Project Design Phase-I

Problem Solution Fit

Date	01 October 2022
Team ID	PNT2022TMID32996
Project Name	Project- IoT based smart crop protection for agriculture
Maximum Marks	4 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 animals interfere with agricultural life, and these we term as constraints.
- Also, the loss that is encountered and lack of resources from 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 / PROBLEMS 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, thus a better solution must be taken place so that the root problem can be eliminated

7. BEHAVIOUR BE

- A customers 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

- Television commercials and expert information from outsource 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 of things(IoT) to address this problem and also get the proper approach from farmer

8. CHANNELS of BEHAVIOUR CH

Online:

- Farmers can 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