# Project Title: IoT based smart crop protection system for agriculture

## **Project Design Phase-I - Solution Fit Template**

### **Team ID: PNT2022TMID52180**

### Explore AS, differe 1. CUSTOMER SEGMENT(S) 6. CUSTOMER CONSTRAINTS 5. AVAILABLE SOLUTIONS AS Farmers and common people are the The crop protection methods which consists of the constraints such as the method of cultivation, increase in crop attacks, improper climate changes, irrigation system, cost Smart crop protection to protect the crops, smart irrigation system, smart pest control and geo fencing for crop protection system. customers. 2. JOBS-TO-BE-DONE / PROBLEMS J&P 9. PROBLEM ROOT CAUSE RC 7. BEHAVIOUR BE The smart crop protection system should One of the major problem faced by the The major problem faced by be introduced by which the crop can be protected. farmers is that the crops that are the farmers and the common people damaged by the wild animals. is that the damages caused to crops Due to the diseases and the pest attacks due to the sudden change in climatic The sensors used in the crop protection system will helps to know about the source of damage and thus the crops can be protected from damage. which will reduce the crop yield and conditions and the efficiency of the increases the need of food production soil is decreased. The productivity of the crop is reduced. The buzzer in the smart crop protection system which can be used to detect whether any attacks of animals happened in the crop field. Using the smart crop protection system the farmers and the people can work in the real

### 3. TRIGGERS

Farmers and the people are able to identify the attack against the crops and can clear the problem with the help of the smart protection technology to protect the crops.



#### **10. YOUR SOLUTION**

Inorder to overcome the issues we need to propose a crop protecting and monitoring app with the modern technology.

### **8.**CHANNELS of BEHAVIOUR



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## 8.1 ONLINE

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People and wellwishers share the posts through social media and spread awareness by forwarding messages about smart crop protection to protect the crops from danger.

# 8.2 OFFLINE

## 4. EMOTIONS: BEFORE / AFTER



Before the system the farmers were highly depressed and worried due to the loss of crops and reduction in crop yield.

. After using the system the farmers and the customers were happy and highly satisfied by increasing the productivity rate.

Spreading awareness about the system by giving proper training and other programs in order to help farmers and the society.