

Data Foundations Nanodegree

P4: Build Data Dashboards

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Viz 1: Airline Delays

<https://public.tableau.com/profile/seif.sameh#!/vizhome/DFNDFlightDelays/AirlinesDelays>

In this visualization, I explore each airline's performance in terms of average arrival and departure delay.

I used a scatter plot with each airline encoded by a different color. The size of the data point indicates how many flights were flown by that specific airline.

It appears from the visualization that the best performing airline is Alaska Airlines which seems to depart and arrive on average earlier than scheduled, while the worst airline is Spirit Airlines.

It is worth noting that both those airlines have a relatively small number of flights in the dataset.

Delta Airlines seems to be the best major airline getting their passengers to their destinations on time.

Viz 2: Departure Delays By Airline

<https://public.tableau.com/profile/seif.sameh#!/vizhome/DFNDFlightDelays/DepartureDelaysbyAirline>

This visualization shows departure delays per airline. I chose a boxplot to see how data is distributed for each airline since outliers might be biasing the first visualization.

This chart shows that Alaska Airlines indeed has very few outliers meaning its departure delay is consistent.

American Airlines appears to have some heavy outliers impacting its overall average. This visualization shows its performance very similar to Delta Airlines.

Viz 3: Delays by Month

<https://public.tableau.com/profile/seif.sameh#!/vizhome/DFNDFlightDelays/DelaysbyMonth>

In the visualization we examine the average delay by month. We see spikes in June which could be due to increased traffic during the summer vacation season.

There's also a spike in December and February which are around Christmas and Winter vacation times.

Viz 4: Cancelled Flights

<https://public.tableau.com/profile/seif.sameh#!/vizhome/DFNDFlightDelays/CancelledFlights>

This visualization shows the number of cancelled flights by airline. Southwest and Atlantic Southeast Airlines cancelled the most flights in 2015.

American Airlines also shows a high number of cancelled flights.

Delta and Alaska (which were our best airlines from the previous visualizations) appear in the lower quadrant with fewer cancelled flights in total.