Project Title: crop yield production
Using data analytics

Project Design Phase-I - Solution Fit Template

Team ID: PNT2022TMIDxxxxxx

Define CS, fit into

1. CUSTOMER SEGMENT(S) — CS

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

- Demographic
- psychographic
- behavioural
- geographic

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.

Soil compaction
Surface sealing
Low levels of organic matter

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

- Climate change is the result of global warming
- Adopt and learn new technologies

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.

- Cope with climate change, soil erosion and biodiversity loss
- Satisfy consumers' changing tastes and expectations
- Meet rising demand for more food of higher quality
- Invest in farm productivity

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.

- Soil erosion
- patterns of rainfall and environmental situations

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)

- Increasing income
- Generting employment oppurtunities
- Reducing risk in agriculture
- Improving quality of rural life

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

Identify strong TR

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.

- Farmers face issues such as high costs of production and low returns,
- high taxes on agricultural raw material, etc.

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.

- Reduce dirty water around the farm
- Improve nutrient use.

8. CHANNELS of BEHAVIOUR — CH

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

- Remote sensing technologies
- Software applications
- Hardware & support systems

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.

- Nitrogen pollution
- Green house gas emission
- Emission
- land

8.2 OFFLINE

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

- Reduced consumption of water ,nutients,fertilizer.
- Reduced negative impact on the ecosystem and better efficiency
- Reduced chemical runoff into the natural water resources
- Reduced production cost and many more.