Project Title: IoT Based Smart Crop Protection System for Agriculture

Project Design Phase-I - Solution Fit Template

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Problem-Solution Fit canvas

Purpose / Vision: **To build IOT based Crop Protection System.**

Version: To Protect , Monitor and Sense the crops

Define CS, fit into CL

1. CUSTOMER SEGMENT(S) — CS

- Farmer have a minimum amount of land and he wants to plant crops and trees but he needs more amount of yield
- He wants to monitor and protect his agricultural land but he doesn't wants to spend more b

6. CUSTOMER LIMITATIONS EG. BUDGET, DEVICES — CL

- Mostly farmers won't have much knowledge about the technology.
- They don't want to invest more money on technology

5. AVAILABLE SOLUTIONS PLUSES & MINUSES — AS

- Automation irrigation system
- Already this solution is available but it doesn't have more features

Explore AS, differentiate

Focus on PR, tap into BE, understand RC

2. PROBLEMS / PAINS + ITS FREQUENCY — PR

- It is impossible to monitor the field every time
- They may suffer from sudden change in climatic conditions
- Sometimes farmer invest more money but they are not getting equal amount of yield
- They fear about the damage that are caused by cattles and birds
- It will Automattically show the correct crop for the soil
- Water scarcity is main reason for dry crops

9. PROBLEM ROOT / CAUSE — RC

- Damage caused by animals and birds
- Farmer can't predict weather
- Monitoring the field 24/7 is impossible
- Water Scarcity is the main problem

7. BEHAVIOR + ITS INTENSITY — BE

- Eventhough using the solution, customer visits the agricultural land often as the notifications are not sent properly
- As they don't have proper knowlege of using the software and system, existing solution is wasted
- At first they won't trust the solution
- All the existing system provides only one solution , so there is need for the farmer to do the rest of the work

Focus on PR, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS TO ACT — TR

- Tell the story of the problem you had faced and suffered and how wealthy you are now after using the solution
- Show the feedback video of the farmers who have benefited from this solution

4. EMOTIONS BEFORE / AFTER — EM

- They felt depressed as they got loss and no yield
- He will feel like that he had saved time and money.
- Farmer won't harm animals and birds

10. YOUR SOLUTION — SL

- Modern IoT technology to overcome their problem.
- Using sensors like ultra sonic sensors to protect crops from animals
- Automated irrigation system using humidity and temperature sensor
- Our software has lot of features for monitoring and accessing

8. CHANNELS of BEHAVIOR — CH

ONLINE

- Current humidity, temperature and other information are sent as notifications
- ON/OFF is automated and also can be manually accessed by the user remotely
- Software will show the current weather conditions

OFFLINE

- Automatic water irrigation
- Protecting crops from animals and birds
- Automatic spraying of fertilizer

Extract online & offline CH of BE

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Designed by Daria Nepriakhina / IdeaHackers.nl - we tailor ideas to customer behaviour and increase solution adoption probability.

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