Project Design Phase-I

Problem Solution Fit

Date	**01 October 2022**
Team ID	**PNT2022TMID04063**
Project Name	**IoT based smart crop protection system for agriculture**

Define CS, fit into CL

1. CUSTOMER SEGMENT(S) CS

Farmers are the customers

6. CUSTOMER LIMITATIONS EG. BUDGET, DEVICES CL

1) High adoption costs , security concerns.
2) Not aware of the implementation of IoT in agriculture.

5. AVAILABLE SOLUTIONS PLUSES & MINUSES AS

Monitor different parameters and mobile or web application make easily to farm the crop field .

Explore AS, differentiate

Focus on PR, tap into BE, understand RC

2. PROBLEMS / PAINS + ITS FREQUENCY PR

1) It's difficult to monitor and control
2) Ain't known if the application doesn't work properly.

9. PROBLEM ROOT / CAUSE RC

1) If temperature ,PH level ,humidity & light intensity makes the serious cause for the environment.
2) Farmer affected by less productivity which will affect in their profit.

7. BEHAVIOR + ITS INTENSITY BE

Direct related: Tries to find a solution to prevent this problem

Indirect related: Located in rural where internet connectivity might not be strong enough to facilitate fast transmission speeds.

Focus on PR, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS TO ACT TR

Create opportunities to lift people out of poverty in developing nations. (Over 60%)

4. EMOTIONS BEFORE / AFTER EM

BEFORE: Finances, Heavy work overload and conflict in relationship.

AFTER: It will easier to make more yield in

10. YOUR SOLUTION SL

"IoT based Smart crop protection system for agriculture" !!

It help farmers grow more food on less land by protection crops from pests, diseases and weeds as well as raising productivity per hectare.

8. CHANNELS of BEHAVIOR CH

ONLINE: The Data send through application for the farmers to know about the farms.

OFFLINE: The control action is taken by the farmers to monitor the farms.

Extract online & offline CH of BE