#### PROBLEM STATEMENT

Domain: Applied data science

**Project Name:** Developing a flight delay prediction using machine learning.

## Simple problem definition:

Over the last twenty years, air travel has been increasingly preferred among travellers, mainly because of its speed and in some cases comfort. An increase in air traffic growth has also resulted in massive levels of aircraft delays on the ground and in the air.

The main objective of the model is to predict flight delays accurately in order to optimize flight operations and minimize delays. Using a machine learning model, we can predict flight arrival delays.

# 1. What is the impact of flight delays?

Flight delays not only irritate air passengers and disrupt their schedules but also cause a decrease in efficiency, increasing a capital cost, reallocation of flight crews and aircraft and additional crew expenses.

## 2.why flight delay prediction is important?

To improve airline operations and passengers' satisfaction, which will results in a positive impact of economy.

#### 3. What are the main reason of flight delay?

- > Extreme whether
- > Late arriving aircraft due to crowding
- ➤ Waiting for connecting passengers
- ➤ Mechanical delays

## 4. What would happen if we solve a problem?

- 1. Passengers' satisfaction
- 2. To know about a reason of flight delay