

Tableau Data Analytics Full Description

This short project is meant to explore and expand my knowledge of Tableau. I have other projects that involve Tableau, however, this focuses solely on Tableau rather than using it in conjunction with other tools. This short project is based on a tutorial by creator Mo Chen. Please see the references section at the end of this document for details.

The data in this short project consists of user reviews from various countries. There are several categories in which customers have given a rating including overall rating, cabin staff service, entertainment, ground service, and seat comfort. There are also different traveler types, seat types and aircrafts. The goal of this project will be to create an interactive dashboard with clear visuals.

Steps:

1. The first step is to import the data. There are two csv files and using tableau connectivity features they can be connected through the country column.
2. After importing and connecting the data sources, the first visual to create is the map.
 - a. To begin a metric is created for the type of rating. This will be used as a filter so that when a certain metric is chosen the map, and later the other visuals, will only show data based on the chosen metric. This can be created by creating a metric with a list of values and then using case statements for the logic for filtering based on which metric is selected from the list.
 - b. After the metric is created, other filters are added including a filter for traveler type, seat type, month of date, continent and aircraft.
3. The second visual is a summary header of the average ratings-that will display at the top of the dashboard. To accomplish this the measure names are inserted into the columns section of the worksheet. This way each metric in our list appears on the header. After this some style editing is done to make the the numbers appear clearer.
4. The third visual to be created is a line chart that shows the average ratings per month, based on the chosen metric. This will show the change in average ratings over time. To accomplish this Date dragged to the column section and the average metric selected is dragged to the rows section.
5. The final visual to create before creating the dashboard will be a horizontal bar chart that shows the top aircraft types and their average ratings.
 - a. Firstly, the aircrafts must be limited to only the top 9. Then the rest can be grouped together as an 'other column.'
 - b. Then the aircraft group can be inserted into the rows section while the average metric selected and the count of reviews can be inserted into the

column section. This will have two horizontal bar charts that show the average for the metric selected for each aircraft as well as the number of reviews for each aircraft.

6. The final step is to create the dashboard. To do this each visual can be dragged into the dashboard area and edited in the layout section to appear where needed. A title can also be added. After some arranging, editing of styles, and testing of the filters the dashboard is complete.

Challenges:

- Tableau's workspace is dynamic and offers a many easy to use features. However, I felt that the workspaces were a bit slow when trying to build the visuals and the dashboards. I am not sure if this was a tableau problem or a connectivity problem on my end but this caused the project to stall somewhat.

References:

- This project was based on a YouTube tutorial by Mo Chen, below is the link to the video:
- <https://www.youtube.com/watch?v=KlAKAarflRQ&t=1658s>
 - Mo Chen's YouTube Channel
 - <https://www.youtube.com/@mo-chen>
 - Original project files:
 - <https://github.com/mochen862/tableau-end-to-end-portfolio-project>