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|------------------------|---|--|---|---------------------------|
| Define CS, fit into CC | <b>1. CUSTOMER SEGMENT(S)</b> <b>CS</b> <ul style="list-style-type: none"> <li>- Normal flight users</li> <li>- Business professionals having meetings</li> <li>- People boarding a lay-over flight</li> <li>- Logistics incharge at airport</li> <li>Airport catering manager</li> </ul>                           | <b>6. CUSTOMER CONSTRAINTS</b> <b>CC</b> <ul style="list-style-type: none"> <li>- Refund/Partial Refund</li> <li>- Not knowing the exact time of delay</li> <li>- Unavailability of alternate flights or accommodation</li> </ul>  | <b>5. AVAILABLE SOLUTIONS</b> <b>AS</b> <ul style="list-style-type: none"> <li>- May take alternate flights</li> <li>- Ask for an alternate flight/schedule</li> <li>- Wait for the delayed schedule</li> <li>- Enjoy airline benefits</li> <li>- Report airline</li> <li>- Cancel the flight</li> <li>- Search for specific reasons for delay</li> </ul> | Explore AS, differentiate |
|                        | <b>2. JOBS-TO-BE-DONE / PROBLEMS</b> <b>J&amp;P</b> <ul style="list-style-type: none"> <li>- To know if a flight is delayed</li> <li>- To make alternate arrangements to reach the destination in case the flight is delayed</li> <li>- To know other things that can be done when the flight is delayed</li> </ul> | <b>9. PROBLEM ROOT CAUSE</b> <b>RC</b> <ul style="list-style-type: none"> <li>- Unavailability of means to estimate delays occurring in airplanes</li> <li>- Large scale economic loss for both airlines and the customers</li> <li>- Degradation in airline's reputation when many flights are delayed</li> </ul> | <b>7. BEHAVIOUR</b> <b>BE</b> <ul style="list-style-type: none"> <li>- Use the app deployed to know the approximate delay</li> <li>- Find alternate travel options</li> <li>- Find hotel accommodations for overnight delays</li> <li>- Fill ratings and feedbacks to help other users</li> </ul>   |                           |

|                         |  |   |   |                         |
|-------------------------|--|---|---|-------------------------|
| Identify strong TR & EM | <b>3. TRIGGERS</b> <b>TR</b> <ul style="list-style-type: none"> <li>- Cancellation of flights</li> <li>- Extreme boredom</li> <li>- Guilt of wasting time</li> <li>- Thought of missing important meetings</li> <li>- Missing layover flight</li> <li>- Uncertainty in deciding if the flight is delayed when they start late for the airport</li> </ul> | <b>10. YOUR SOLUTION</b> <b>SL</b> <ul style="list-style-type: none"> <li>- The aim is to develop an application that predicts flight delays using a supervised machine learning model (a decision tree classifier) with the data of flights and delays so far and estimate the time of delay taking spatial dependencies of flights into account.</li> </ul> | <b>8. CHANNELS of BEHAVIOUR</b> <b>CH</b> <p><b>8.1 ONLINE</b></p> <ul style="list-style-type: none"> <li>- Check if a particular flight will be delayed and the estimated time of arrival</li> <li>- Giving ratings and feedbacks for various flights so as to improve the app's performance in predicting further delays</li> <li>- Check for other specific reasons for delay</li> </ul> | Identify strong TR & EM |
|-------------------------|--|---|---|-------------------------|

#### 4. EMOTIONS: BEFORE / AFTER

EM

##### Before:

- Worried
- About missing important events
- About missing layover flights
- If the flight is going to be cancelled
- Frustrated
- About the unexpected delay/cancellation
- Not knowing the news of delay beforehand
- About the weather
- Bored
- Don't know how to make use of time

##### After:

- Gets to enjoy the airline benefits
- Stay relaxed after getting a proper update from the airline
- Relieved if an alternate solution can be found

#### 8.2 OFFLINE

- Finding alternate travel routes in the airport
- Hotels near the airport can be visit for overnight stays during delays