"U.S. Airline Cancellation Analysis 2015 ~ 2018"

Trends and Data

By: Team Coachella

Project Team



Abel Renteria
Senior Developer



Jorge Sanchez Entry Developer



Kwang Min Ko CEO Business magnate











Datasets

1. International IATA Airports Data - <u>Airport Data</u> from Rapid API. The dataset consists of reliable airports list and details, with IATA codes. The Data is accessed through an API call.

U.S Airline Delay and Cancellation Data from 2009 to 2018 - <u>Airline Delay Data</u> from the Kaggle public data. The dataset is derived from the Department of Transportations flight info of US domestic flights. Updated yearly, showing data for the entire years of 2009 to 2018.

3. Airline Data - <u>Airline Data</u> from the Kaggle public data website. The dataset contains a database of over 5000 airlines. The data presents airline name, IATA id, callsign, and country.







Assumption

- 1. Our assumption is that every year there are certain months (pattern) that flights get cancelled more often compared to other months.
- 2. Based on our own personal experiences, American, Delta, and United Airlines are the most cancelled airlines between the years 2015 and 2018.









Mission

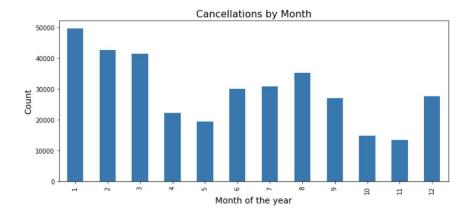
"Our mission is to use the data we found to help small and new trip advising or airline booking companies to put them in more competitive position in the airline market by collaborating with right airline companies and airports"

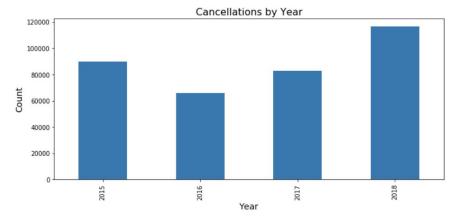




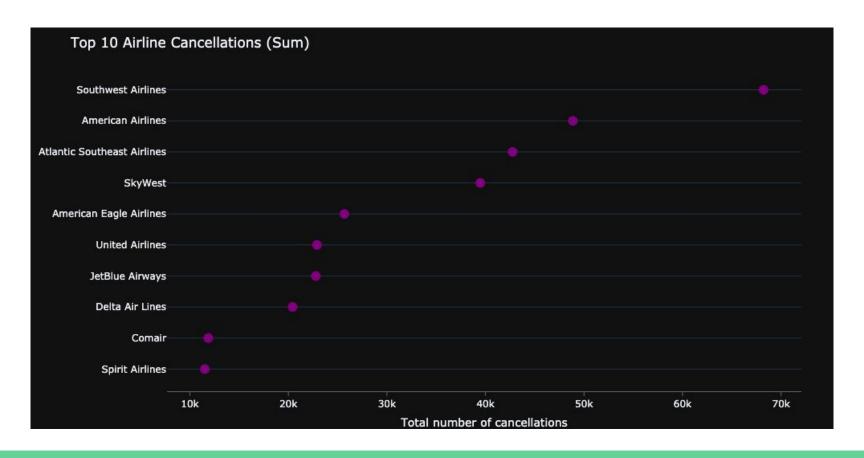


Data Visualization

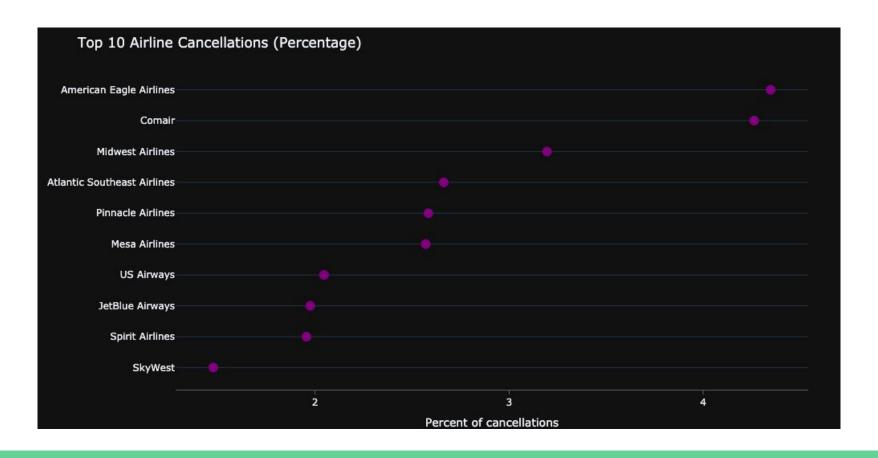




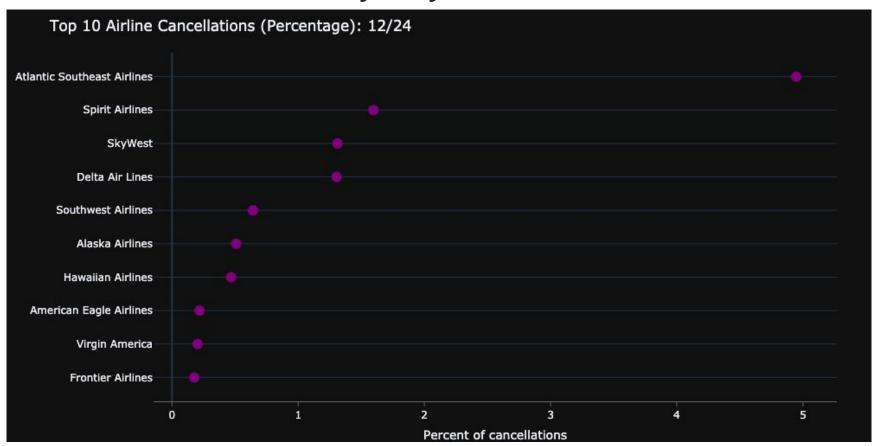
Data Visualization: Airline cancellations 2015-2018



Airline cancellations by percentage



Airline cancellations by day



Conclusion

- 1. Avoid American Eagle Airline and Comair.
- Always prepare the higher or large risk management budget during January, February, March and August due to its unpredictable cancellations.
- 3. Include Hurricane, and Storm data
- 4. Airline rating data.
- 5. Airport cancellations and traffics.