**Project Title: Smart Farming-IOT Enabled smart farming application Project Design Phase-I** - **Solution Fit Template**

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

**Team ID:** PNT2022TIMD51719

**Explore AS, differentiate**

**Deﬁne CS, ﬁt into CC**

**AS**

**5. AVAILABLE SOLUTIONS**

Implementation of land reforms

Interplant

Plant more densely

Plant more crop

Raised beds

Smart water management

Heat tolerant varieties

1)High adoption costs, security concerns

2) Not aware of implementation of IOT in Agri

**CC**

**6. CUSTOMER CONSTRAINTS**

**CS**

**1. CUSTOMER SEGMENT(S)**

* Corporate Agribusiness
* Agro-SME
* Farmers

**Explore AS, differentiate**

**Define CS, fit into CC**

**BE**

**7. BEHAVIOUR**

Online: farmers can monitor all the

sensor parameters by using web or mobile

application even if the farmer is not near

his field

**RC**

**9. PROBLEM ROOT CAUSE**

Connectivity in rural areas

Cope with climate change, soil erosion and biodiversity loss

Satisfy customer’s changing tastes and expectations

Meet rising demand for more food of higher quality

High adaptive cost

Lack of information

**J&P**

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

1. Monitoring of climate conditions

2. Greenhouse automation

3. Crop management

4. Cattle monitoring and management

5. Precision farming

6. Agricultural drones

7. Predictive analytics for smart farming

8. End-to-end farm management systems

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

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**Identify strong TR & EM**

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| --- | --- | --- | --- | --- |
| **Identify strong TR & EM** | **3. TRIGGERS TR**  Optical information, virtual fence technologies allow cattle herd management based remote-sensing signals and sensors or actuators attached to the livestock | **10. YOUR SOLUTION SL**  Sensor: Visual sensor and biosensors constitute a significant part of the solution to automate the monitoring process of farm animals. Sensors and biosensors in this context refer to devices that ensure data about a specific physical, chemical.  The global positioning system(GPS): is satellite based standard sensing technology used for tracking farm animal’s location. | 1. **CHANNELS of BEHAVIOUR CH**     1. **ONLINE**  Digitalization innovation as a means to increase agricultural sustainability  * 1. **OFFLINE**   Well-informed, technology-interested young crop farmers in Germany rate SFT environmental performance with caution.  AKIS stakeholders agree that most barriers to adoption are linked to technologies’ and infrastructures’ deficits  Innovation targeted communication between farmers and technology developers or providers is not well developed.  Multi-actor approaches can be substantial to link various stakeholders although no direct impact may be observed.  . |  |
| **4. EMOTIONS: BEFORE / AFTER EM**  Increased production: the optimization of all the processes related to agriculture and livestock-rearing increases production rates.  Water saving: weather forecasts and sensors that measure soil moisture and for the right length of time. |