

## 1. CUSTOMER SEGMENT(S)

CS

Smart farming helps farmers to better understand the important factors

- ✓ Water
- ✓ Topography
- ✓ Vegetation
- ✓ Soil types

## 6. CUSTOMER CONSTRAINTS

CC

- ✓ Water Conservation
- ✓ Real –Time Data and production insight
- ✓ Lowered Operation costs
- ✓ Increased quality of production
- ✓ Remote monitoring

## 5. AVAILABLE SOLUTIONS

AS

- ✓ It is possible to optimise the monitoring of farms , mainly through smart sensors capable of measuring everything from solar radiation to leaf moisture and stem diameter
- ✓ The temperature of each animal in the case of livestock , making its easier

## 2. JOBS-TO-BE-DONE / PROBLEMS

J&P

- ✓ To control the flow of water using IoT
- ✓ To count the number of earthworms using PIR sensor
- ✓ To identify the temperature and humidity using DHT11 sensor
- ✓ To identify the soil moisture using FC-28 sensor

## 9. PROBLEM ROOT CAUSE

RC

- ✓ Cope with climate change ,soil erosion and biodiversity loss
- ✓ Satisfy consumer's changing tastes and expectations
- ✓ Meet rising demand for more food of higher quality
- ✓ Invest in farm productivity

## 7. BEHAVIOUR

BE

- ✓ It is used to measure the soil quality of the agriculture field for crop irrigation
- ✓ To design the framework at less cost
- ✓ To monitor soil fertility and plant growth

## 3. TRIGGERS

TR

- ✓ Decreasing resource input will save the farmer money and labor, and increased reliability of spatially explicit data will reduce risks

## 4. EMOTIONS: BEFORE / AFTER

EM

BEFORE : Fear of smart farming, High Cost  
AFTER : Cost Effective , Accuracy

## 10. YOUR SOLUTION

SL

- ✓ Livestock tracking and Geo fencing
- ✓ Smart logistics and warehousing
- ✓ Smart pest management
- ✓ Smart Greenhouses
- ✓ Climate monitoring and forecasting
- ✓ Remote crop monitoring

## 8.CHANNELS of BEHAVIOUR

CH

### 1. ONLINE

Cloud storage helps to store a large quantity of sensor data in devices

### 8.2 OFFLINE

Detection of earthworms ,measure the temperature of the soil, humidity ,climate condition and moisture present in the soil