

# FLIGHT DELAY PREDICATION USING MACHINE LEARNING

Different airports have different standards when it comes to delays caused by adverse weather conditions, usually determined by national regulatory bodies such as the Federal Aviation Authority (FAA) in the US. Adverse weather conditions are often cited as one of the main reasons for flight delays, however they are not as common as most people think. That is because even if the weather does not appear to be optimal, it is not a given that the flight cannot be operated on time.

## #IDEA 1

Adverse weather conditions:

## #IDEA 2

Fixing a Mechanical issue:

Aircrafts are subject to very strict technical maintenance and rightly so. It is not uncommon for a flight to be delayed because of a technical issue which requires immediate attention. While this does sound scary, most of the time it poses no risk to passengers and is relatively easy to repair.

In certain cases, the airline may slightly delay the flight in order to board connecting passengers. As a general rule of thumb, carriers will not wait for connecting passengers. However, they seem to approach this on a case by case basis.

## #IDEA 3

Waiting for connecting passengers:

## #IDEA 4

Knock-on effect due to a delayed aircraft:

A knock-on effect is the main cause for what's also known as rotational delay - i.e. when a flight is delayed because of the late arrival of an aircraft. Since airlines are optimizing the utilization of their fleet, it is not uncommon that your flight may be delayed because the aircraft which is supposed to operate your flight has been delayed on its previous route.