Project Title: DEVELOPING A FLIGHT DELAY PREDICTION USING MACHINE LEARNING
Project Design Phase-I - Solution Fit
Team ID: PNT2022TMID43039

1. CUSTOMER SEGMENT(S)   CS

Who is your customer?
i.e., working parents of 0-5 y.o. kids

*Domestic and international passengers or a traveler
*Airport maintaining companies

6. CUSTOMER CONSTRAINTS   CC

What constraints prevent your customers from taking action or limit their choices of solutions? i.e., spending power, budget, no cash, network connection, available devices.

*Less influence
*Data collection
*some solutions need high budget
*Out of capacity for some of passengers
*The known solutions will quit complex

5. AVAILABLE SOLUTIONS   AS

Which solutions are available to the customers when they face the problem?

or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e., pen and paper is an alternative to digital notetaking

*Predefined plans if any issue will occur
*Change their schedule
*backup officers, flight, infrastructure of airport
*Be ready with precautions

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

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

* change their schedules
*Unable to attend important meetings it will spoiling the image of airlines where they will be cancelled or delayed
*Unnecessary tensions, crowding in airport

9. PROBLEM ROOT CAUSE   RC

What is the real reason that this problem exists? What is the back story behind the need to do this job?
i.e. customers have to do it because of the change in regulations.

*Air traffic
*Whether condition
*Technical fault
*Medical emergency
*previous flight delay

7. BEHAVIOUR   BE

What does your customer do to address the problem and get the job done?

i.e., directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)

*Deep thinking about why the problem will be occur and find a correct reason
*Need to think about what we will do next to avoid this problem (find a solution)

3. TRIGGERS

TR

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.

*Economic losses
*Unable to attend the important meeting at correct time
*Frustration created by delay of flights

4. EMOTIONS: BEFORE / AFTER

E

M

How do customers feel when they face a problem or a job and afterwards?
i.e. lost, insecure > confident, in control - use it in your communication strategy & design.

* At initial stage they are well motivated, energetic and pleasant mind to reach a destination and do their planned jobs
* After customers facing a problem, they are frustrated

10. YOUR SOLUTION

SL

If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality.
If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.

*Build a model using various machine learning algorithms to predict a delay of flight which gives the best accuracy. This prediction helps us to know the flight delay earlier.

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE
What kind of actions do customers take online? Extract online channels from #7

*Through online the customers try to contact via helpline, customer care number to inform airline officer

8.2 OFFLINE
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

*Avoid violence and try to know a details of flight delay with his neighbors and find a proper solution