# **Build Data Dashboards**

by Selmir Kalender

## Insight 1: Flight cancellations

#### (link:

 $\frac{https://public.tableau.com/profile/selmir.kalender \#!/vizhome/Flightcancellations\_1589038349}{3830/Flightcancellations})$ 

This Tree Map shows us that the airline Southwest Airlines Co. had the most cancellations (15.721) but also the most flights (1.157.339) in 2015.

Hawaiian Airlines Inc. had the least number of cancellations, which is 159, but they also had 70.030 total flights.

By using the filter option, we can also filter our insights by States and Airports.

**Design**: I've used a Tree Map for the visualization, because it gives us a very clear view, even if there are more values.

**After Feedback**: I've added a chart title and used 'Cancelled flights' as a color filter so it's nicely sorted from dark blue to light blue.

**After second Feedback**: I've added the Legend for the colour format, so that the reader can easily understand, what the fading in colour means.

# Insight 2: Cancellation percentage

#### (link:

https://public.tableau.com/profile/selmir.kalender#!/vizhome/Cancellationpercentage/Cancellationpercentage)

In the previous Insight, we've found out that Southwest Airlines Co. had the most cancelled flights, but they've also had the most flights in total.

If we compare the number of flights to the number of the total flights, than we will se that American Eagles Airlines Inc. has the highest percentage of cancelled flights (5,10%). Southwest Airlines Inc. had just 1,27%.

The lowest percentage had Hawaiian Airlines Inc. (0,22%)

We can use the filters to filter by Airport and Airline.

**Design**: For this insight I've used vertical bars, because we can make a clear comparison between the airlines.

**After Feedback**: I've added the chart title, as well as the axis titles. I've also rotated the chart because of better readability, so that the reader doesn't have to tilt his head. I've also used one colour for the chart and sorted it by the percentage from darker for higher to lighter for lower percentage. One more thing I've changed was replacing the IATA Code with the full name of the airlines.

### Insight 3: <u>Cancellation reason</u>

(link:

https://public.tableau.com/profile/selmir.kalender#!/vizhome/Cancellationreason\_1589040420 6860/Cancellationreason)

This visualization shows us that the most cancellations happened because of the weather conditions, that, in the judgment of the carrier, delays or prevents the operation of a flight such as tornado, blizzard or hurricane (source: Bureau of Transportation Statistics). Only 22 flights were cancelled because of Security reasons.

We can filter the insights by Airport and Airline.

**Design**: For the third insight I've used a Bubble Chart, because it makes the insight easily readable, since there are just 4 values to be explored.

After Feedback: Title is added.

## Dashboard - Frequent locations: Total distance flown - Airline destinations

(link:

 $\underline{https://public.tableau.com/profile/selmir.kalender \#!/vizhome/Frequentlocations/Frequentlocat} \ \underline{ions}\ )$ 

This dashboard shows us that Southwest Airlines Inc. has flown the most miles, with a total of 1,261,855 miles. Far behind on the second place is Delta Air Lines Inc. with 875,881 miles. The Airline with the least flown miles is Virgin America with a total distance of 61,903 miles. This dashboard also sows us, that the Airlines didn't flew to all the parts of USA. For instance, Alaska Airlines Inc. has flown a wider range of the Country in comparison with Southwest Airlines Inc.

Atlantic Southeast's destinations were mostly in Southeast America, while Hawaiian Airlines Inc. flew the greater part of flights in the southwest/west region.

We can also filter by Months and Weekdays, to see in which month or on what weekday happened the most flights.

By using the filters on the right side of the dashboard, we can filter the insights by State, Airline, Month and Weekdays.

**Design**: For this Dashboard I've used a Map because this way we have a clear overview on various cities. For the display of the total distance every airline has flown, I've used a simple horizontal bar chart because it shows me what I need to know in a simple and effective manner.

**After Feedback**: I've added the chart and axis titles. I've also used one colour and sorted it by the total distance flown by each airline. That way it's much easier to interpret the visualization.

**After second Feedback:** Legend for the colour format has been added, for better understanding. The Airline filter is used to filter the destinations by airlines.

# Thank You!