CH

# 1. CUSTOMER SEGMENT(S)

CS

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

1)People who use renewable energy source Like windmill, solar panels.

# 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

- 6) \*)Comercial Partnering & PPA,
  - \*)Increase the no of Offshore wind turbines,
  - \*)Leading wind turbine blade technology.

# 5. AVAILABLE SOLUTIONS



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

Which solutions are available to the customers when they face the

- 5) \*)On shore Wind turbine
  - \*) Offshore Wind turbine
  - \*) Comercial Partnering & PPA

# 2. JOBS-TO-BE-DONE / PROBLEMS



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

2) Weather change is the biggest problem for us To predict the energy of wind Turbine.

## 9. PROBLEM ROOT CAUSE



What is the real reason that this problem exists? What is the back story behind the need to do

i.e. customers have to do it because of the change in

9) Sound and visual are the two main public health and Community concerns associated with operating wind Turbines. Most of the sound generated by wind turbines Is aerodynamic, caused by the movement of blades Through the air.

## 7. BEHAVIOUR

8. CHANNELS of BEHAVIOUR

8.I ONLINE



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)

7) Improving production of electric power from Renewable Sources is fundamental in order to decrease the Use of fossil fuels.

# 3. TRIGGERS



EM

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

3)Using Renewable sources like Windmill to reduce the use of power generated by coal.

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

& It is a free source so there is no paid for that.

i.e. lost, insecure > confident, in control - use it in your communication strategy & design.

4)Before - Once they installed the renewable energy they

After – The windmill is free from non-renewable source

4. EMOTIONS: BEFORE / AFTER

would paid the electricity bill

# 10. YOUR SOLUTION



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.

# 10) Solution Offered through this project

We analyzed the data for a Windmill Farm and extracted the parameters (assuming other physical conditions like weight of blades, height of windmill to be same etc) that affect power generation the most.

Then we prepared an ML model taking the obtained features in consideration, using Boosted Regressor Tree Model. Then for provinding solution quicker to the end-user, we Made an Android app to obtain power predictions of next 72 ss hours on hourly basis in single click.



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

- 8.1) Customer use our weather predict app to find the ipdates about weather and wind speed
- 8.2) They need to use Leading wind turbine blade echnology and based on their land we suggest onshore wind urbine and offshore wind turbine.

# strong

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fit into