Project Design Phase-I

Problem Solution Fit

Date	19 September 2022
Team ID	PNT2022TMID26635
Project Name	Project- IoT based smart crop protection for agriculture
Maximum Marks	2 Marks

Problem Solution Fit template : IoT based smart crop protection for agriculture

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

- Customer who are unable to foresee animals entering their fields are farmers
- Animal intrusion on agricultural property results in crop loss,thus our target

6. CUSTOMER CONSTRAINTS CC

- The difficulties that customers encounter when animalsinterfere with agricultu ral life, and these weterm as constraints.
- Also,the loss that is encountere d and lack of resourcesfrom government.

5. AVAILABLE SOLUTIONS AS

- Customers use barrier and other boundary tools to avoid animals from trespassing

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBL EMS — J&P

- When animals enter agricultural grounds, a sensor will detect them and alert the consumers .
- Thus we need to eliminate the threat for our customer without causing any collateral damage

9. PROBLEM ROOT CAUSE — RC

- Farmers suffer , also it affects when animals tamper with the growth of the crops, thu s a better solution must be taken place so that the root problemcan be eliminated

7. BEHAVIOUR — BE

- Acustomers work of locating an animal ingress into the farming grounds is never easy

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

Identify strong TR & EM

3. TRIGGERS — TR

- Televisioncommercials and expert information from outsou rce are some of the triggering measures that can be adopted

4. EMOTIONS: BEFORE / AFTER — EM

- **BEFORE : Frustration, helplessness**
- **AFTER : Satisfaction, Calm state of mind**

10. YOUR SOLUTION — SL

- Proposing an automated method for judicious crop defense system by utilizing the internet o f things(IoT) to address this problemand also get the proper approach from farmer

8.CHANNELS of BEHAVIOUR — CH

Online:

- Farmerscan purchase IoT based solutions with the aid of numerous online channels

Offline:

- Trying to purchase IoT based devices from authorized vendors any officially whole sale stores

Identify strong TR & EM