# Project Design Phase-I - Solution Fit

**Project Title: IOT Based Smart Crop Protection System For Agriculture.**

**Team ID:** PNT2022TMID30731

Define CS, fit into CC

### 1. CUSTOMER SEGMENT(S) — CS

The customers who are going to adapt this project contains of Large scale farmers.

### 6. CUSTOMER CONSTRAINTS — CC

1) High adoption costs , security concerns.
2) Not aware of the implementation of IOT in agriculture.
3) Use it according to the climate change.

### 5. AVAILABLE SOLUTIONS — AS

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

Explore AS, differentiate

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

### 2. JOBS-TO-BE-DONE / PROBLEMS — J&P

It requires an unlimited or continuous internet connections to be successful. Sensor did not work properly all the time.

### 9. PROBLEM ROOT CAUSE — RC

If temperature , PH level, humidity and light intensity makes the serious cause for the environment.

### 7. BEHAVIOUR — BE

Located in rural where internet connectivity might not be strong enough to facilitate fast transmission speeds. The customer will give the proper products in the crop.

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

Identify strong TR & EM

### 3. TRIGGERS TR

Create opportunities to lift people out of poverty in developing nations
.smart farming reduces the ecological footprint.

### 4. EMOTIONS: BEFORE / AFTER EM

Before:

Farmers can't protect the crops until 24 hours.

After:

Farmers can easily protect the crops until 24 hours.

### 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. The sensors and drones sensed information from field and protect the crop.

### 8.CHANNELS of BEHAVIOUR CH

#### 8.1 ONLINE

The Data send through application and sensor data will send to the farmer.

#### 8.2 OFFLINE

The control action is taken by the farmers to monitor the farms .Through the immediate reaction.

Extract Online and offline CH of BE