

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

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

The customer for this product is a farmer who yields crops.

CS

6. CUSTOMER CONSTRAINTS

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.

The biggest challenges faced by farmers in the agricultural sector are lack of information, high adoption costs, and security concerns, etc. Lack of network connectivity in rural areas, available devices and lack of technical knowledge are some factors that limit their choices of solution.

CC

5. AVAILABLE SOLUTIONS

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

Pesticides and fertilizers are used to protect crops from pests but overuse of them leads to destruction of crops and reduces soil quality. Conventional farming which relies on chemical intervention is used. Recycling of water can be done.

AS

Explore AS, differentiate

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

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.

Large consumption of natural resources in the agricultural sector need to be reduced. Decrease in quality of soil, which leads to decreased growth rates for all crops must be prevented. Proper monitoring of weather conditions must be maintained. Crops must be protected from pests and insects.

J&P

9. PROBLEM ROOT CAUSE

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.

Poor soil quality results from inadequate fertilization. Pests attack the crops due to seasonal changes, food or water shortage and loss of habitat. Because of population growth and rising standard of living, the demand for natural resources increases.

RC

7. BEHAVIOUR

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)

Use a proper drainage system to overcome the effects of excess water from heavy rain. Use of hybrid plants that are resistant to pests.

BE

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

Identify strong TR & EM

3. TRIGGERS

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

Inadequate water supply reduces yields and affects farmers profit. Labour and Energy cost is too expensive.

TR

4. EMOTIONS: BEFORE / AFTER

EM

BEFORE: Lack of knowledge in monitoring and maintenance > Random decisions > Low Yield
AFTER: Proper Monitoring and maintenance > Preventive measures > High Yield

10. YOUR SOLUTION

Use of IOT sensors enables to get accurate real time information such as temperature, humidity and soil condition. Precision agriculture is a management approach that uses technologies to enable farmers to make better decisions about where, when and how much to fertilize, irrigate, and spray pesticides.

SL

8. CHANNELS of BEHAVIOUR

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

Farmers seek information about weather conditions, preventive measures for crops through online.

8.2 OFFLINE

Awareness camps to be organized to teach the importance and advantages of the automation and IoT in the development of agriculture.

CH

Extract online & offline CH of BE