Problem-Solution fit canvas 2.0

FLIGHT DELAY PREDICTION

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

Business peoples and regular flight users face a important problem which was missing their flight due to un accurate prediction of arrival and delay. Many emergency patients whom have to fly for their treatment suffers due to flight delay.

6. CUSTOMER CONSTRAINTS — CC

Availability of efficient model to evaluate and predict the flight delays. The anomalies in the availability of the data and uncertainty in the events relating to the flight delays.

5. AVAILABLE SOLUTIONS — AS

Using a machine learning model, we can predict flight arrival delays. We then use decision tree classifier to predict if the flight arrival will be delayed or not. we compare decision tree classifier with logistic regression.

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

The impact of flight delay can be a risk and this risk represents financial losses, the dissatisfaction of passengers, time losses, loss of reputation and bad business relations. If an airline doesn't deal with this problem immediately, it will cause other problems.

9. PROBLEM ROOT CAUSE — RC

The root cause of the problem is unforeseen/ unpredictable weather delays that cause cancellations and arrival, departure delays. And lack of data supporting the prediction.

7. BEHAVIOUR — BE

Based on econometric estimations, welfare impacts of flight delays are calculated. Flight delays on a route reduce passenger demand and raise airfares, producing significant decreases in both consumer and producer welfare.

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS — TR

Adverse weather conditions, knock-on effect due to a delayed aircraft, Waiting for connecting passengers, Waiting for cargo, Getting security clearance. the crew needs to ensure the aircraft is ready for boarding. Basis requisites have to be checked and filled before passengers board a 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 Logistic regression, 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 BEHAVIOUR — CH

ONLINE:
The flight delay is notified in web applications such as: Your airline's app, Flight aware, Lounge Buddy and Airhelp.

OFFLINE:
The respective officers should know the reason of the delay and report the respective customers.

Extract online & offline CH of BE

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