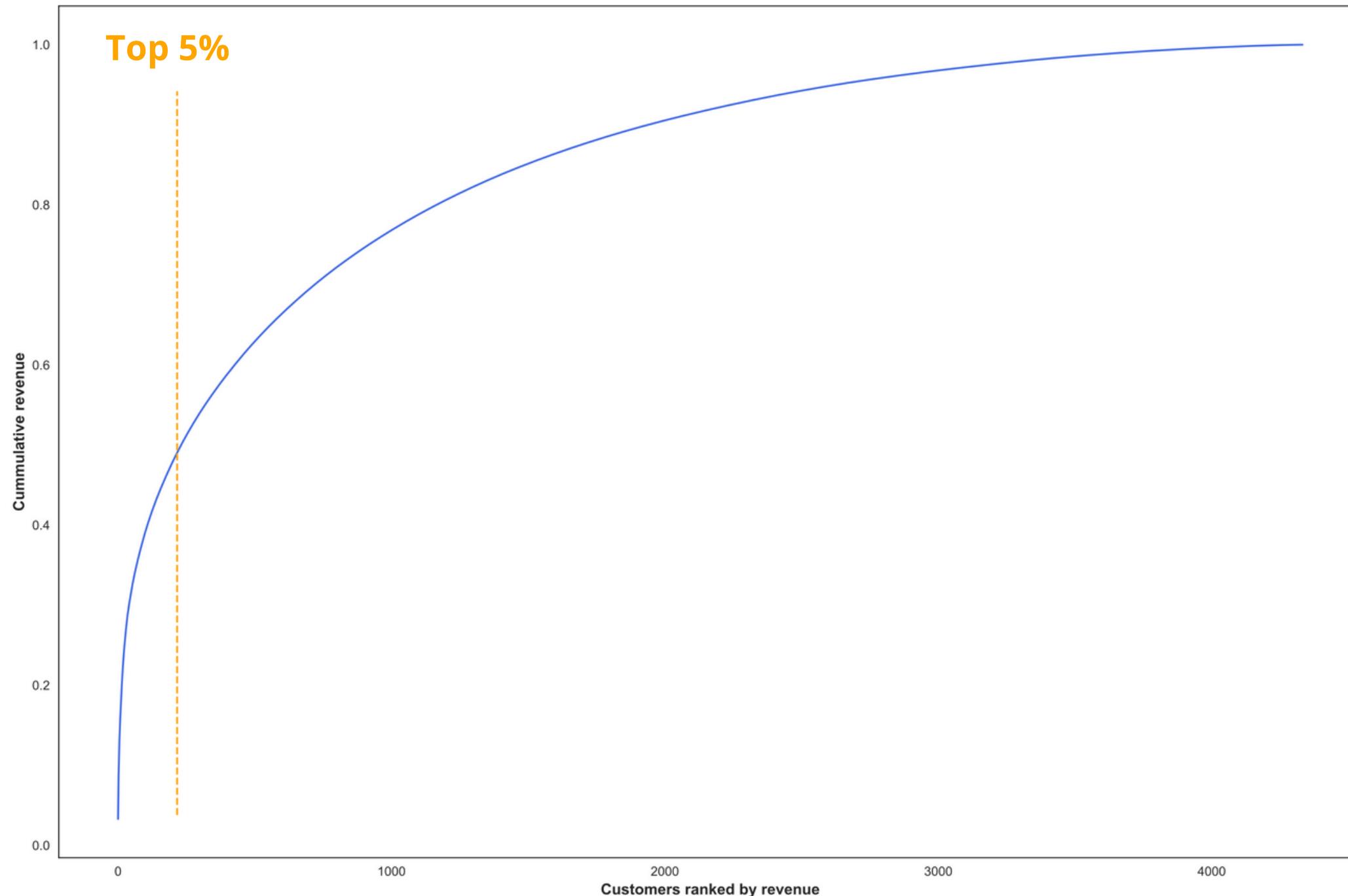


- **90% are UK residents**
- **UK customers account for 80% of total revenues**

# What are the most popular products?



# Cumulative revenue shares

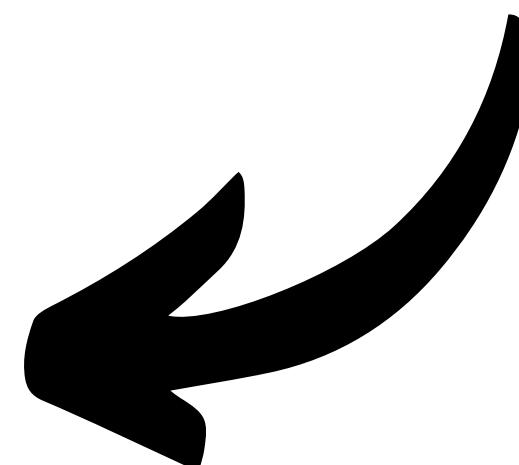
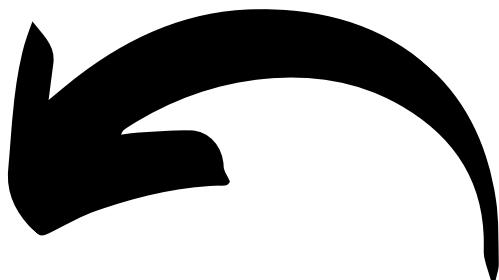
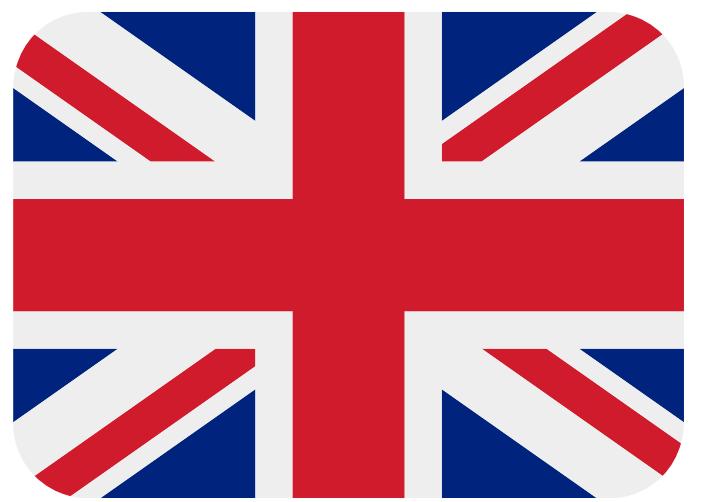


- **5% of the customers account for almost 50% of revenues**
- **20% of the customers account for 75% of total turnover**



# Recommender System

# Cold start problem



# Implicit recommender system

## Collaborative Filtering Recommendation System

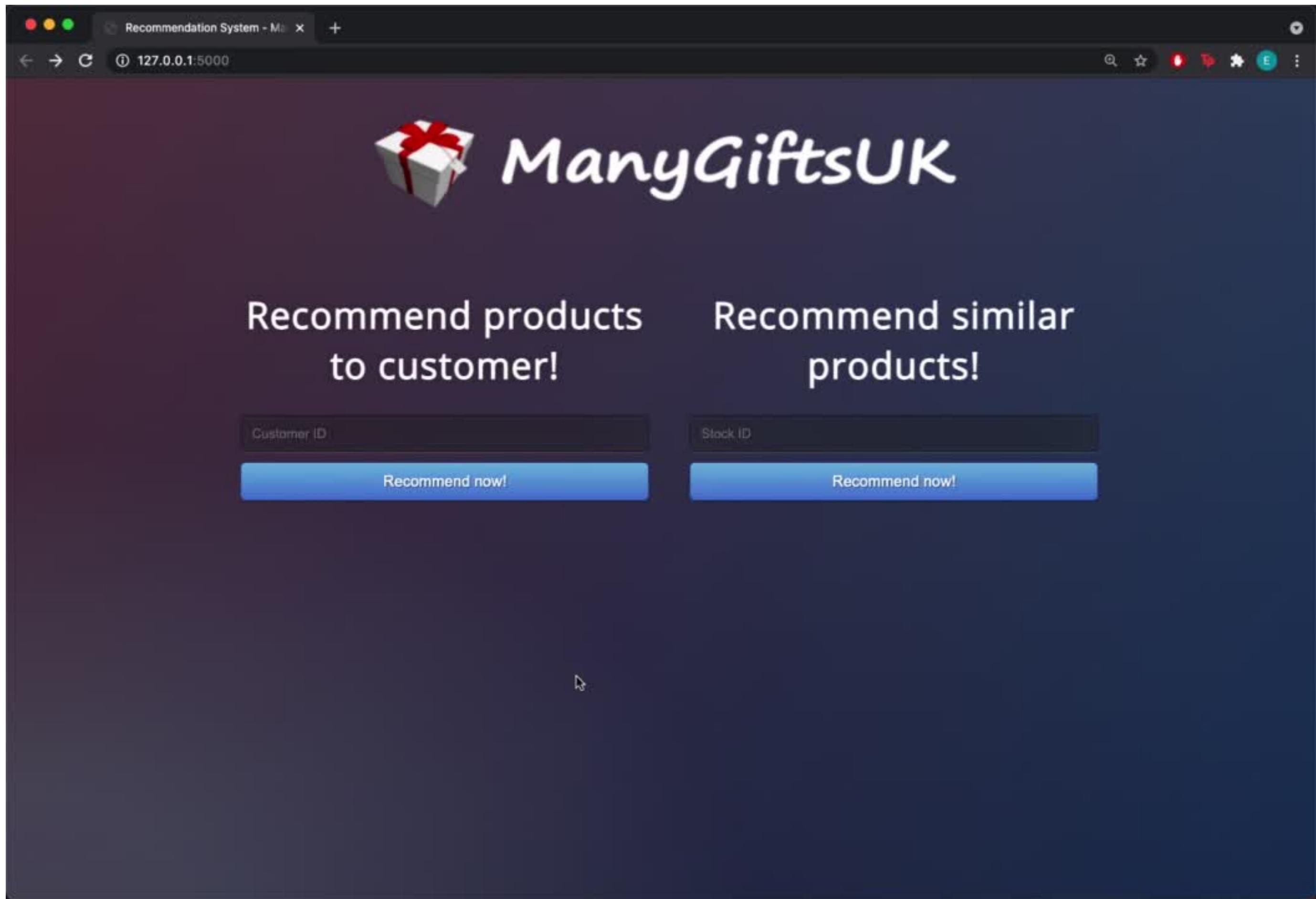
- Based on user's preferences
- Similarities between users based on their consumption behaviour



## Content-based Recommendation System

- Based on the attributes of the content
- Similarities between items







Thank you for  
listening!

For questions or concerns, contact us at  
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[Github Repository Group G](#)