

## Project Design Phase-I - Solution Fit Template

### Project Title: Smart Farmer - IOT Enabled Smart Farming Application

Define CS, fit into CC	<b>1. CUSTOMER SEGMENT(S)</b> <span>CS</span> Who is your customer? i.e. working parents of 0-5 y.o. kids  ❖ Farmers are the customers of our application.	<b>6. CUSTOMER CONSTRAINTS</b> <span>CC</span> 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.  ❖ The availability of network connection and devices are the constraints for the farmers. ❖ The most common challenge for the Internet of Things in agriculture is connectivity. Every area doesn't have proper internet connectivity.	<b>5. AVAILABLE SOLUTIONS</b> <span>AS</span> Which solutions are available to the customers 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 '❖ Weather plays a very significant role when it comes to Agriculture sector. In agriculture, there is almost everything depend upon the climate condition. ❖ In Smart Farming, temperature, humidity, light intensity and soil moisture can be monitored through various sensors. ❖ These are again used by the reactive system to trigger alerts or automate process such as water and air control.	Explore AS, differentiate
	<b>2. JOBS-TO-BE-DONE / PROBLEMS</b> <span>J&amp;P</span> Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.  ❖ Smart agriculture makes it possible to avoid challenges and remove all issues that may arise during farming processes. So the quality of the product is growing and consumers get a good product of high quality.	<b>9. PROBLEM ROOT CAUSE</b> <span>RC</span> What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. customers have to do it because of the change in regulations. ❖ The effects of climate change affect farmers ability to grow the food we all need. ❖ Increasingly volatile weather and more extreme events -like floods and droughts- change growing seasons, limit the availability of water, allow weeds, pests and fungi to thrive and can reduce crop. ❖ Soil erosion is reducing the amount of land available for agriculture, and declining biodiversity affects the polination of crops.	<b>7. BEHAVIOUR</b> <span>BE</span> 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: customers spend free time on volunteering work (i.e. Greenpeace)  This product aims to: ❖ Monitoring of climatic conditions. ❖ Precision Farming. ❖ Crop management. ❖ Maximum use of water efficiently	
Identify strong TR & EM	<b>3. TRIGGERS</b> <span>TR</span> What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.  ❖ Smart agriculture makes it possible to avoid challenges and remove all issues that may arise during farming processes. So the quality of the product is growing and consumers get a good product of high quality.	<b>10. YOUR SOLUTION</b> <span>SL</span> If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality. If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.  This product aims to: ❖ Monitoring of climatic conditions. ❖ Precision Farming. ❖ Crop management. ❖ Maximum use of water efficiently ❖ Control of soil erosion and maximum crop yield.	<b>8. CHANNELS of BEHAVIOUR</b> <span>CH</span> <b>8.1 ONLINE</b> What kind of actions do customers take online? Extract online channels from #7  <b>8.2 OFFLINE</b> What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.  <u>ONLINE:</u> Providing online assistance to the farmer, for providing Knowledge about the access of our product and how efficiently it will increase the product quality.  <u>OFFLINE:</u> Awareness about how agriculture will be improved by using Internet of Things and how to use our product in rural areas.	Identify strong TR & EM
	<b>4. EMOTIONS: BEFORE / AFTER</b> <span>EM</span> How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure > confident, in control - use it in your communication strategy & design.  <u>Before:</u> The Customers are unable to predict the accurate climatic conditions and also productions. <u>After:</u> Accuracy in increased production with high quality and Better Sustainability.			