



---

# PROJECT 4

---



February 21, 2021  
Futuer seekers – business analytics  
Ali Ibrahim Alqahtani

## INSIGHT 1

[https://public.tableau.com/trusted/cVN\\_nugfSteLFFYvuca8KA==:gkyRuWScp25t3-BV-dHtiHJd?:redirUrl=%2Fprofile%2Fapi%2Fpublish%2FBook1\\_16137020717160%2FUSACancelledFlightmap](https://public.tableau.com/trusted/cVN_nugfSteLFFYvuca8KA==:gkyRuWScp25t3-BV-dHtiHJd?:redirUrl=%2Fprofile%2Fapi%2Fpublish%2FBook1_16137020717160%2FUSACancelledFlightmap)

A map is best suited here as I had to plot state-wise flight cancellations which involves geographical data. I used a sequential blue color wherein the darker the blue color, more is the number of flight cancellations. This type of coloring makes it easier to quickly spot which states have high/low cancellations. We can see from the map where the most cancellation occur, It appears that most cancellations in Texas (668) and Illinois (563). I added Airline filter so that readers can dig which flight cancellation count in each airline name and month filter to have the highest and lowest cancellations in each or a range of the months.

## INSIGHT2

[https://public.tableau.com/profile/ali5510#!/vizhome/Book1\\_16137020717160/CancellationReasonsPie?publish=yes](https://public.tableau.com/profile/ali5510#!/vizhome/Book1_16137020717160/CancellationReasonsPie?publish=yes)

I used a pie chart plot you can see how total cancellation reason organized in the chart. I used color-blind to represent each reason. First, the weather reason with the color dark gray has more than half the pie chart with (2,397) cancelled flight. Second, I chose the orange color that represent the Airline/Carrier that has (1,260). Third, is the fewest flight reason National Air System with the color light gray is (776).

## INSIGHT3

[https://public.tableau.com/profile/ali5510#!/vizhome/Book1\\_16137020717160/CancelledFlightByStateBar?publish=yes](https://public.tableau.com/profile/ali5510#!/vizhome/Book1_16137020717160/CancelledFlightByStateBar?publish=yes)

A bar chart plot is simple to share total cancellation by state category. I used a sequential blue color wherein the darker the blue color, more is the number of flight cancellations. We can see the number of cancelled flight bar for each state. The highest bar is Texas by (668) cancelled, and the lowest states is Guam, Delaware, American Samoa by (0) cancellation.

I added a month filter so that readers can dig which states have the highest and lowest cancellations in each or a range of the months.

## INSIGHT4

[https://public.tableau.com/profile/ali5510#!/vizhome/Book1\\_16137020717160/CancelledFlightsDashboard?publish=yes](https://public.tableau.com/profile/ali5510#!/vizhome/Book1_16137020717160/CancelledFlightsDashboard?publish=yes)

In this insight I created a dashboard that represent Cancelled flight map & Cancelled flight bar chart combined into one web page, all sheets connected to multiple value filter there is a map and bar chart shows the number of cancelled flights also I add highlight for state code that will mark the geolocation of the state with the state bar.

## INSIGHT5

[https://public.tableau.com/profile/ali5510#!/vizhome/Book1\\_16137020717160/AirlineCancellationBar?publish=yes](https://public.tableau.com/profile/ali5510#!/vizhome/Book1_16137020717160/AirlineCancellationBar?publish=yes)

I chose a bar chart it is simple to see the bar share total cancellation with airline category. I used a deferent color for each airline to make it clear and classified. We can see from the chart that the highest bar is Southwest Airline Inc. with the color dark gray by number of cancelled flight (818), and the lowest is Hawaiian Airline Inc. with the color light blue by number of cancelled flight (8).

## INSIGHT6

[https://public.tableau.com/profile/ali5510#!/vizhome/Book1\\_16137020717160/TheMostAirportsDelayBar?publish=yes](https://public.tableau.com/profile/ali5510#!/vizhome/Book1_16137020717160/TheMostAirportsDelayBar?publish=yes)

I chose a bar chart plot it is easy and simple to see the bar shares total cancellation with airport category. I used a sequential blue color wherein the darker the blue color, more is the number of flight cancellations. This type of coloring makes it easier to quickly spot which Airport have high/low cancellations. From the bar chart, we can see the most airport delay flights. The highest bar is Hartsfield-Jackson Atlanta International Airport by (62,505).

## INSIGHT7

[https://public.tableau.com/profile/ali5510#!/vizhome/Book1\\_16137020717160/AirlineTotalFlightsvsTotalDelayScastr?publish=yes](https://public.tableau.com/profile/ali5510#!/vizhome/Book1_16137020717160/AirlineTotalFlightsvsTotalDelayScastr?publish=yes)

I chose a scatter plot, because I want to count two variables for one year filtered by Airline name, for the (X) access I created a calculate object that sum all delay count, (Y) access I used the total count for all flights. I used colored circle to recognize deferent airlines and increased circle size to know how many counts for total delays and total flights. I added a drop line so that readers can see the x,y count.

## INSIGHT8

[https://public.tableau.com/profile/ali5510#!/vizhome/Book1\\_16137020717160/Story1?publish=yes](https://public.tableau.com/profile/ali5510#!/vizhome/Book1_16137020717160/Story1?publish=yes)

In this insight I build a story that represent my work in sequence taps .

### **Dataset Sources:**

[https://d17h27t6h515a5.cloudfront.net/topher/2017/November/5a1f4b2f\\_flight-delays/flight-delays.zip](https://d17h27t6h515a5.cloudfront.net/topher/2017/November/5a1f4b2f_flight-delays/flight-delays.zip)