Problem-Solution fit canvas 2.0

To make wind energy as a reliable source of energy.

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

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

Windmill electricians, power analysists , research students on wind energy, electricity suppliers, government electricity board, windmill owners

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.

Weather on that particular time period, budget(spending more capital investment), topology, storms(power supply might not available), network issues

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

Changes in materials (copper, fiberglass, and iron), labour (employee productivity), legal and financial costs contributed over 30% to the cost reduction of wind turbine prices over the period 2005–2017.

Explore AS, differentiate

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

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.

Get the output energy accurate
Get experts to handle the wind mill readings
Identify and eliminate any outliers to prevent misprediction. These outliers may happen rarely and some might be crucial, hence identifying them might be a difficult task.
Routing of the power supply based on the prediction made
Update the data regularly for the convenience for the user

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.

The supply of electricity produced by windmill has not always been stable due to the unpredictable weather conditions. Thereby, we try to build this system which can predict the power output based on the weather and other factors.

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)

find the right topology for installing wind mills, calculate usage and benefits; ,experts spend free time on volunteering work , cooperate with private or government electricity suppliers for providing power supply

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

Identify strong TR & EM

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.

Awareness on wind energy , continuous and stable supply of electricity, Sustainable Development

4. EMOTIONS: BEFORE / AFTER — EM

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.

Before: Complex , expensive, very technical
After: Wind energy becomes reliable source.

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.

Long-term wind power forecasting is to be performed based on daily wind speed data using machine learning algorithms and statistical methods as a SAAS model.

8. CHANNELS of BEHAVIOUR — CH

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

Take the energy output and weather readings and do the analysis on it. Promote the advantageous of the system in terms of efficiency thus gaining more power consumers.

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

Use the extracted power output units and use it to supply stable chain of electricity

Extract online & offline CH of BE

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