Project Title: Smart Farming – IoT Enabled Smart Farming Application Project Design Phase-I - Solution Fit Template Team ID: PNT2022TMID01891

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

Smart farming helps farmers to better understand the important factors such as water, topography, aspect, vegetation and soil types. This allows farmers to determine the best uses of scarce resources within their production environment and manage these in an environmentally and economically sustainable manner

6. CUSTOMER CONSTRAINTS — CC

Production constraints have been identified that contribute to explaining the yield gap, i.e. limited water availability, limited nutrient availability, inadequate crop protection, insufficient or inadequate Page 4 Major Challenging Constraints to Crop Production Farming System and Possible Breeding to Overcome

5. AVAILABLE SOLUTIONS — AS

Which solutions are available to the customers when they face the problem?

Greenhouse automation.
Crop management.
Cattle monitoring and management.
Precision farming.
Agricultural drones.
Predictive analytics for smart farming.
End-to-end farm management systems.

Explore AS, differentiate

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

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

Furthermore, farms with tall, dense trees and/or hilly terrains also face problems in receiving GPS signals which makes it even more difficult to implement precision agriculture techniques in such locations.

9. PROBLEM ROOT CAUSE — RC

The challenges of a smart agriculture system include the integration of these sensors and tying the sensor data to the analytics driving automation and response activities.

7. BEHAVIOUR — BE

What does your customer do to address the problem and get the job done?

StarTree ThirdEye is an Anomaly Detection, Monitoring, and Root-Cause Analysis Platform. Speak With an Expert to See How We Can Kickstart Your Real-Time Data Monitoring Efforts. Statistical Detection. Quickly Solve Problems. Supports Multiple Plugins

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

3.
TRIGGERS

TR

Smart farming sensors can be placed right in the ground. There, it shall read and analysis the derived data and help improve farming practices

4. EMOTIONS: BEFORE / AFTER

EM

Smart farming can make agriculture more profitable for the farmer. Decreasing resource inputs will save the farmer money and labor, and increased reliability of spatially explicit data will reduce risks

10. YOUR SOLUTION

SL

Livestock tracking and Geo fencing. Smart logistics and warehousing. Smart pest management.
Smart Greenhouses.
Climate monitoring and forecasting.
Predictive analytics for crops and livestock.
Remote crop monitoring.

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

Sensors for soil scanning and water, light, humidity, and temperature management. Telecommunications technologies such as advanced networking and GPS. Hardware and software for specialized applications and for enabling IoT-based solutions, robotics and automation.

8.2 OFFLINE

Smart farming" is an emerging concept that refers to managing farms using technologies like IoT, robotics, drones and AI to increase the quantity and quality of products while optimizing the human labor required by production. The Internet of Things (IoT) has provided ways to improve nearly every industry imaginable