Airline Customer Ratings

Interactive Visualisation Application

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Goal

Analyze airline ratings

- to uncover trends in **passenger satisfaction** and
- enable **benchamarking with other airlines**.

Intended users:

- Airline companies; seeking to improve customer experience and perform benchmarking with other airlines
- Travelers; looking for insight into airline quality

Data Structure

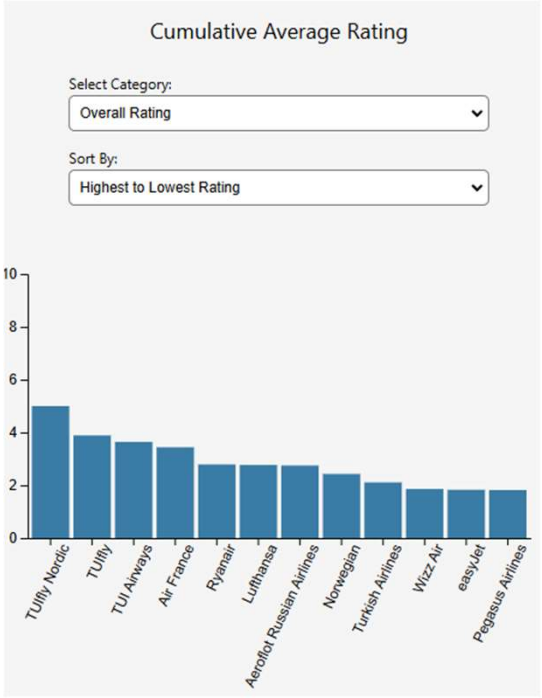
- Data extracted from **Kaggle** (airlinequality.com)
- Initially much larger set of airlines exceeding the AS index restrictions
  - Currently: 1010 tuples x 16 dimensions = **16160 AS**
  - Contains data only for the 10 biggest airlines in Europe and data from 2015=<
- The data set consists of the following **attributes**:
  - ID, Airline Name,
  - Overall Rating,
  - Review Date, Date Flown,
  - Seat Comfort, Cabin Staff Service, Food & Beverages, Ground Service, Inflight Entertainment, Wifi & Connectivity, Value For Money, and
  - Recommendation Status, Verified, Type of Traveller, Seat Type

Chosen Visualisations

- Barchart
- Linechart
- Heatmap

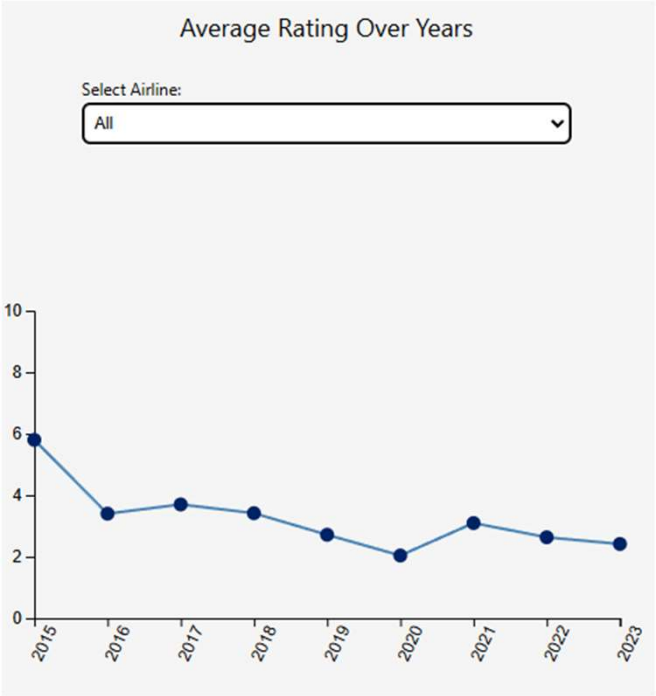
Barchart

- Displays category-wise ratings, allowing users to compare airlines based on specific criteria
- multiple categorical rating attributes exist in the data set → makes a comparative bar chart the best approach to visualize them



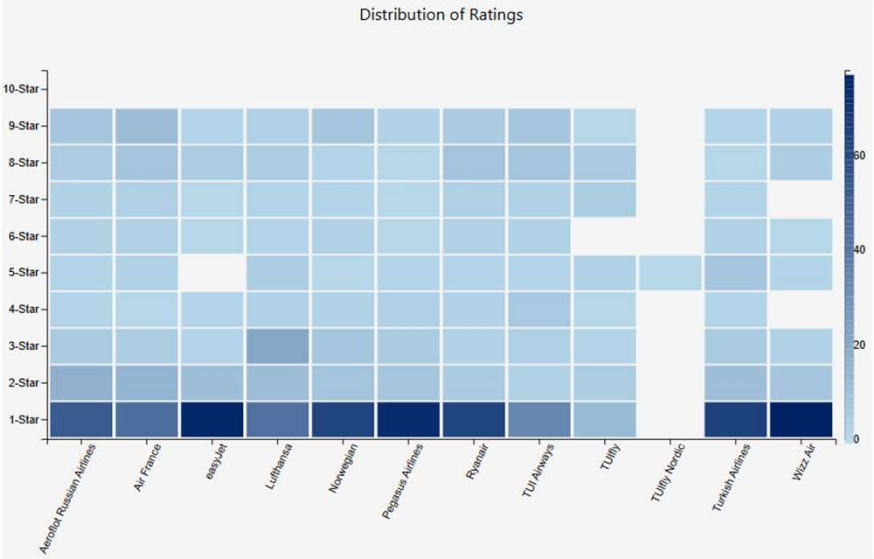
Linechart

- Tracks changes in average ratings over time, enabling users to identify trends and performance improvements
- data set includes both a review date and a flight date, it allows for temporal analysis → making a line chart a logical choice



Heatmap

- Shows the distribution of ratings, highlighting common rating patterns and outliers
- Implements PCA – dimensionality reduction
- data set contains multiple rating dimensions → explore how frequently certain scores appear



TOP 10 Airlines - Customer Ratings

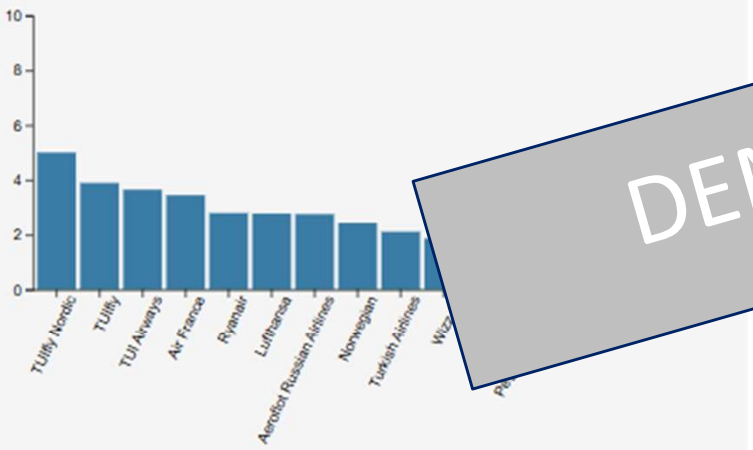
Cumulative Average Rating

Select Category:

Overall Rating

Sort By:

Highest to Lowest Rating

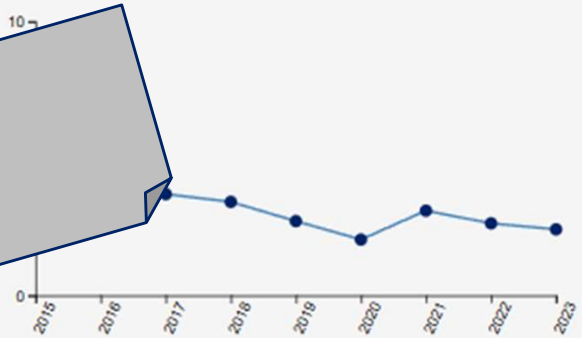
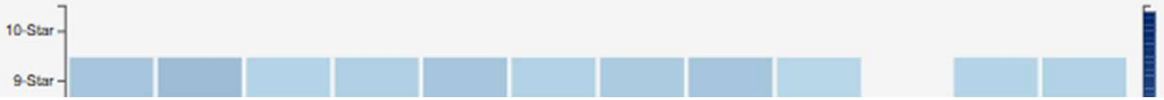


DEMO

Average Rating Over Years

Select Airline:

All



Distribution of Ratings