

Project Design Phase-I Problem – Solution Fit Template

Date	05 October 2022
Team ID	PNT2022 TMID49537
Project Name	Project – Smart Farmer - IOT Enabled Smart Farming Application
Maximum Marks	2 Marks

Problem – Solution Fit Template:

Problem-Solution fit canvas 2.0 Purpose/ Vision

<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">Define CS, fit into CC</div> <div> <p>1. CUSTOMER SEGMENT(S) CS</p> <p>Who is your customer? i.e. working parents of 5-6 kids</p> <p>i) Farmers who want to finish his jobs in smart way.</p> </div> </div>	<div style="display: flex; justify-content: space-between;"> <div></div> <div> <p>6. CUSTOMER CONSTRAINTS CC</p> <p>What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices.</p> <p>i) Spending more manpower.</p> <p>ii) High cost.</p> </div> </div>	<div style="display: flex; justify-content: space-between;"> <div></div> <div> <p>5. AVAILABLE SOLUTIONS AS</p> <p>Which solutions are available to the customer when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital note taking</p> <p>i) Sensors are used to detect the farmer it is possible to find the positive solution.</p> </div> </div>
<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">Focus on J&P, tap into BE, understand RC</div> <div> <p>2. JOBS-TO-BE-DONE/ PROBLEMS J&P</p> <p>Which jobs to be done or problems do you address for your customers? There could be more than one ex.</p> <p>JOB-TO-BE-DONE</p> <ul style="list-style-type: none"> i) Biodegradable waste. ii) Clean Surrounding. iii) Pesticide Free. iv) Food safe. v) Less waste & Grow unique crops. <p>PROBLEMS</p> <ul style="list-style-type: none"> i) Chemical Fertilizers. ii) Coping with climate change. iii) Soil erosion and biodiversity loss. iv) Small and Fragmented land holding. v) Demand for more food of higher quality. </div> </div>	<div style="display: flex; justify-content: space-between;"> <div></div> <div> <p>9. PROBLEM ROOT CAUSE RC</p> <p>What is the real reason that this problem exists? What is the backstory behind the need to do this job? i.e. customers have to do it because of the change in regulations.</p> <p>i) Analyzing and giving solution.</p> <p>ii) Weather condition poor and monitor</p> </div> </div>	<div style="display: flex; justify-content: space-between;"> <div></div> <div> <p>7. BEHAVIOUR BE</p> <p>What does your customer do to address the problem and get the job done? i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customer spends time in volunteer work (i.e. Greenpeace)</p> <p>i) The integration of these sensors and tying the sensor data to the analytics driving automation and response activities.</p> <p>ii) Coping with climate change, soil erosion and biodiversity loss.</p> <p>iii) Satisfy consumers' changing tastes and expectations.</p> <p>vi) Meet rising demand for more food of higher quality.</p> </div> </div>
<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">Identify strong TR & EM</div> <div> <p>3. TRIGGERS TR</p> <p>What triggers customer to start? i.e. seeing his neighbour installing solar panel, reading about a more efficient solution in the news.</p> <p>i) Economic and Environmental based motivations, organizing training, Explained about smart farming benefits to farmers.</p> </div> </div>	<div style="display: flex; justify-content: space-between;"> <div></div> <div> <p>10. YOUR SOLUTION SL</p> <p>If you are working on an existing business, write down your current solution first. If it isn't the case, start with a solution that fits within customer limitations, solves a problem and matches customer behaviour.</p> <p>i) Farmers are under pressure to produce more food and use less energy and water in the process.</p> <p>ii) Remote monitoring and control system will help farmers will effectively with these pressure.</p> <p>iii) Agricultural operations (water 60% consumed each year - Now more than ever, new technologies for water conservation must be adopted.</p> </div> </div>	<div style="display: flex; justify-content: space-between;"> <div></div> <div> <p>8. CHANNELS/ BEHAVIOUR CH</p> <p>8.1 ONLINE What kind of action do customers take online? Extract online channel from #7</p> <p>i) It provides growers a quick and easy way to build relationships and interact with people in agriculture.</p> <p>8.2 OFFLINE What kind of action do customers take offline? Extract offline channel from #7 and use them to promote development.</p> <p>i) When you buy organic fruits and vegetables directly from the farmers who made them, they are able to receive all profits, not just a portion of them.</p> </div> </div>



Problem-Solution canvas is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 License Created by Daria Nepriakhina/ Amaltama.com

