

WORKSHOP 032

[Tableau]

Flying High Airlines

Difficulty Level: 3 of 3

Disclaimer: Dataset was designed for educational purposes. Any reference to real facts or real events is purely coincidental.

You are part of a research team working for the inflight magazine for Flying High Airlines, who asked for interesting insights relating to flight delays and cancellations for their cover article in the next edition. Your role in the team is to derive insights through creating visualisations relating the cancellations and delays of domestic commercial flights during 2015, from the files supplied.

Your team leader has asked you to not only come up with interesting insights on which the content of the article can be based, but also visualisations which are of front page quality. He has asked you to get started immediately with the following:

1. Highlight which destination airports experience the biggest delays due to air system malfunction, as this could be an indication of poor maintenance of these systems. Display the results using a map chart.
2. Create a visualisation which will determine which days during the year has the worst weather delays. Show this using a calendar heatmap (3 x 4 month matrix), for which you might need to use Level of Detail (LOD) calculations.
3. Using a time series scatter plot, visualise the different types of delays which are experienced (Air System, Airline, Late Aircraft, Security, Weather) to be able to comment on the average delay time as well as the frequency of the delays.
4. There was also a last minute request from one of your team members to build a visualisation to help them with their part of the research. They requested that you develop a visualisation in Tableau where they can select different combinations of origin and destination airports to be able to see which airline to choose in order to minimise arrival delays (show it by the different types of delays).

5. Visualise all possible flight routes into a specific destination airports highlighting the ones with the largest overall delay. It needs to be built in such a way that the head researcher is able to select any destination airport at random and have the results displayed correctly. Here he wants you to use a destination map to make the visualisation ready for use on the front cover of the magazine.

Remember, you need to provide interactivity on every chart. The best way to test this is to view your visualisation in Presentation Mode. Best of luck!