SAVEETHA ENGINEERING COLLEGE AUTONOMOUS

Approved by AICTE | Affiliated to Anna University

TNEA CODE 1216

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IBM NALAIYA THIRAN PROJECT

Project Design Phase-I

Date	24 September 2022
Team ID	PNT2022TMID03479
Project Name	IoT Based Smart Crop Protection System for Agriculture
Maximum Marks	2 Marks

Problem Solution-Fit:

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Customers who are unable to foresee animals entering their fields are farmers. Animal intrusion on agricultural property results in significant crop loss, thus becoming 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 customer's 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 outsourceare some of the triggering measures that can be adopted.

4. EMOTIONS: BEFORE / AFTER EM

With the use of IoT systems, primitive farmers are quite satisfied with the great output of the nutritious crops as opposed to being disheartened by their inability to forecast the animals grazing in the fields that was followed in older technology.

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

8.1 ONLINE :
Farmers can purchase IoT-based solutions with the aid of numerous online channels.

8.2 OFFLINE
Trying to purchase IoT-based devices from authorized vendors or anyofficially registered wholesale stores.

Identify strong TR & EM