**How to reliably predict airline delays**

Business Problem, Opportunity, and Impact

Overview of industry, business, or problem

The airline industry provides air transportation for passengers and cargo by using aircraft. Flight delays and cancellations can significantly affect customer experience and cause financial loss to the business. The total cost of delays from 2016-2019 was over US$23 billion.

Define the specific problem that should be solved

Assist customers in making better decisions when booking flights and help businesses mitigate financial loss due to delays.

* Predict flights that will be delayed allowing passengers to avoid those flights if they chose.
* Allow businesses to do root-cause analysis on flights with habitual delays as well as apply mitigation strategies to avoid negative customer experiences related to delays.

How to accomplish the problem

* Analyze flight delay data: detecting seasonality, airport and connection flights patterns and any correlation.

Why does this problem matter?

Delays have costs airlines over US$23 billion. Additionally, negative customer experiences further erode a company’s reputation and future profit by loss of business.

Potential Audience

* Anyone who is booking flight arrangements (for self or others) would be interested. This information would allow them to make informed decisions regarding flights and/or airports.
* Airline executives could benefit by identifying frequently delayed flights and do deep dives into cause and effects.