

# Project Design Phase-I

## Problem Solution Fit

Date	17 October 2022
Team ID	PNT2022TMID44521
Project Name	Developing a Flight Delay Prediction Model Using Machine Learning

**1. CUSTOMER SEGMENT    6. CUSTOMER CONSTRAINTS    5. AVAILABLE SOLUTIONS**

Business peoples and regular flight users    Lack of transparency, no user-friendly Weather forecasting, creation of larger models to work with runways, effective air traffic control

**2. JOBS-TO-BE-DONE/ PROBLEMS    9. PROBLEM ROOT / CAUSE    7. BEHAVIOUR**

Predicting the flight delay due to the various Adverse weather conditions, air traffic, Choose the right airlines, Choose different reasons that may cause it, Intimate the flight bird strikes, less runways, waiting for connecting modes of transport , Wait patiently in the delay to the passengers, Provide alternate passengers and bags, flight malfunction waiting hall until further notification, Search flights, if the delay is prolonged online for alternate flights, Dissatisfied and frustrated

**3. TRIGGERS    10. YOUR SOLUTION    8. CHANNELS OF BEHAVIOUR**

Seeing other airlines that give accurate By using machine learning algorithms we 8.1 ONLINE departure and arrival time even with delay can try to predict if the flight will be Check for reimbursements, Search for the ofdelayed in many ways. If given the right set input parameters (Flight no, departure and rightagree airlines, to a new book connection, alternate call flights the airlineonline,

**4. EMOTIONS: before /after**

arrival time, origin and destination airport,  
scheduled arrival and departure time, etc.), the 8.2 OFFLINE  
Frustration -> Satisfaction ML algorithms can predict the delay with high Don't plan activities on the day of arrival, accuracy schedule flights  
for the middle of the week,  
fly non-stop routes, avoid travelling during  
holidays