Data Storytelling Project

Viz 1. Cancellation Summary

1. **Story Point Url** - [Flights Cancellation and Delay](#)
2. **Summary**
   - This dashboard shows a summary of Flight Cancellation for the US 2015 flight data. We found there were 4,433 cancellations out of a total of 274,964 flights, which translates into a cancellation rate of 1.61%. The main reason for cancellation (over 50%) was due to weather. It is consistent with the high cancellation rate during the winter times (December to March) in other years. In fact, February 2015 had the highest cancellation rate in the middle of winter season.
3. **Design Considerations**
   - A table of summary breakdown of cancellations numbers to those readers looking for key figures at a glance.
   - A pie chart is chosen to list the main cancellation reasons along with their respective proportions. These parts contribute to the total cancellation counts.
   - A bar chart together with a line graph to show the cancellation counts distribution on a day of the week dimension. Viewers can find the high point and low percentage on a weekly scale.
   - A line chart to display the cancellation percentage distribution over a 12 months period. It gives another view of a different time scale.
4. **Resources - N/A**

Viz 2. Flights Delay by Airlines

1. **Story Point Url** - [Flights Cancellation and Delay](#)
2. **Summary**
   - This dashboard displays the flights' delay by airlines with a breakdown of different reasons that caused the delay. Users can view the full set of monthly figures caused by individual reasons of delay with a click of a particular month. In addition, users can drill down to a specific airline by clicking the Airlines' filter checkbox.
3. **Design Considerations**
   - An area chart is chosen to show how values develop over a period of 12 months. Interactivity is introduced that enables users to drill

down to a specific airline to look at its numbers. Average Air Time (the time duration between wheels_off and wheels-on time) is added via the Tooltip feature to give users an additional piece of data for consideration.
- An Airline filter is added. It allows users to perform filtering or drill down actions interactively.

4. **Resources - N/A**

Viz 3. Flights Cancellation by Airports

1. **Story Point Url** - [Flights Cancellation and Delay](#)
2. **Summary**
   - This map displays the locations of airports across the United States. By hovering above an airport with the cursor, one can find the count of cancellations and the cancellation rate for that particular airport. In addition, an airport filter is added to enable users to pinpoint a particular airport for further information.
3. **Design Considerations**
   - A map chart is chosen in order to show geographic data more effectively. Given airports are location dependent, a map allows users to make sense of geographic data more easily. For instance, an airport located in the NorthEast region of the States has a higher flight cancellation rate in the winter months than another airport situated in the SouthEast.
   - An Airports filter is added to give users an interactive feature to perform data drill down.
4. **Resources - N/A**