

Project 4. Build Data Dashboard (Flight Delays and Cancellations)

i. Insight 1:

Summary:

- By looking at the map, we can see the airports which has a long total delay time (Total delay time = Arrival delay + Departure Delay) based on the size of marks.
- The following airports: Chicago O'Hare airport, Atlanta Hartsfield-Jackson airport, Dallas fort/Worth airport and Los Angeles airport, have the highest flights delay time.
- The Bar Chart also illustrates the airports flights total delay time in minutes.

Design:

I chose map and to illustrates the airports' location, and the marks size indicates the long delay time. In addition, a Bar Chart that illustrates the same information to directly see the delay time in minutes. I used blue as it is a colorblind friendly color.

Link:

https://public.tableau.com/views/AirportsDelayTime/AirportstotalDelaystime?:language=en-US&:display_count=n&:origin=viz_share_link

ii. Insight 2:

Summary:

- This is a visualization of the US flight's time delay reasons, and time is measured by the average of delay minutes.
- By looking at the chart, we can see the main reason for the delayed flights is Late Aircraft, with average of 24 minutes.

Design:

For this insight I chose Bar Chart, as it shows the results in a clear and simple way, and used blue as it is a colorblind friendly color.

Link:

https://public.tableau.com/views/FlightsDelayReasons_16863027993210/AvgMinofdelaysreasons?:language=en-US&:display_count=n&:origin=viz_share_link

iii. Insight 3:

Summary:

- The Bar Chart illustrates the number of cancelled flights for US Airlines.
- We can see that Southwest Airlines, Atlantic Airlines and American Eagle Airlines have the highest number of cancelled flights.

- Atlantic Airlines and American Eagle Airlines are ranking second and third for number of cancelled flights, yet when we hover on their bars, they do not have the highest number of flights in comparing to the other airlines with lower cancelled flights.
- The area chart shows the average minutes of delayed flights reasons through months, it changes depending on what airline bar we chose, which help to understand what the reason for the cancelled flights could be, the cause of the flights delay time is and at which month the delay peaks.

Design:

I chose bar chart to show the cancelled flights for simple view. I chose the area chart as it visualizes the delayed time for each reason per month clearly and used blue as it is a colorblind friendly color.

Link:

https://public.tableau.com/views/CancelledFlights_16863007011720/TopAirlinesCancelledFlights?:language=en-US&:display_count=n&:origin=viz_share_link

Resources:

1. Udacity Marketing Analysis Nanodegree, [Creating visualizations in Tableau](#).
2. Udacity Lesson [Cheat Sheet](#),
3. Project Walkthrough [Video](#)
4. [Tableau Community](#).