Analyzing Flight Cancellation for Trend US Airlines During 2015 Utilizing Tableau

Insight no.1

- Link:
https://public.tableau.com/app/profile/feras6672/viz/FlightCancellation_16310412881690/Dashboard1?publish=yes

- Summary: The dashboard in the link above presents two types of visualization, the first is a map that shows the total of cancelled flights for each state in US during 2015. The one with highest number of cancelled flights is Texas, which represents 15% out of the total number of flights cancelled. The second graph shows the number of cancelled flights for each month with February being the highest and having more than 1000 flights cancelled. As per the below resource, this was due bad weather condition. Moreover, the reference also states that Dallas Fort Worth Airport had one of the highest number of flights cancelled due to the aforementioned reason.

- Design: As stated earlier the design of the graphs was chosen to be a map and a line plot. The map is best suited for visualizing locations. While the line plot is the best option for representing time series data

- Resources: https://www.theguardian.com/us-news/2015/feb/28/texas-oklahoma-winter-weather-advisory

Insight no.2

- Link:
  https://public.tableau.com/app/profile/feras6672/viz/FlightCancellationPart2/Sheet5?publish=yes

- Summary: The graph in the link above shows the total number of flights cancelled for each airport across all US in 2015 filtered by months. The chart is sorted from highest to lowest number cancelation per airport. It can be seen that Dallas Fort Worth Airport had the highest number of canceled flights during February 2015. Hence, confirming what was mentioned earlier in the first insight.

- Design: the chosen design for the paragraph was bar chart, because it can easily highlight the required information by representing the number of occurrences through the length of the bar making it easier for the viewer to interpretate the information.

- Resources: NA

Insight no.3

- Link:
  https://public.tableau.com/app/profile/feras6672/viz/FlightCancellationPart3/Sheet4?publish=yes

- Summary: The graph in the link above shows number of canceled flights in 2015 due to three major factors in percentage. It can be seen that weather is the main cause for flight cancellation for more than 50% precent of the flights in the US during 2015. Second in order comes airline or carrier related problems causing about 30% of flights cancellation. Finally, it can be seen that the almost remaining 20% of the flights canceled are due to national air system.

- Design: Pie chart was used for visual representation because it is easier for the viewer to interpret the graph, especially when there are very few elements to show (3 -5 mostly) and the numbers are shown in percentage.

- Resources: NA