**Project Title: – IOT Enabled Smart Farming Application**

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

**Team ID:** PNT2022TMID24462

Define CS, fit into CC

CS

1.CUSTOMER SEGMENT(S)

Farmers and Large landowners must understand the potential of IoT market for agriculture by installing smart technologies to increase competitiveness and sustainability in their production.

CC

6. CUSTOMER CONSTRAINTS

IoT in the agricultural sector are lack of information, high adoption costs, and security concerns, etc. Most of the farmers are not aware of the implementation of IoT in agriculture.

5. AVAILABLE SOLUTIONS

Remote crop and soil monitoring, With the help of smart farming system, moisture and fertility of soil along with crops growth rate can be monitored remotely through real time animation and graphics via a smartphones.

Explore AS, differentiate

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

J&P

1.Lack of Security
2. Data collection frequency

## 9. PROBLEM ROOT CAUSE

RC

1.Since IoT devices interact with older equipment they have access to the internet connection, there is no guarantee that they would be able to access drone mapping data or sensor readouts by taking benefit of public connection.
2. Because of the high variety of data types in the agricultural industry, ensuring the optimal data collection frequency can be problematic. The data from field-based, aerial and environmental sensors, apps, machinery, and equipment, as well as processed analytical data, can be a subject of restriction and regulations.

## 7. BEHAVIOUR

BE

Smart farming applications should be tailored for use in the field. A business owner or farm manager should be able understand the working of it and get into the details about the issues.

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

Identify strong TR & EM

**3. TRIGGERS**

TR

Poor Internet Connectivity in Farm Most farms are located in remote locations where internet connectivity might not be strong enough to facilitate fast transmission speeds

**4. EMOTIONS: BEFORE / AFTER**

EM

BEFORE: Lack of knowledge in weather forecasting, Random decisions , low yield, lack of knowledge in hardware

AFRER: Data from reliable source ,correct decision ,high yield

**10. YOUR SOLUTION**

SL

Our product provides better Crop Monitoring it involves the use of sensors, drones, and satellites to monitor crop health and identify locations requiring attention. Crop monitoring systems also include all data such as crop health, humidity, rainfall, temperature, and more.

**8.CHANNELS of BEHAVIOUR**

CH

ONLINE: Providing online assistance to the farmer, regarding the knowledge about the device, and by giving more knowledge about iot and assistance about the crop monitoring.

OFFLINE: By conducting Awareness camps to teach the importance and advantages of the automation and IoT in the development of agriculture

Identify strong TR & EM