

# Project Design Phase - I

## Problem Solution Fit

Date	05 October 2022
Team ID	PNT2022TMID20305
Project Name	Estimate the Crop yield Using Data Analytics

Define CS, fit into CL	<b>1. CUSTOMER SEGMENT(S)</b> <span>CS</span> The farmer, who primarily manages the crops in the field, is our target client.	<b>6. CUSTOMER LIMITATIONS</b> <small>EG. BUDGET, DEVICES</small> <span>CL</span> 1) Exorbitant adoption fees and safety worries. 2) Ignorant of agriculture's application. 3) Apply it in accordance with climate change	<b>5. AVAILABLE SOLUTIONS</b> <small>PLUSES &amp; MINUSES</small> <span>AS</span> Tracking several indicators with a smartphone or online application makes farming an agricultural field simple..	Explore AS, differentiate
	<b>2. PROBLEMS / PAINS</b> <small>+ ITS FREQUENCY</small> <span>PR</span> <ul style="list-style-type: none"> <li>Controlling the mechanism is challenging.</li> <li>It is unknown if the application is not function correctly.</li> </ul>	<b>9. PROBLEM ROOT / CAUSE</b> <span>RC</span> If the environment's serious contributing factors include temperature, PH level, humidity, and light intensity.	<b>7. BEHAVIOR</b> <small>+ ITS INTENSITY</small> <span>BE</span> Located in a rural area with weak internet access that might not allow for quick transmission speeds.  The right goods from the crop will be provided by the customer.	
Identify strong TR & EM	<b>3. TRIGGERS TO ACT</b> <span>TR</span> Create possibilities to help individuals in underdeveloped countries escape poverty. Smart farming lessens its impact on the environment.	<b>10. YOUR SOLUTION</b> <span>SL</span> <b>"Smart crop protection for agriculture based on data analytics"</b> - Helps farmers produce more food on a less amount of land by protecting crops from pests, diseases, and weeds and increasing production per hectare.  Drones and sensors sensed data from the field to protect the crop.	<b>8. CHANNELS of BEHAVIOR</b> <span>CH</span> <b>ONLINE:</b> The farmer will receive the data sent through the application and sensor data.  <b>OFFLINE:</b> Farmers take control action to keep an eye on their land through quick response.	Extract online & offline CH of BE
	<b>4. EMOTIONS</b> <small>BEFORE / AFTER</small> <span>EM</span> <b>BEFORE:</b> Finances, heavy workload, and relationship difficulty. <b>AFTER:</b> people learn more about crop protection measures that increase production.			