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Data Visualization Project

Delay and Cancellation Information Report

Link to Tableau Story

https://public.tableau.com/views/FlightDelays_16714833050000/DelayandCancellationInformation?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

Summary

The Delay and Cancellation Information story visualization was created using data from the U.S. Department of Transportation's Bureau of Transportation Statistics 2015 dataset of flight delays and cancellations. I approached the creation of this visualization with the help of Udacity's project description, which mentions working at an airline and understanding why delays and cancellations occur.

The first story point is a dashboard of two different bar charts. The top chart identifies Southwest Airlines Co. as the airline that experiences the most delays (1,820,495). The bottom chart breaks those delays down into their different categories so we can identify the most common, which is departure delays (648,419).

The next story point drills down further given the previously found information to identify which city has the most departure delays. Here we find that Chicago had 51,853 departure delays in 2015. This makes sense seeing as the Chicago O'Hare International Airport (ORD) is the largest airport that Southwest Airlines Co. services and Chicago is known for their harsh winters.

The final story point visualization explains that about 80% of cancellations at the ORD are due to weather. This finding enforces the speculation that winter weather is to blame for a lot of the pauses in operation that this airline experiences at this airport. Unfortunately, there is not much that we can do to stop bad weather, though we can take measures to help mitigate the impacts it can have.

Design

The only design choice that I feel the need to defend is the bubble chart that I used in the third visualization. I chose this kind of chart to display my skills and knowledge and because three different kinds of visualizations were required. I understand that multiple colors and size are not the best to use when creating visualizations because they can be messy, distract from the data, and our brains are not the best at deciphering these kinds of visual differences.

Resources

N/A