

## Insights from Flight Delay and Cancellation Dataset

### 1. Are airlines delay and flight cancellation affected by the day of week?

a. Link to dashboard:

<https://public.tableau.com/app/profile/taha.elsaid.borhamy/viz/Areairlinesdelayandflightcancellationaffectedbythedayofweek/Dashboard1?publish=yes>

b. Summary: we can see that the day of week truly affect airline delay and flight cancellation with the day of week 6 is the lowest in terms of delay and cancellation and day of week 1 being the most among all airlines. When we look to airlines individually, we see that Southwest Airlines Co. is the highest in delay and cancellation and Virgin America is the lowest.

c. Design: I used a line chart to show the effect of day of week on airline delay and cancellation with color change according to amount of delay, plus a filter to show each airline separately, and a bar chart to show number of delay and cancellation with color change according to number of cancellations.

d. Resources: N/A

### 2. Causes and count of cancellation in each Airline.

a. Link to worksheet:

<https://public.tableau.com/app/profile/taha.elsaid.borhamy/viz/CausesandcountofcancellationineachAirline/Sheet2?publish=yes>

b. Summary: we can see here reasons of cancellation for each airline to work on it and try to decrease it. The American Eagle airline is the highest in cancellation due to weather. The Atlantic Southeast airlines is the highest in cancellation due to national air system and Southwest airlines co. is the highest in cancellation due to Airline/carrier.

c. Design: I used stacked bar chart with airline filter to show count of cancellation per each airline and added colors to show cancellation reasons.

d. Resources: N/A

### 3. Effect of Distance on Airline delay.

a. Link to worksheet:

<https://public.tableau.com/app/profile/taha.elsaid.borhamy/viz/EffectofDistanceonAirlinesdelay/Sheet4?publish=yes>

b. Summary: we can see here for some airlines there is a positive correlation between distance and airline delay as when distance increase the airline delay will also increase. In the Southwest airlines co., the higher the distance the higher the delay will be.

c. Design: I used scatter plot to show the relation between these 2 quantitative variables and added colors for different airlines.

d. Resources: N/A