Project: Build your Data Dashboards

Link to story:

Description:

My story focuses on the problems different airlines have in terms of delays and cancellations. These are my main findings:

1. Which airlines or airports have the worst delays on average?
Are there any differences throughout the year?

All the all, it is the Spirit Air Lines with the highest average delay when looking at the whole year. Though this might change when only looking at specific months, as there differences throughout the year.

All in all, it is the Sawyer International Airport with the highest average delay when looking at the whole year. Though this might change when only looking at specific months, as there differences throughout the year.

2. What causes the delays?
Are there any differences between the airlines or throughout the year?

When looking at the whole year it is mostly the aircraft that causes the delay of the airline. Though this might change when looking only at specific months, as there differences throughout the year.

3. Which airlines has the highest count on cancellation?
What are the main reasons for cancellations by airline and are differences throughout the year?

All in all, it is Texas with the highest count of cancellations throughout the year, which is not surprising when looking at the result of the second graph. This might differ when looking at a specific month.

All in all, the Southwest Airlines Co. has the highest count of cancellations when looking at the whole year. This airline is headquartered in Texas, the state with the highest rate of cancellation. This is caused by different reasons such as Security, Airline/Carrier, National Air System and Security, though weather makes up the biggest reason for cancellation throughout the airlines.

The reasons for cancellations differ in ratio throughout the airlines and by month.

Design:

1. I decided to take a bar chart with basic colours in order to show differences in average delay time between airlines and destination airports, as I believe this shows well the answer to the questions asked.
2. I used a bar chart with different colours for each delay category in order to emphasise the difference between them. In order to be colourblind-friendly I used the colourblind palette. The specific airport and month one is looking for can be chosen on the right side.
3. In order to show the amount of cancellations by state, I decided to use a Map. This gives a good overview about where the cancellation rates are the highest. I chose a bar chart in order to show the airport with the highest count of cancellations, differentiating cancellation reasons by color. This gives a good overview about where the cancellation rate is the highest and what the reasons are for it throughout the different airlines.

Resources: The ones given by the DF Nanodegree, such as the Tableau knowledge base.