

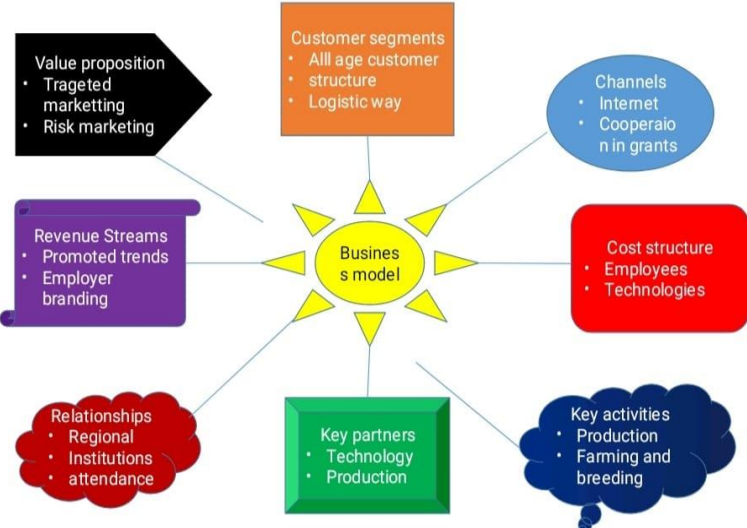
Project Design Phase-I Proposed Solution

Date	25 September 2022
Team ID	PNT2022TMID49497
Project Name	Smart Farmer – IoT Enabled Smart Farming Application
Team Lead	T.VarunPandiyan
Team Members	S.Gunaseelan, M.SuryaPrakash, R.Rajadurai
Maximum Marks	2 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)	Smart Farmer – IoT Enabled Smart Farming Application
2.	Idea / Solution description	This system is Arduino Microcontroller-IOT based smart farming application and this is help to increase Production using a microcontroller from PIC family. To increasing the production and prevent plants from unnecessary disease, we use Humidity & Temperature, PH level sensor etc ., Notify the collected data to Mobile device with the help of Arduino & Sensors.
3.	Novelty / Uniqueness	Prevent plant prior from disease and abnormal growth we need to find NPK level and Monitoring water Quality.
4.	Social Impact / Customer Satisfaction	In order to meet the needs of consumers and increase profit value, farms need to demonstrate that products offered to the market are clean products also, it helps to track and trace agrifood supply chains production process and trace the origin of agricultural products. This solution has successfully supported the tracing of food and agricultural products through QR codes, improving product quality and ensuring the clear traceability of products, thereby allowing consumers to know the product's entire history.

5.	Business Model (Revenue Model)	 <pre> graph TD VP[Value proposition • Targeted marketing • Risk marketing] --> BM((Business model)) CS[Customer segments • All age customer structure • Logistic way] --> BM CH[Channels • Internet • Cooperation in grants] --> BM CST[Cost structure • Employees • Technologies] --> BM KA[Key activities • Production • Farming and breeding] --> BM KP[Key partners • Technology • Production] --> BM R[Relationships • Regional • Institutions • attendance] --> BM RS[Revenue Streams • Promoted trends • Employer branding] --> BM </pre>
6.	Scalability of the Solution	<p>Using IoT sensors, prevent the plants from abnormal growth and unnecessary disease & Monitoring the air humidity and temperature to Improve quality and production of the crop, its beneficial for both Consumers and Farmers.</p>