

PROBLEM STATEMENT

DATE	26 th September 2022
TEAM ID	PNT2022TMID36536
PROJECT TITLE	AIRLINE DATA ANALYTICS FOR AVIATION INDUSTRY

Technology is drastically changing the way businesses connect with their customers, **take business decisions**, and **build workflows**. No doubt, the world of aviation has been affected too: **data is transforming airlines** from pre-flight to post-flight operations, including ticket purchase, seat selection, luggage, boarding, ground transportation, etc. Hence, the **data required for dozens of use cases is captured along the various components of a passenger's journey**.

We have **real-time access to data** that, in its turn, allows organizations to take informed steps towards operational efficiency and improved customer experience. The airline industry of today is highly competitive, generating billions of money every year with a cumulative profit margin of less than 1%.

The ultimate benefits of big data analytics include **timely responses** to current and future market demands, **improved planning and strategically aligned decision making**, as well as crystal clear **comprehension and monitoring of all main performance drivers** relevant to the airline industry.

When properly followed, the positive outcomes of the above mentioned benefits encompass lower operating costs, better customer service, market leading competitiveness and increased profit margin and shareholder value.

***Who does the problem affect?**

Passengers who need to handle international meeting and also emergency purpose.

***What are the boundaries of the problem?**

Adverse weather conditions, low ceilings, and low visibility conditions strongly influence flight delays.

***What is the issue?**

Inclement weather , such as thunderstorm ,hurricane ,or blizzard.
Late arrival of the aircraft to be used for the flight from a previous flight.
Maintenance problems with the aircraft.

***When does the issue occurs?**

A flight delay is when an airline flight takes off and /or lands later than its scheduled time. A cancellation occurs when the airline does not operate the flight at all for a certain reason.

***Why is it important that we fix problem?**

Passengers are increasingly affected by delays and cancellations .Thus these problems has to be fixed .