Project Title: Developing a Flight Delay Prediction Model **Project Design Phase-I - Solution Fit** **Team ID:** PNT2022TMID30209

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Customers are students, businessmen, doctors, teachers and all the people travelling in flight.

6. CUSTOMER CONSTRAINTS CC

Customers require very accurate and early predictions of the delays. They also look for alternate solutions.

5. AVAILABLE SOLUTIONS AS

There are very few flight delay prediction models available, some of which are not too accurate. They also lack the ability to get frequent updates on the flight's location.

Explore AS, differentiate

Focus on J&P, tap into BE,

2. JOBS-TO-BE-DONE / PROBLEMS J&P

Flights are often delayed due to weather delays and other unforeseen reasons. This leads to a lot of customer dissatisfaction. To accurately predict the flight delays and track the flight.

9. PROBLEM ROOT CAUSE RC

The root cause of the problem is unforeseen/ unpredictable weather delays that cause cancellations and arrival, departure delays.

7. BEHAVIOUR BE

To develop a model that has a good prediction of delays along with frequent updates of flight's location.

Focus on J&P, tap into BE,

Identify strong TR & EM

3. TRIGGERS TR

To accurately predict the flight delays and track the flight.

4. EMOTIONS: BEFORE / AFTER EM

Passengers often get annoyed and frustrated. They lose their temper and also might lose to reach on time to some important occasions.

10. YOUR SOLUTION SL

Our solution includes using algorithms like Random Forest, Logistic regression, Support Vector Machine and Decision Trees to predict the flight delays more accurately. The customers will be able to look at available flights and their current status. Frequent updates about a booked flight's location.

8. CHANNELS OF BEHAVIOR CH

Users will check for flight delay/ cancellation information.

Identify strong TR & EM