Udacity
Marketing Analytics

Nanodegree Program
Project: Build a Data Visualization

Which Airline or airport has the highest number of cancelled?

SUMMARY:
The visualize shows which airline has the most cancelled occurred at destination airport: with airline wn (818).
There are 14 airlines. The most airline cancelled was wn with 818, followed by ev with 800.
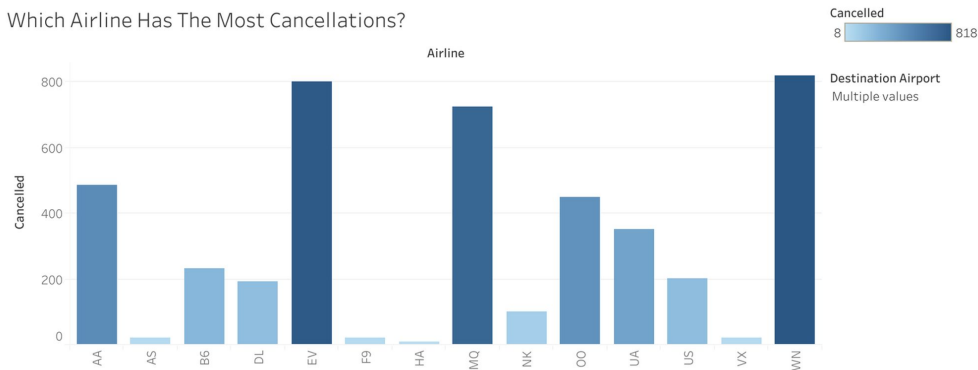
DESIGN:
I utilized a bar chart text tables with a sequential palette so that i could easily observe which airline has the highest number of cancellations.
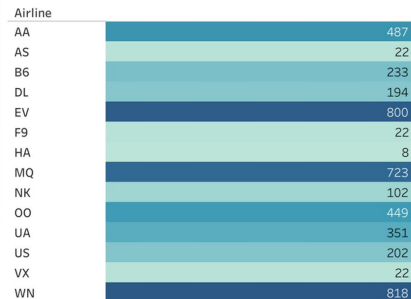
RESOURCES: N/A

LINK:
https://public.tableau.com/app/profile/wiam6353/viz/Dashboard1_16847705241460/Dashboard3

Which Airline Has The Most Cancellations?

Airline

Cancelled
8 — 818

Destination Airport
Multiple values

Which Airline Has The Most Cancellations?

Airline	Cancelled
AA	487
AS	22
B6	233
DL	194
EV	800
F9	22
HA	8
MQ	723
NK	102
OO	449
UA	351
US	202
VX	22
WN	818

Which Airline or airport has the highest number of cancelled?

SUMMARY:
The visualize shows which airline has the most cancelled occurred for destination airport.
There are 321 airlines. i choose to view only 9 destination airport out of 321.
The destination airport aus has the highest number of cancelled with 28, while yum and azo with 1.
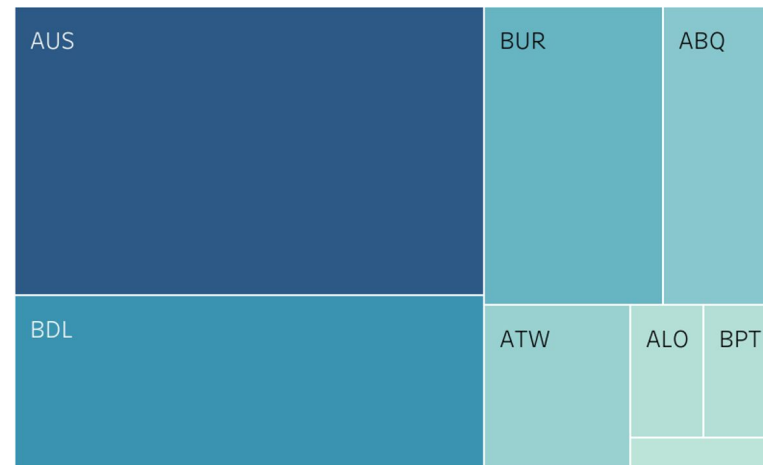
DESIGN:
I utilized a heatmap to display the data in a way that can be easily understood. When the color becomes darker, it indicates a high number of cancellations at the destination airport, while when the color becomes lighter, it indicates the lowest number of cancellations.
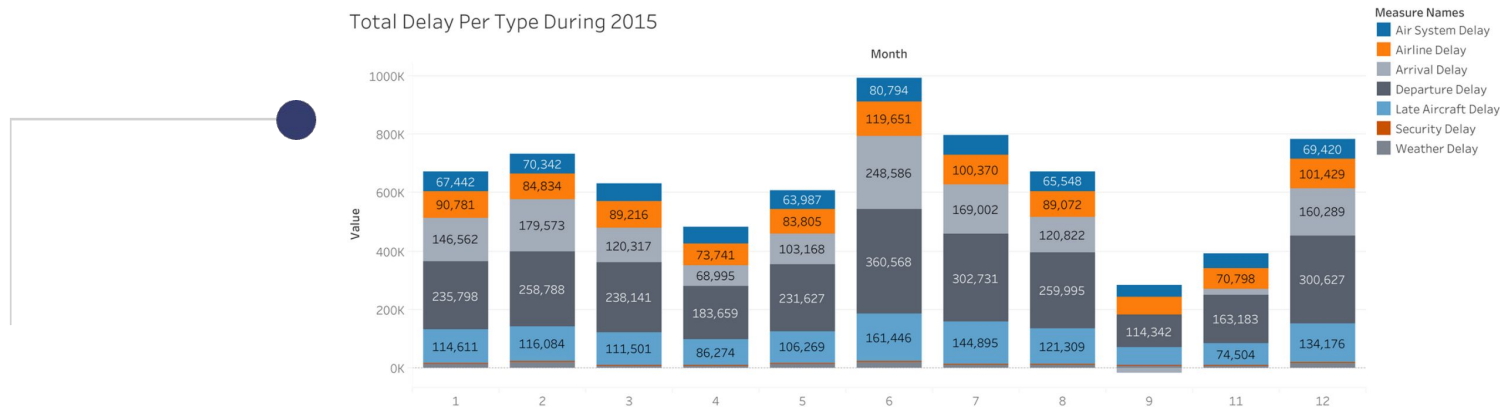
RESOURCES: N/A

LINK:
https://public.tableau.com/app/profile/wiam6353/viz/Dashboard1_16847705241460/Dashboard3

Total Cancellation For Each Destination

WHICH MONTH HAS THE HIGHEST NUMBER OF FLIGHT DELAY?

Total Delay Per Type During 2015

SUMMARY:
As can be seen, June has the most effect, and all kinds of flight delays add to the overall total.
The departure delay is the most common kind of delay in June (with 360.568 minutes).

DESIGN:
To compare categorical variables—flight delays—and determine which month had the most delays, I utilized a bar chart. I chose a colorblind-friendly palette to ensure that everyone can see and comprehend my work.

RESOURCES: N/A

LINK:
https://public.tableau.com/app/profile/wiam6353/viz/shared/45JJM9GCD

WHICH MONTH HAS THE HIGHEST NUMBER OF FLIGHT DELAY?

SUMMARY:
The most common departure delays, as mentioned, occur in the middle of the year, in June (360.568 minutes).
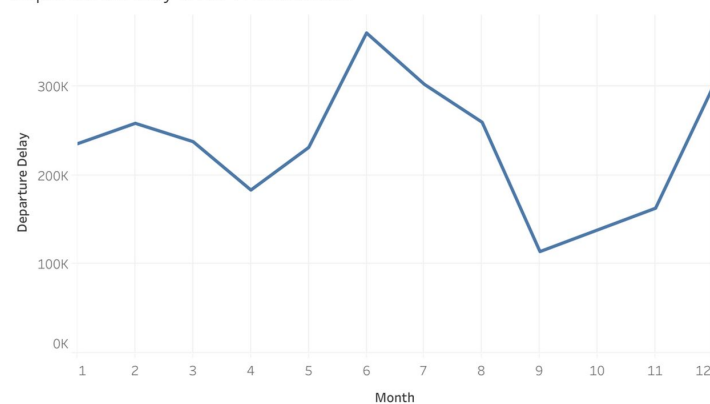
DESIGN:
I utilized a line chart to track changes over time and display the sum of the delay in departure for each month over 2015.

RESOURCES: N/A

LINK:

Departure Delay Over The Months

WHICH MONTH HAS THE HIGHEST NUMBER OF FLIGHT DELAY?

SUMMARY:
There are 7 types of flight delays: security , late aircraft, departure, arrival, airline, air system, and weather.
The most impacting type is departure delay.

DESIGN:
Text tables are a conservative way to show very specific values to help the reader spot the exact values explained in the description
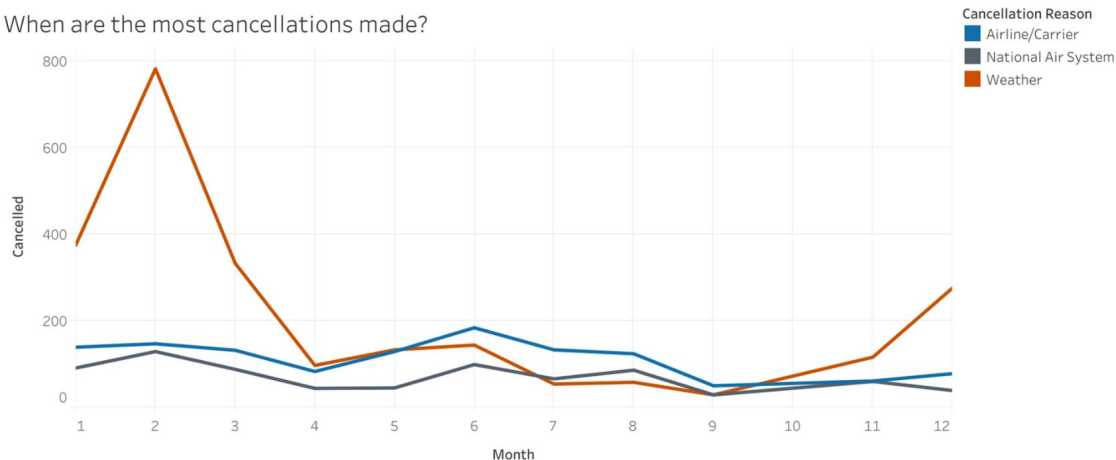
RESOURCES: N/A

LINK:
https://public.tableau.com/app/profile/wiam6353/viz/shared/45JJM9GCD

Total Delay For Each Type

Air System Delay	697,937
Airline Delay	964,174
Arrival Delay	1,322,517
Departure Delay	2,649,459
Late Aircraft Delay	1,231,193
Security Delay	4,702
Weather Delay	163,814

WHAT CAUSES CANCELLATION?

When are the most cancellations made?

Cancellation Reason
- Airline/Carrier
- National Air System
- Weather

SUMMARY:
We may deduce from the following graph that the majority of cancellations occur due to weather from january to march, with minor changes in the other causes of cancellation.

DESIGN:
For each month of 2015, I used a line chart to track changes over time and illustrate the causes that led to cancellation.

RESOURCES: N/A

LINK:
https://public.tableau.com/app/profile/wiam6353/viz/Dashboard3_16847595322000/Dashboard2

WHAT CAUSES CANCELLATION?

SUMMARY:
As we can see, there are three causes for flight cancellations due to weather with 2397 cancelled, followed by the airline/carrier with 1260 and national air system with 776.
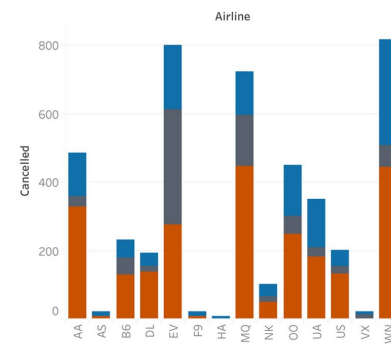
DESIGN:
I compared categorical variables—cancellation reasons—using a bar chart to determine which airline had the most cancellations. The other bar chart shows which cancellation reasons have occurred the most frequently.

RESOURCES: N/A

LINK:
https://public.tableau.com/app/profile/wiam6353/viz/Dashboard3

Cancellation Reasons Per Airline

Reasons Leading To Cancellations