



SKYTRAX



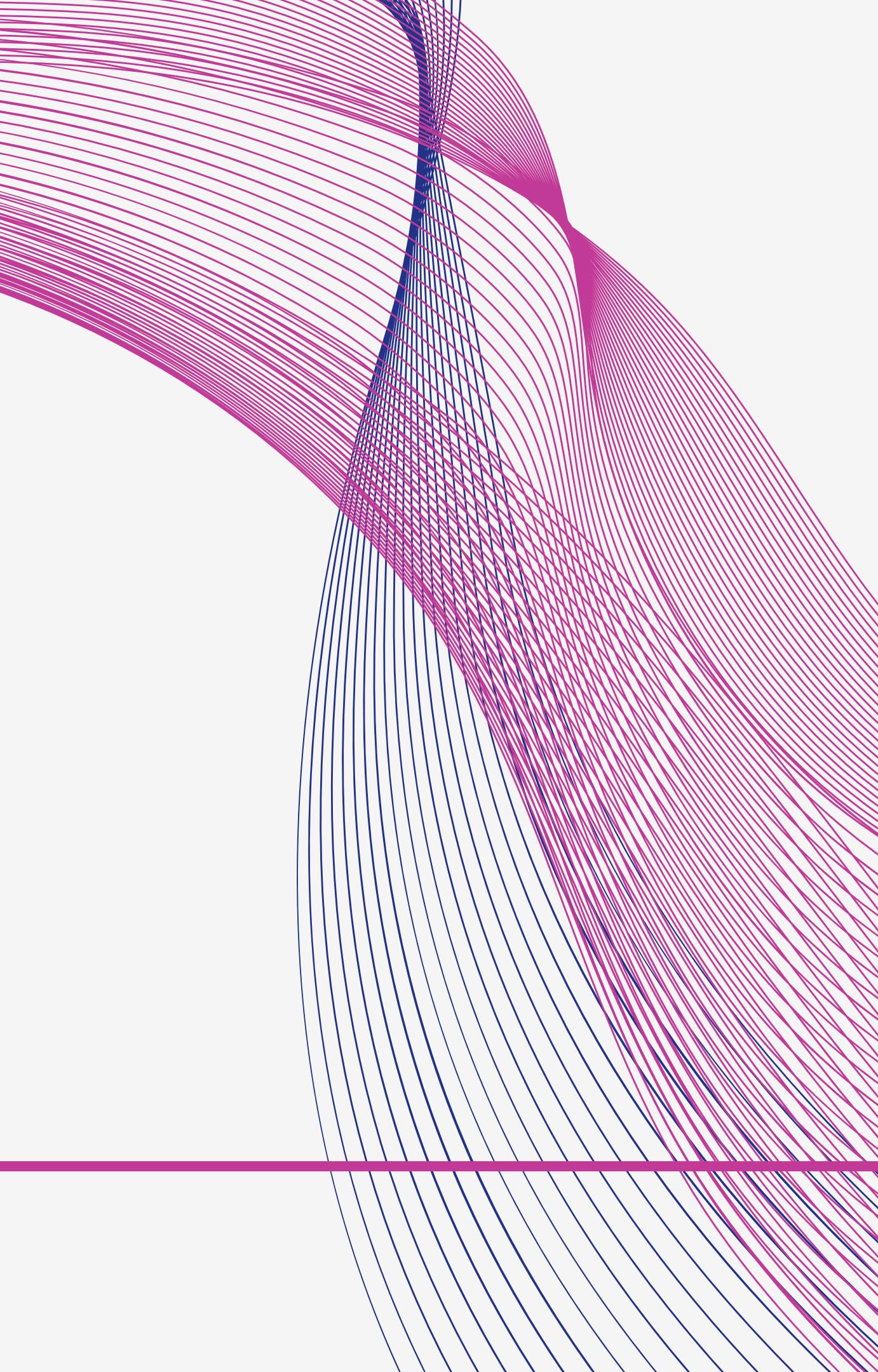
USER REVIEW

Airlines Review



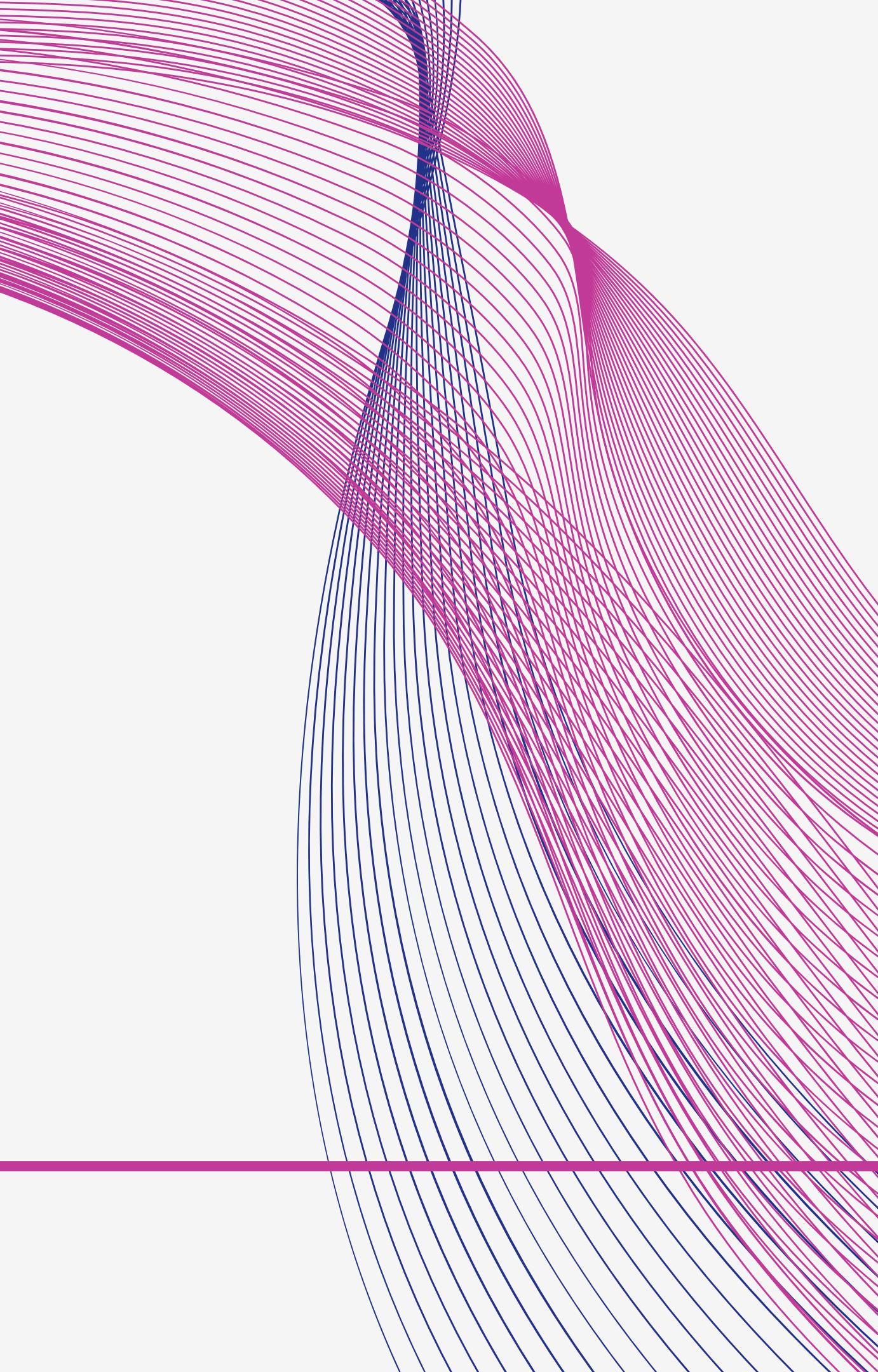
Meet THE TEAM





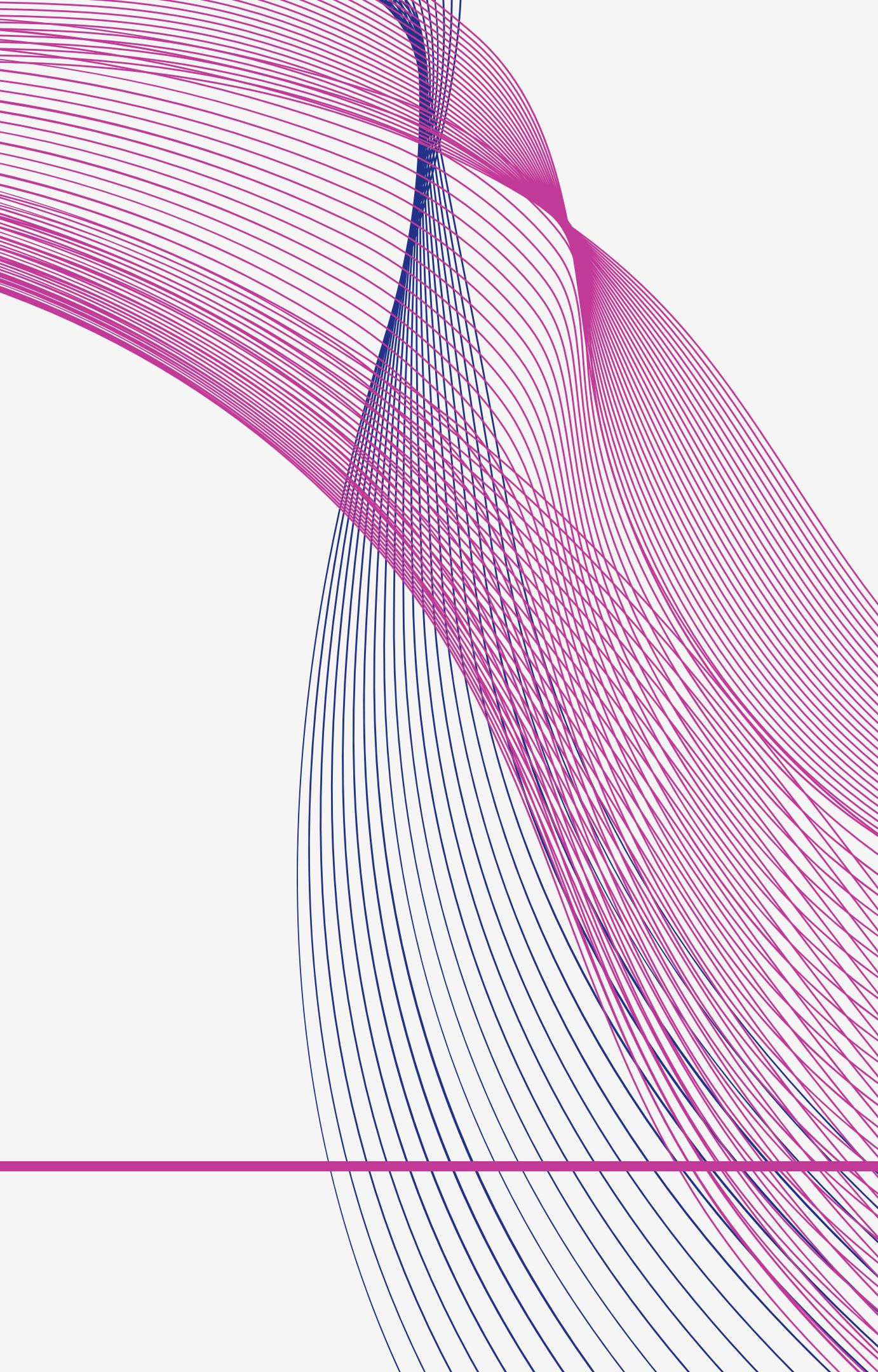
BUSINESS GOAL

Dedicated to improving Quality of
the customer experience for
airlines and airports across the
world, discover what we do.



BUSINESS PROBLEM

Skytrax User Review company has observed that certain airlines are consistently not recommended by their users, and we aim to investigate the underlying factors that contribute to this trend.



PROJECT GOAL

The goal of this project is to understand and investigate the reason why some airlines are not recommended.

Business UNDERSTANDING

Skytrax is a UK based consultancy that runs an airline and airport review and ranking site. Skytrax conducts research for commercial airlines as well as taking surveys from international travelers to rate airports, airlines, air lounges, seats, onboard catering, cabin staff and several other elements of air travel after a customer has directly used an airline.



DATA UNDERSTANDING

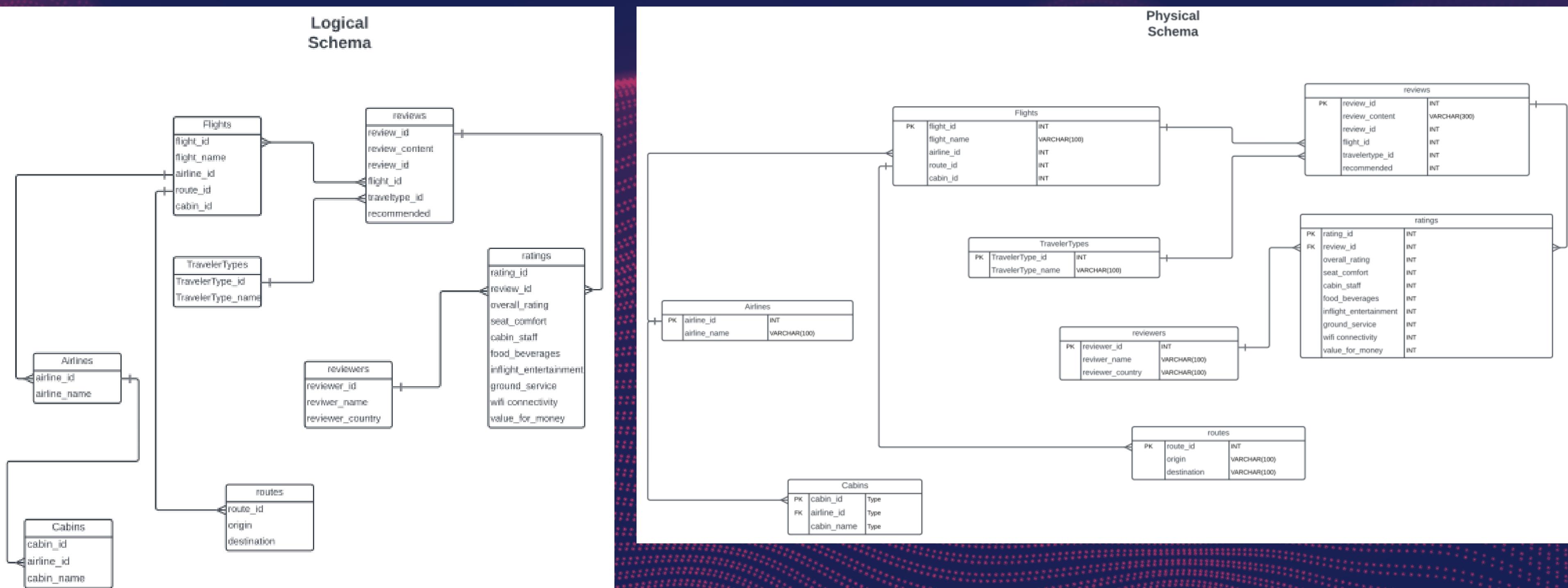
For this project, we will make use of airline reviews obtained from Skytrax Company website. The dataset contains a variety of information including overall rating, seat comfort rating, cabin staff rating among several other ratings.

Proposed OBJECTIVES

- **Objective 1**
Identify trends, patterns, and factors that contribute to airlines not being recommended by users.
- **Objective 2**
Gain insights into the characteristics and variables that might influence an airline's recommendation status.
- **Objective 3**
Come up with recommendations for the airlines

STEP 1;

We created the logical and physical schema to understand the relationship between tables



STEP 2: Creating a DataBase

```
3   require File.expand_path("../../config/environment", __FILE__)
4   # Prevent database truncation if the database needs
5   # abort("The Rails environment is running in production mode!
6   require 'spec_helper'
7   require 'rspec/rails'
8
9   require 'capybara/rspec'
10  require 'capybara/rails'
11
12  Capybara.javascript_driver = :webkit
13  Category.delete_all; Category.create
14  Shoulda::Matchers.configure do |config|
15    config.integrate do |with|
16      with.test_framework :rspec
17      with.library :rails
18    end
19  end
20
21  # Add additional requires below this line if you need them
22
23  # Requires supporting files within the same directory as
24  # this file if you want to avoid using the full
25  # spec/support/ and its subdirectories. If you do
26  # run as spec files by default. You can
27  # run twice. It is recommended that you do not
28  # end with _spec.rb. You can configure the
29  # action on the command line via the --require option
30  # action on the command line via the --require option
No results found for 'mongoid'
```

We created a data base
using mysql
to store the data from
airlines csv

STEP 3: Data preprocessing and cleaning

Data transformation;

- corrected data types
- corrected unordered columns
- fixed errors
- converted recommended from 0, 1 to no, yes
- Changed the ratings from numeric to alphabetical. 0 - “very poor”, 1- “poor” etc



366

Distinct airlines

22

% recommended

Airlines

53.3%

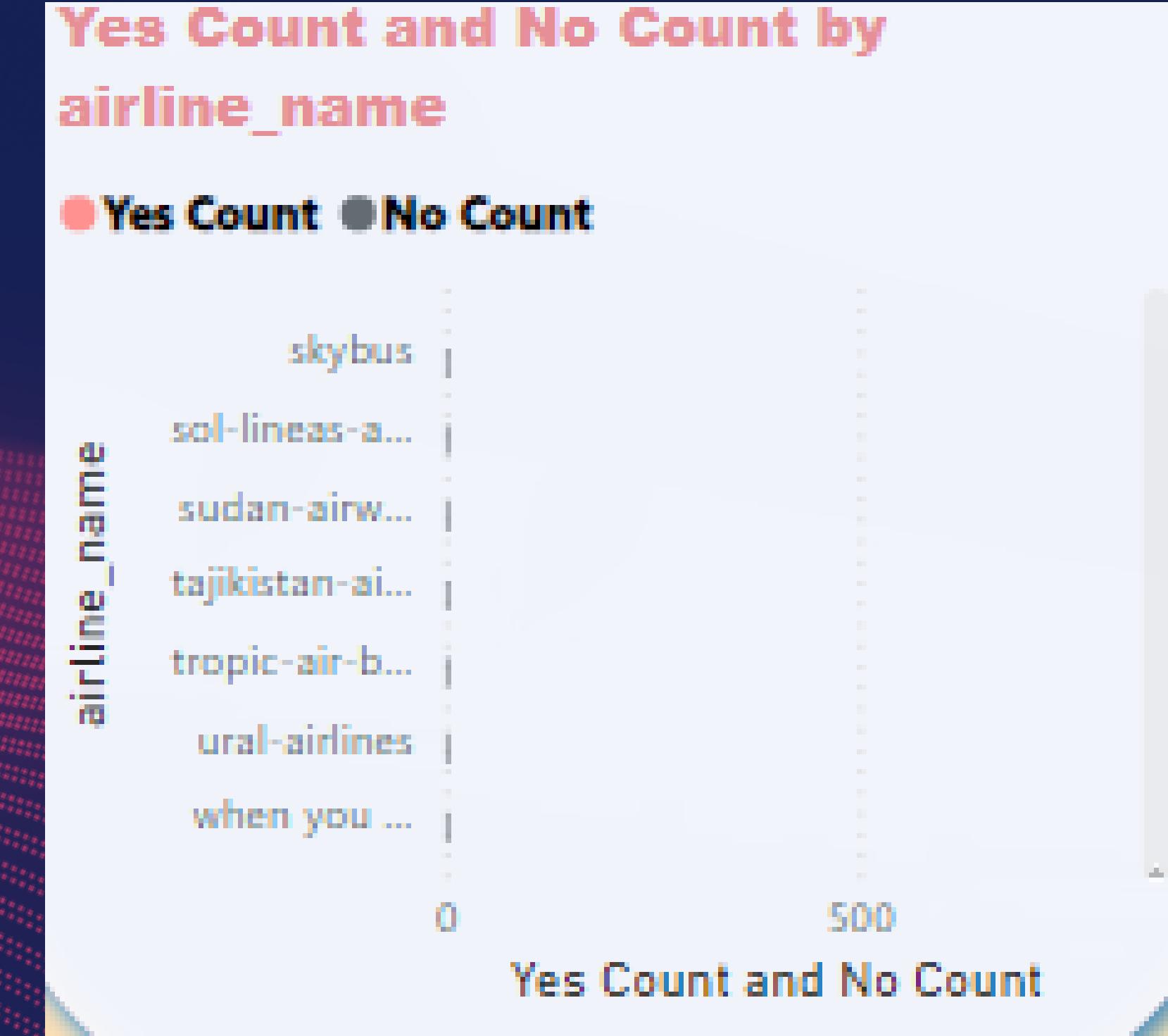
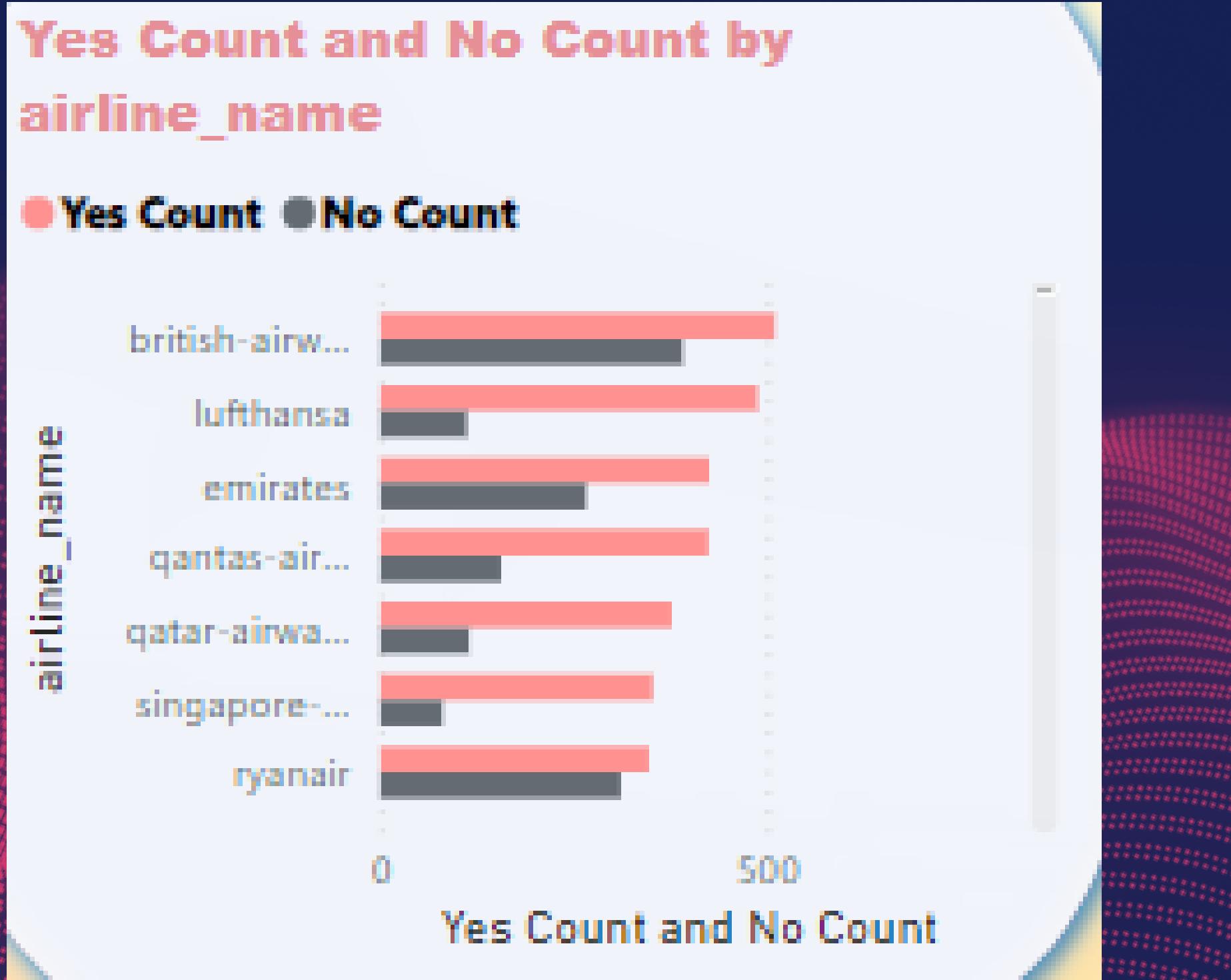
% Not

Recommended

46.7%

The dataset contains 366 distinct airlines and 53.3% of the airlines were recommended by their users and 46.7% were not recommended due to various reasons.

User recommendation according to Airlines

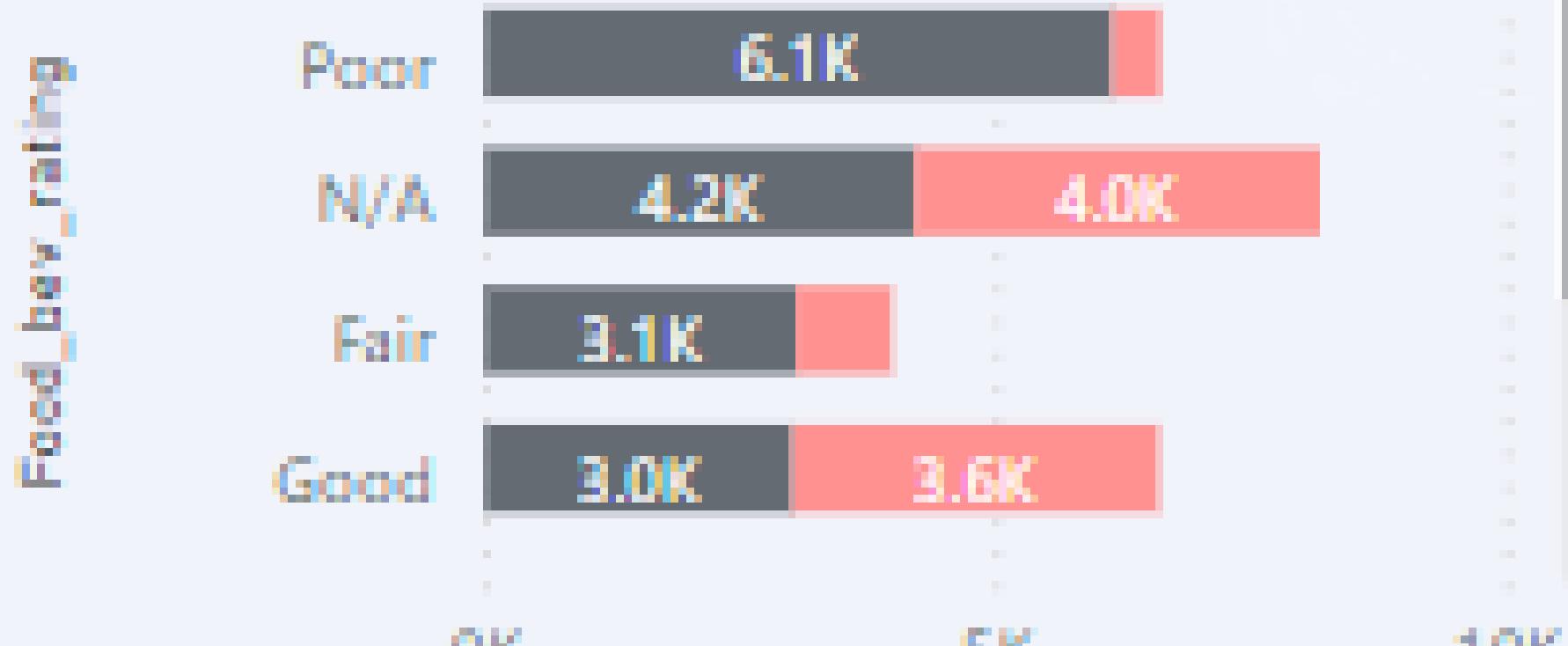


Clustered Bar chart of Airlines with
the number of recommendations
they received

User recommendation according to food-beverage rating

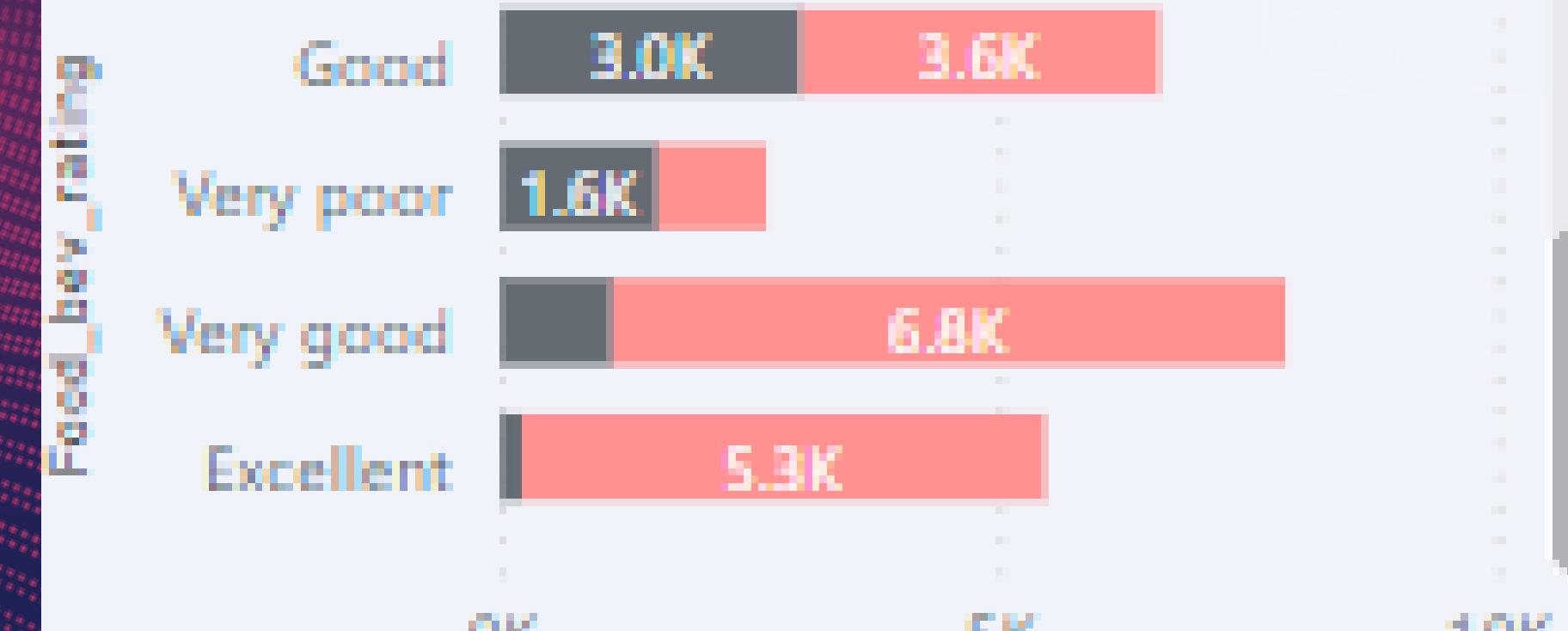
No Count and Yes Count by Food_bev_rating

● No Count ● Yes Count



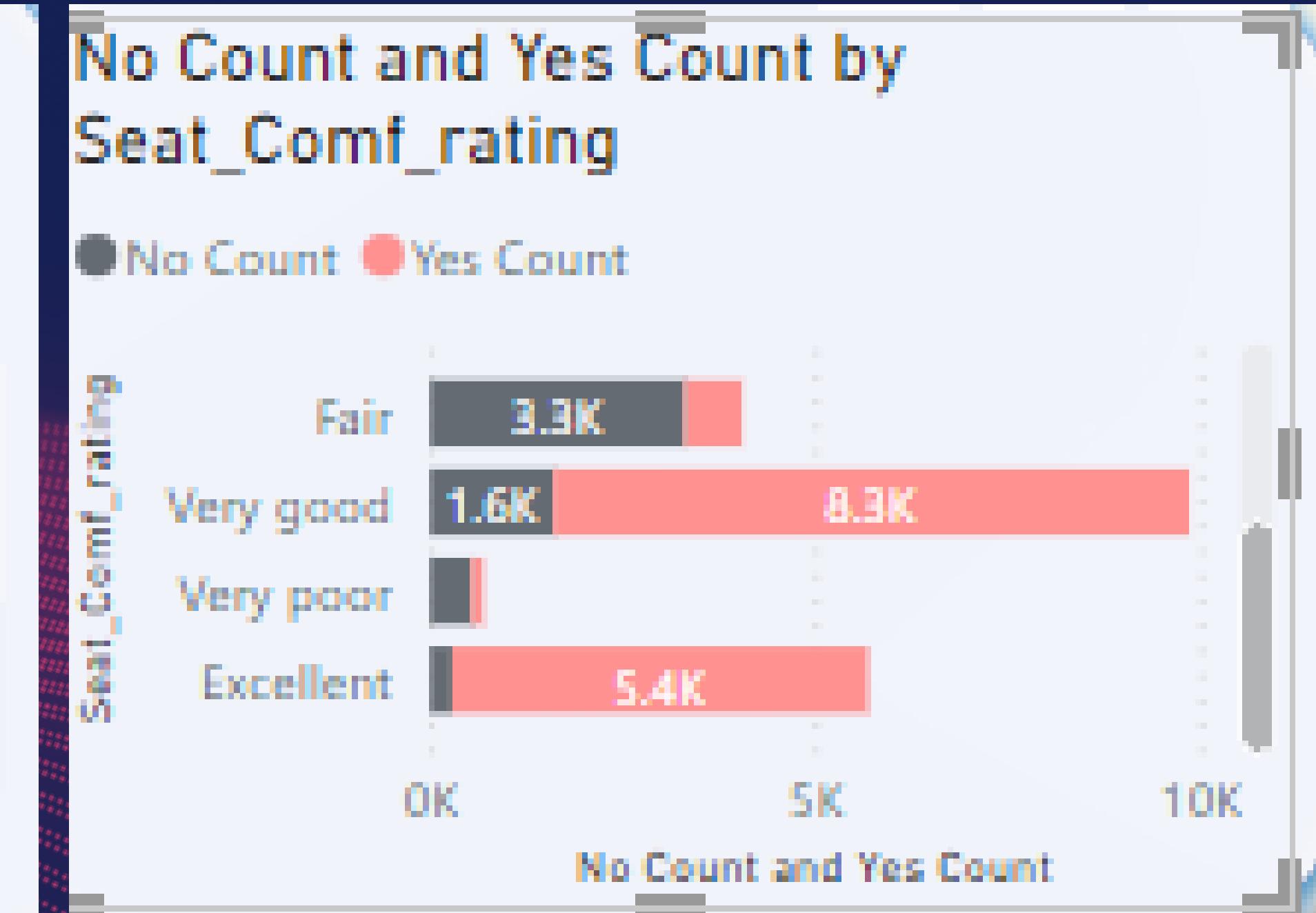
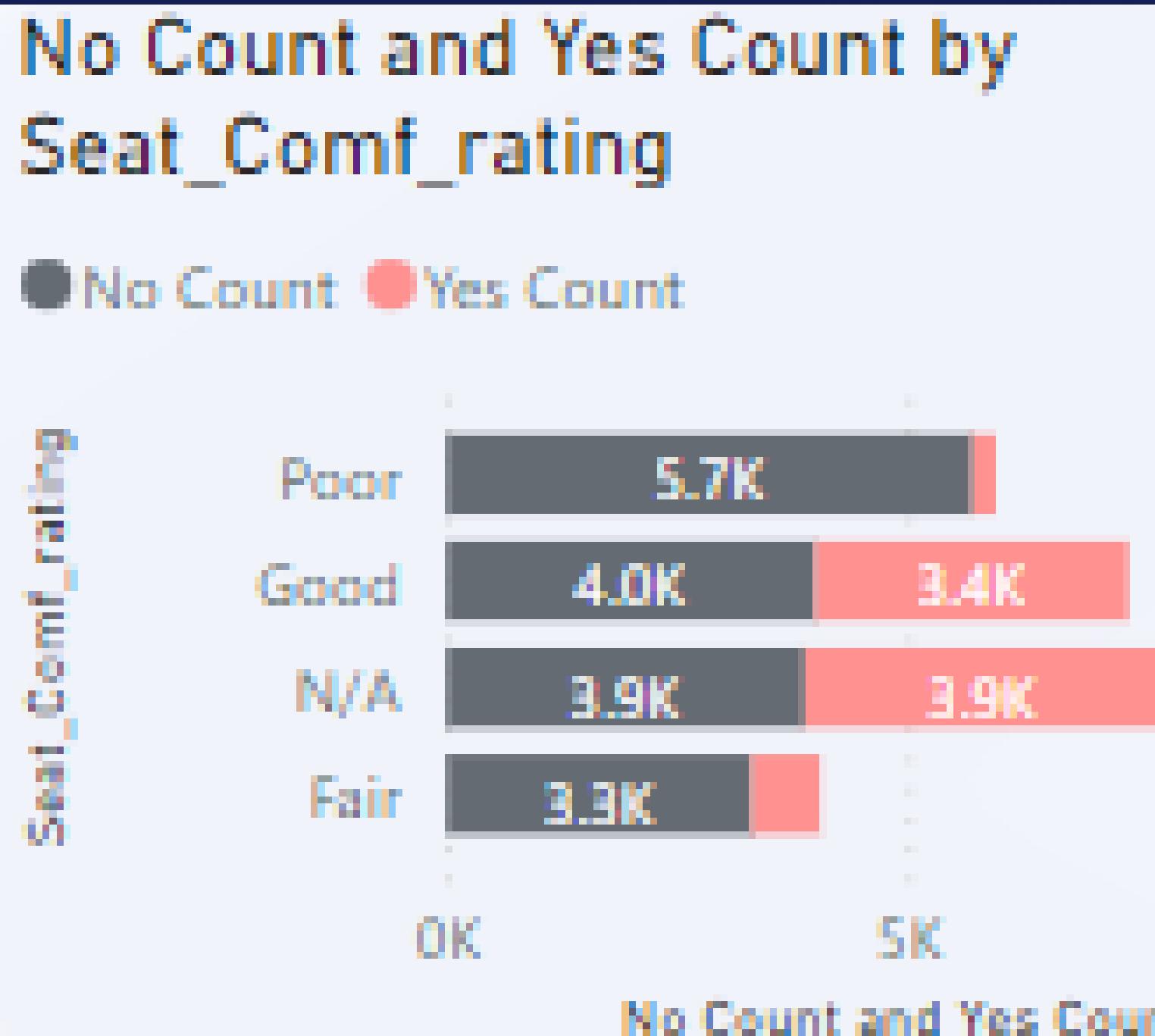
No Count and Yes Count by Food_bev_rating

● No Count ● Yes Count



Airlines with positive food_beverage rating were recommended by their users.

User recommendation according to seat comfort rating



User recommendation according to Inflight_Ent rating

No Count and Yes Count by Inflight_Ent_rating

No Count Yes Count

Poor 6K 1K

N/A 5K 5K

Very poor 2K 3K

Good 2K 3K

Fair 2K 1K

OK

10K

No Count and Yes Count

No Count and Yes Count by Inflight_Ent_rating

No Count Yes Count

Very poor 2K 3K

Good 2K 3K

Fair 2K 1K

Very good 1K 5K

Excellent 1K 4K

OK

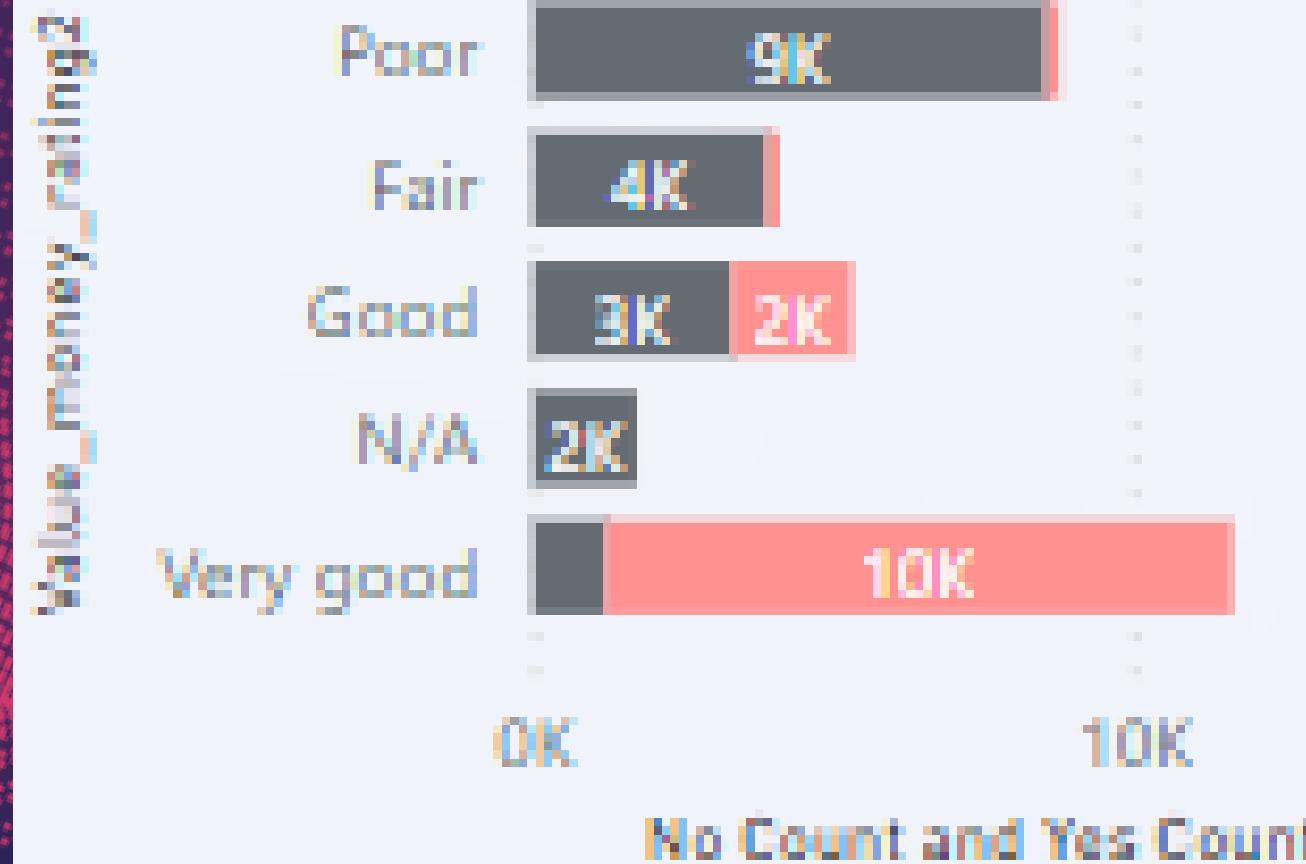
10K

No Count and Yes Count

User recommendation according to value for money

No Count and Yes Count by
Value_money_rating2

● No Count ● Yes Count



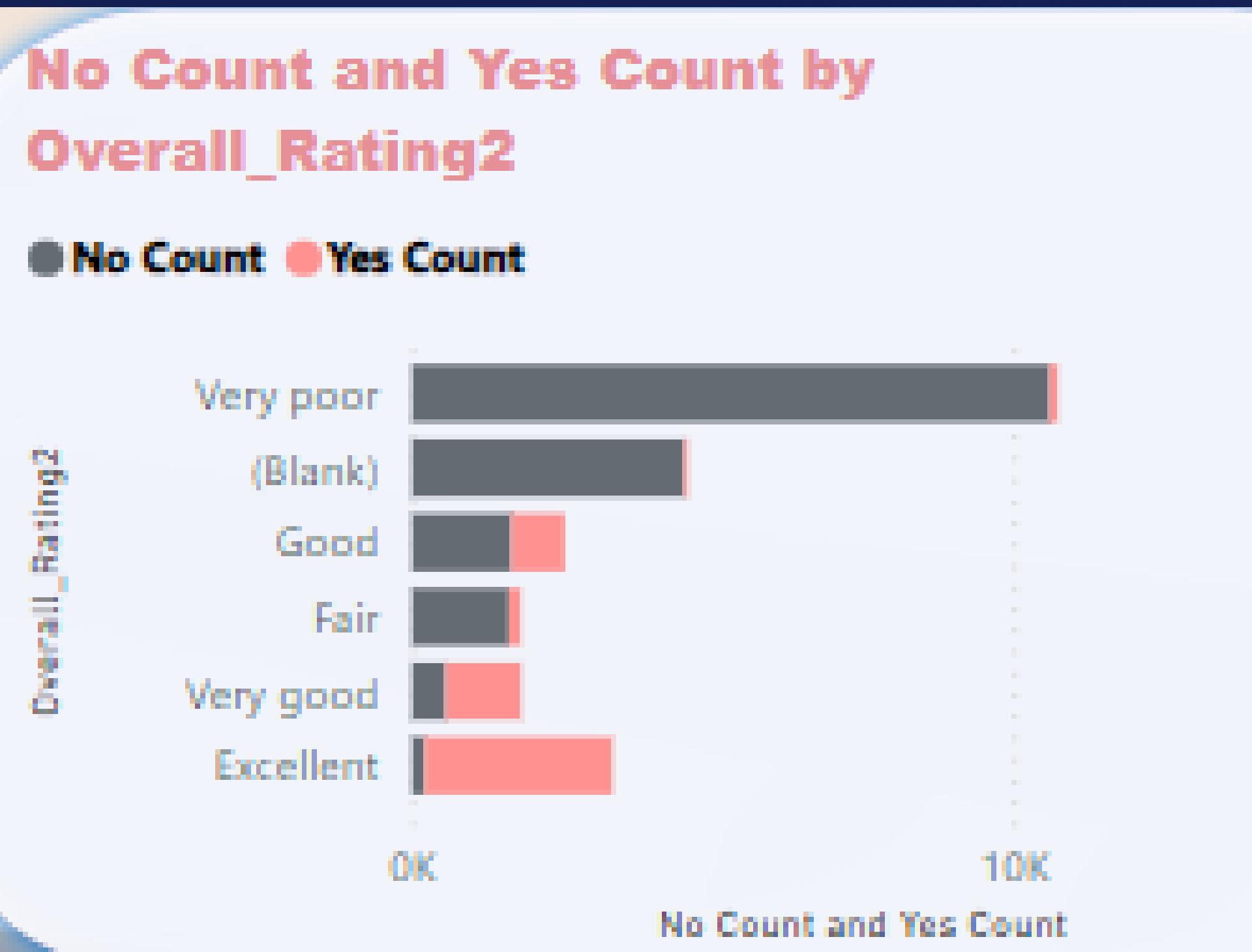
rating

No Count and Yes Count by
Value_money_rating2

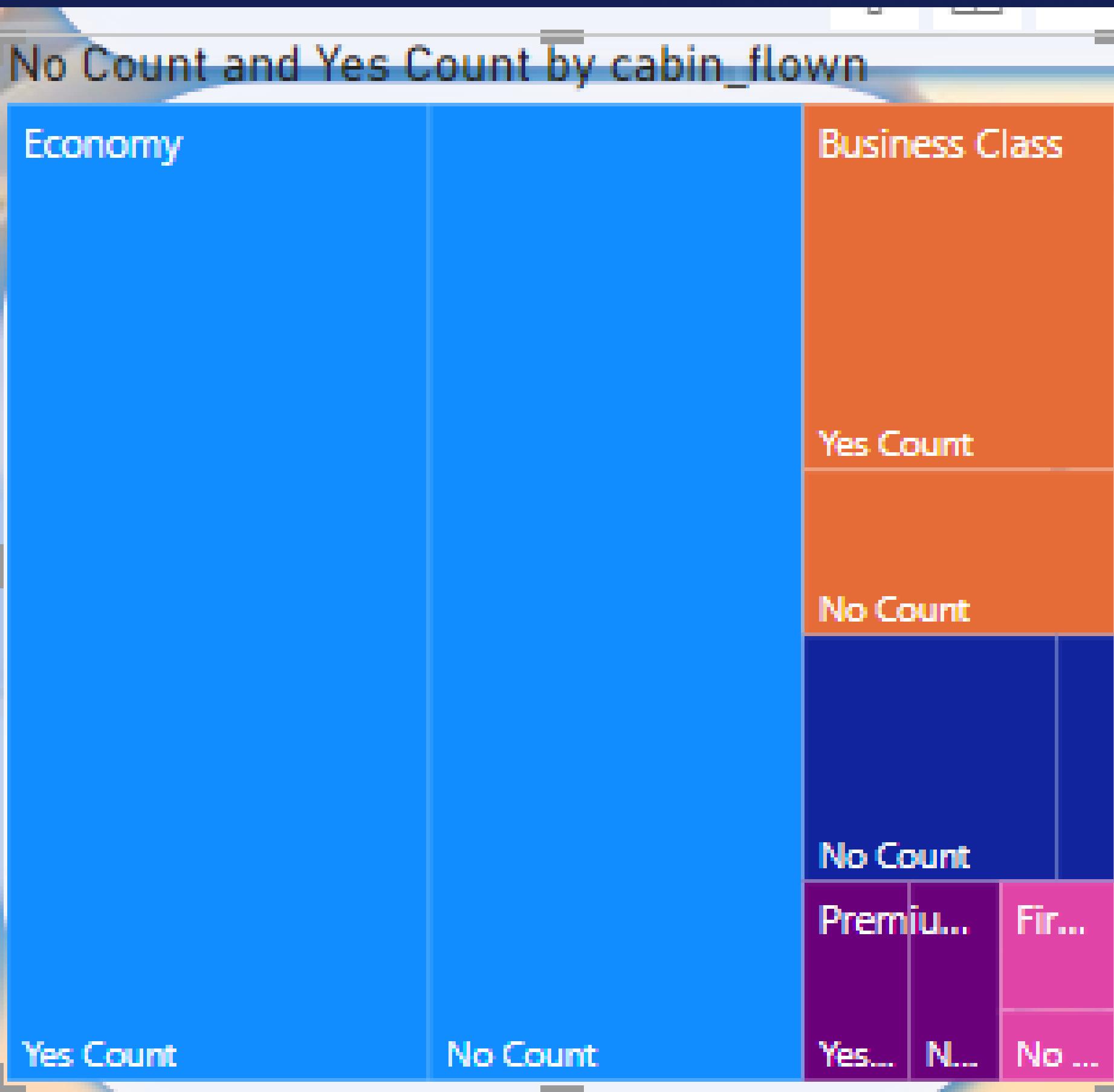
● No Count ● Yes Count



User recommendation according to overall Rating



User Recommendation by cabin flown

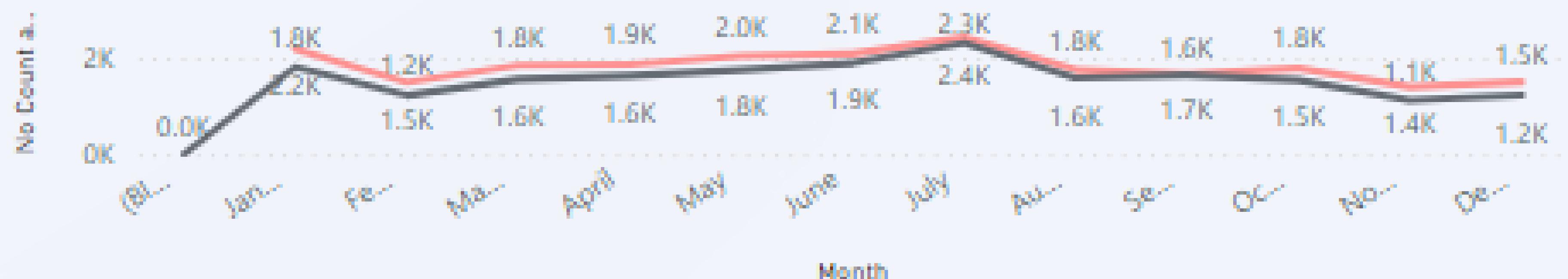


Economy class had the most users

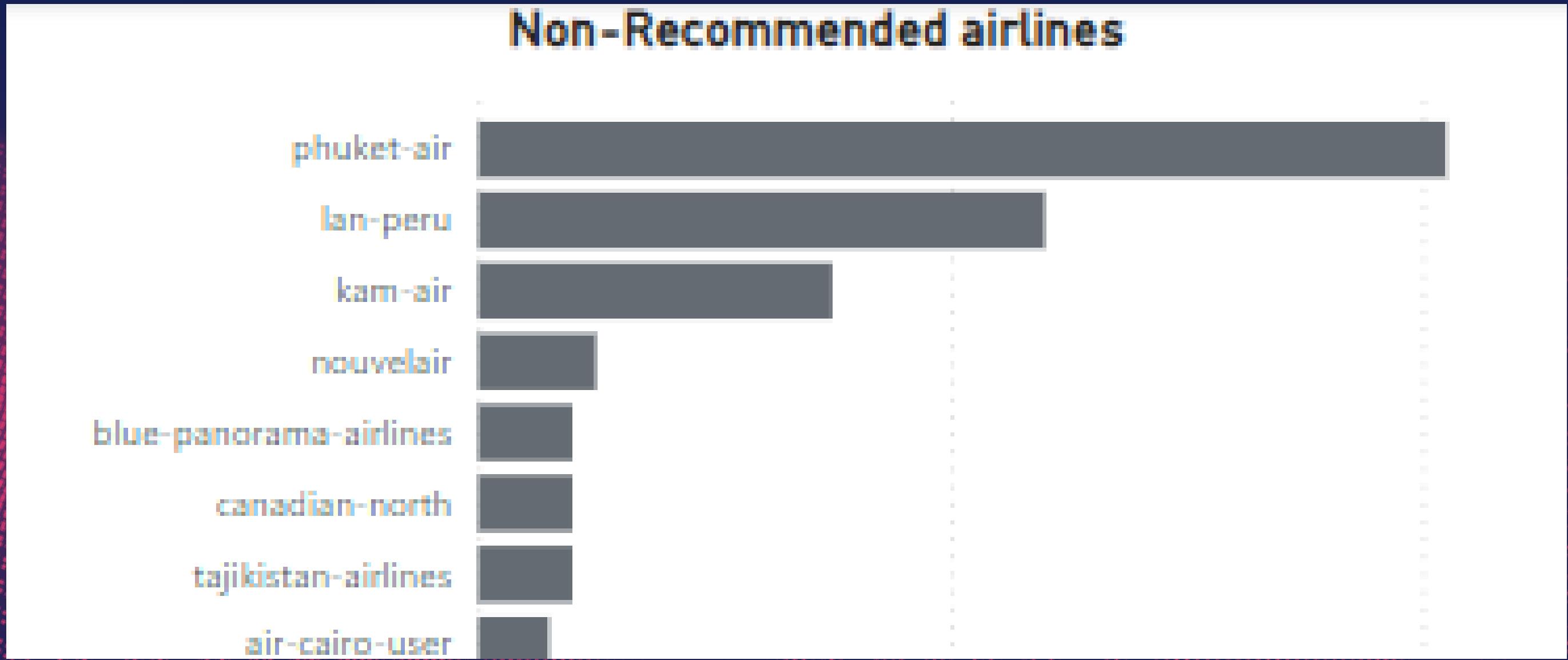
Time analysis of User recommendations by month

No Count and Yes Count by Month

● No Count ● Yes Count



Airlines with the highest non-recommendation



Airlines with the highest recommendation





TRENDS

The higher the rating of a particular feature, the more likely it is for the airline to be recommended.

The higher the cabin flown rank, the higher the recommendation.

INSIGHTS

All ratings play a significant role in influencing a customer's decision to recommend an airline or not.

Features rated 'Excellent' and 'Very good' have noticeably more people recommending the airline.

Features rated 'Very poor', 'poor' and 'Fair' have noticeably more users not recommending the airline.



RECOMMENDATIONS

Airlines can improve their ratings and enhance customer satisfaction by focusing on;

- Seat comfort of their airlines - Invest in comfortable seating with sufficient legroom.
- cabin staff - Train and empower staff to provide excellent customer service
- food and beverages offered in their airline
- Inflight Entertainment - Find out what's new and currently trending
- Value for money - Offer deals to customers



CONCLUSION

Low ratings and negative reviews can significantly diminish the likelihood of passengers recommending an airline to others.

Positive ratings and recommendations can significantly influence a customer's decisions, while negative feedback can deter potential customers. To enhance their ratings and customer satisfaction, airlines should prioritize various aspects of the passenger experience, including service quality, comfort, in-flight amenities and more.

WHAT NEXT?

The next step for our project is to perform sentiment analysis on the reviewer's content to determine the positive and negative sentiments.