**Project Design Phase-I**
**Proposed Solution**

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| Date | 19.10.2022 |
| Team ID | PNT2022TMID41134 |
| Project Name | Smart Farmer – IOT Enabled Smart Farming Application |
| Maximum Marks | 4 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

| S.No. | Parameter | Description |
|---|---|---|
| 1. | Problem Statement (Problem to be solved) | ❖ Farmers are under pressure to produce more food AND use less energy and water in the process.<br>❖ A remote monitoring and control system will help farmers deal effectively with these pressures. |
| 2. | Idea / Solution description | ❖ Smart farming refers to managing farms using modern Information and communication technologies to increase the quantity and quality of products while optimizing the human labor required.<br>❖ Among the technologies available for present-day farmers are: Sensors: soil, water, light, humidity, temperature management |
| 3. | Novelty / Uniqueness | ❖ Smart farming combines concepts (precision agriculture, land management), scientific fields (earth observation, climate science) and cutting-edge technologies (image processing, GIS, UAV, multispectral/hyperspectral imaging) that could improve the agricultural production.<br>❖ Each one of the aforementioned subfields involves different techniques and methods that offer the capability of being explored in depth. |
| 4. | Social Impact / Customer Satisfaction | ❖ Major tech innovations in farming such as automation and robotics, livestock technology, modern greenhouse practices, precision agriculture and artificial intelligence and blockchain are enabling the shift towards modern farming practices |

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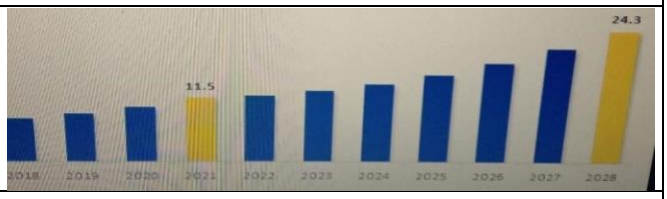
| | | ❖ The journey from the farmer to the consumer in a food business is paramount to ensuring quality and taste for the consumer while empowering farmers. |
| 5. | Business Model (Revenue Model) |  |
| 6. | Scalability of the Solution | ❖ Scalability in smart farming refers to the adaptability of a system to increase the capacity,the number of technology device such as sensor and actuators |
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