Introduction

The purpose of this analysis is to gain insights from customer reviews and feedback to improve the customer experience and inform business decisions. By analyzing a dataset of customer reviews, we aim to understand customer sentiments, identify key topics, and uncover patterns in the feedback.

Dataset:

- We collected a dataset of customer reviews from a popular airline review website.

- The dataset consists of 3500+ reviews.

- The reviews cover a range of topics including flight experiences, customer service, amenities, and more.

Analysis Techniques:

- Sentiment Analysis: We used TextBlob library to determine the sentiment polarity of each review, allowing us to gauge the overall sentiment expressed.

- Topic Modeling: Employing Latent Dirichlet Allocation (LDA), we extracted key topics and the most important words associated with each topic.

- Word Clouds: Word clouds provide a visual representation of frequently mentioned words in the reviews, helping us identify common themes.

The insights derived from this analysis will assist British Airways in making data-driven decisions to enhance customer satisfaction, optimize services, and drive business growth.

Sentiment Analysis
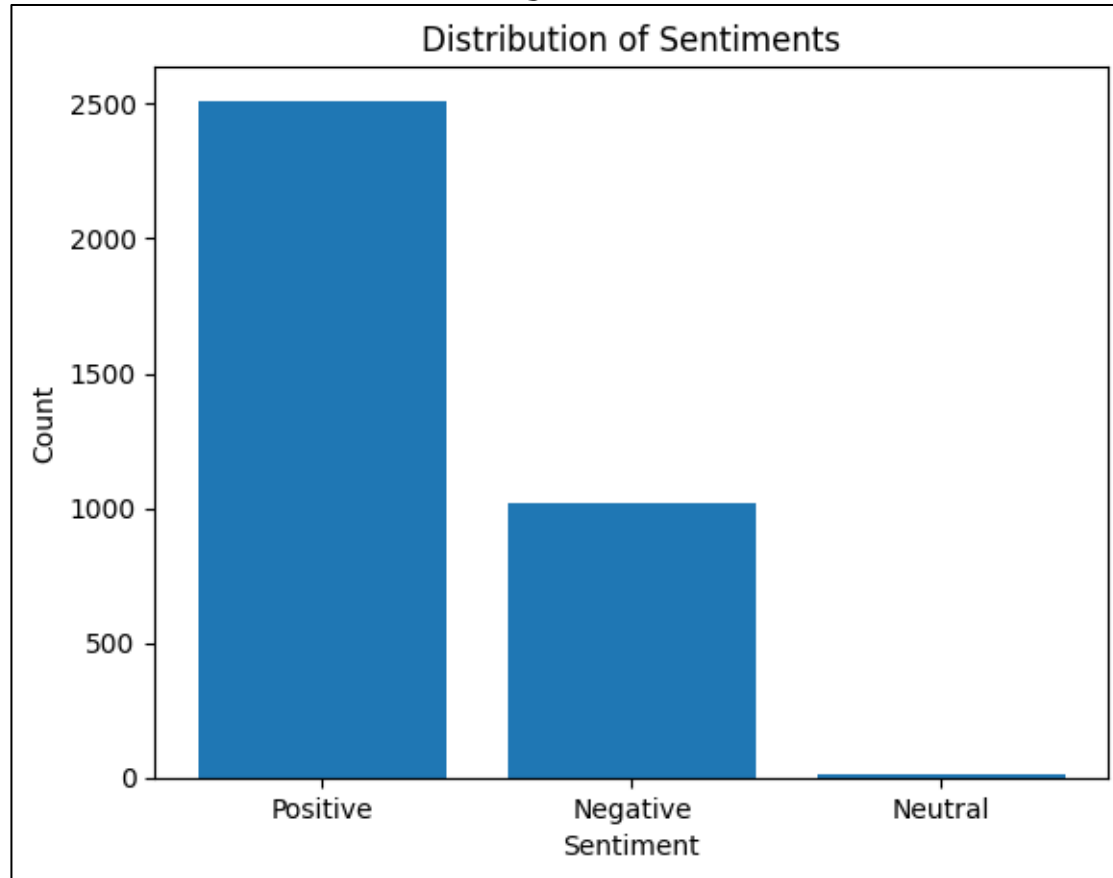
Distribution of Sentiments

Number of positive reviews: 2512
Number of negative reviews: 1018
Number of neutral reviews: 14

Sentiment Distribution
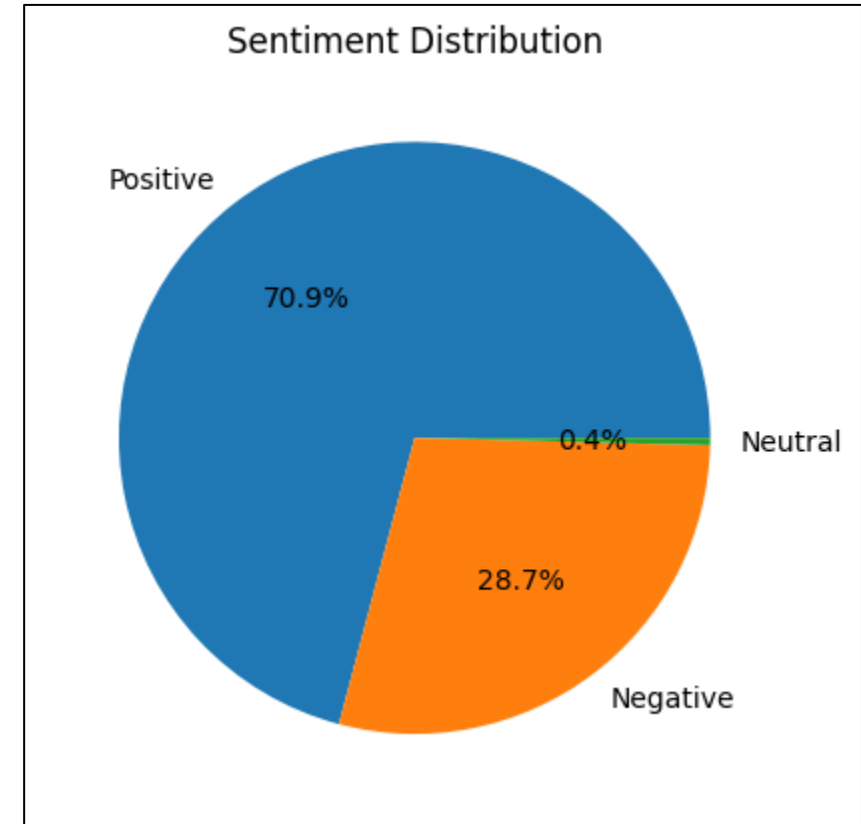
An Average Sentiment Polarity of 0.095 suggests that, on average, the sentiment expressed in the reviews is slightly positive.

Topic Modelling

- Topic 1: suitcase, thank, angeles, los, sydney, impressed, wonderful, missing, singapore, thanks
- Topic 2: flight, ba, airways, british, customer, told, london, hours, service, check
- Topic 3: amazing, fantastic, great, home, crew, week, welcome, service, fault, lovely
- Topic 4: flight, good, ba, food, seat, crew, cabin, service, class, seats
- Topic 5: lisbon, pillow, bring, idea, attendant, remote, lady, going, felt, terminal

Key Insights from each topic
- Topic 1: Travel Experience and Gratitude
- Topic 2: Customer Service and Flight Operations
- Topic 3: Positive Experience and Excellent Service
- Topic 4: Flight Comfort and Service Quality
- Topic 5: Lisbon Travel Experience

Word Cloud

Word Cloud - Positive Reviews

Word Cloud - Negative Reviews

Word Cloud

Word Cloud - All Reviews

Summary

The sentiment analysis revealed the following distribution:

- Number of positive reviews: 2512

- Number of negative reviews: 1018

- Number of neutral reviews: 14

- The average sentiment polarity of 0.095 indicates a slightly positive sentiment expressed in the reviews.

Key Insights:

1. Travel Experience and Gratitude:

   - Customers expressed appreciation for their travel experiences, with mentions of cities like Los Angeles, Sydney, and Singapore.

2. Customer Service and Flight Operations:

   - Discussions revolved around interactions with British Airways' customer service and flight operations.

3. Positive Experience and Excellent Service:

   - Customers shared positive experiences, praising the crew and service quality provided.

4. Flight Comfort and Service Quality:

   - Aspects related to flight comfort, including food, seats, and cabin, were highlighted in the reviews.

5. Lisbon Travel Experience:

   - Specific experiences related to traveling to or from Lisbon were discussed.

These insights provide valuable feedback for improving the customer experience and making informed business decisions.