Date	22 Oct 2022
Team ID	PNT2022TMID28832
Project Name	Predicting the energy output of wind turbine based on weather condition
Project Design Phase 1	

Define CS, fit into C

1. **CUSTOMER SEGMENT(S)** CS

Residential customers,

Agricultural customers,

Governmental customers

6. CUSTOMER CONSTRAINTS

What constraints prevent your customers from taking action or limit their choice of solutions?

unpredictability, it is a threat to farmlife, it creates low-level noiseless, understanding of windmill, Less knowledge of technology.

5. AVAILABLE SOLUTIONS

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

Predicting Plans for every kind of Problem that may arise and prevention during natural disaster.

Explore AS, differe

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

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

debonding, joint failure, splitting along fibers, gel coat cracks, and erosion

converting the kinetic energy in wind into clean, renewable electricity

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?

7. BEHAVIOUR BE

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

Some customer find a way to solution.
some seek help from office.
some find solution through other who faced the problem already.

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

3. TRIGGERS TR

- Optimisation of energy production;
- Visual influence;
- Noise; and.
- Turbine loads.

4. EMOTIONS: BEFORE / AFTER EM

How do customers feel when they face a problem or a job and afterwards?

Panic, Angry, Restless, asking too much questions before correcting solutions. After they cooldown.

10. YOUR SOLUTION SL

A Solution to problems is to place a company engineer near the wind farm. If Engineer is provided proper technology he could be able to instantly solve problems and avoid problems that could cost high if became late and increase job requirements

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE

Customer fill the form and wait for solutions

8.2 OFFLINE

Customer come to the branch office near them and tell their problems.