

Project Design Phase-I – solution Fit

Project title: - SmartFarmer - IoT Enabled Smart Farming Application

Team ID: PNT2022TMID21342

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) <small>Who is your customer? i.e. working parents of 0-5 y.o. kids</small>	6. CUSTOMER CONSTRAINTS <small>What constraints prevent your customers from taking action to deal with changes of solutions? i.e. spending money, budget, no cash, network connection, available devices</small>	5. AVAILABLE SOLUTIONS <small>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 their solutions have? i.e. pen and paper</small>	Explore AS, differentiate
	<p>The customer for this product is a farmer who grows crops. Our goal is to help them, monitor field parameters remotely. This product saves agriculture from extinction.</p>	<p>Using a large number of sensors is difficult. An unlimited or continuous internet connection is required for success.</p>	<p>The irrigation process is automated using IoT. Meteorological data and field parameters were collected and processed to automate the irrigation process. Disadvantages are efficiency only over short distances, and difficult data storage.</p>	

Focus on JAP, top 100 BE, understand RC	2. JOBS-TO-BE-DONE / PROBLEMS <small>Which jobs to be done (or problems) do you address for your customers? These could be more than one, explore different roles</small>	9. PROBLEM ROOT CAUSE <small>What is the real reason that this problem exists? What is the logic stack behind the need to do this job?</small>	7. BEHAVIOUR <small>What does your customer do to address the problem and get the job done? i.e. directly related, feed the right other parcel installer, calculate usage and benefits, manually accounted, systematic spend time doing on supporting work (i.e. timekeeping)</small>	Focus on JAP, top 100 BE, understand RC
	<p>The purpose of this product is to use sensors to acquire various field parameters and process them using a central processing system. The cloud is used to store and transmit data using IoT. The Weather API is used to help farmers make decisions. Farmers can make decisions through mobile applications.</p>	<p>Frequent changes and unpredictable weather and climate made it difficult for farmers to engage in agriculture. These factors play an important role in deciding whether to water your plants. Fields are difficult to monitor when the farmer is not at the field, leading to crop damage.</p>	<p>Use a proper drainage system to overcome the effects of excess water from heavy rain. Use of hybrid plants that are resistant to pests.</p>	

3. TRIGGERS <small>What triggers customers to act? i.e. seeing their neighbor installing solar panels, calling their cousin who offers advice in the town</small>	10. YOUR SOLUTION <small>If you are working on an existing business, what have your customers achieved from CS to the company and how have you solved it for them? If you are working on a new business proposition, what have it made and how did it do the same and how you will solve the problem that the market currently has, what a problem and whether customer behaviour</small>	8. CHANNELS of BEHAVIOUR 8.1 ONLINE <small>What kind of channels do customers like online? (Email, online support, etc.)</small> 8.2 OFFLINE <small>What kind of channels do customers like offline? (Business offline channels from IP and non-IP, etc.)</small>
4. EMOTIONS: BEFORE / AFTER <small>How do customers feel when they face a problem or a job and afterwards? i.e. love, interest, confidence, etc. (small) - not at all (over communication strategy & design)</small>	<p>Our product collects data from various types of sensors and sends the values to our main server. It also collects weather data from the Weather API. The final decision to irrigate the crop is made by the farmer using a mobile application.</p>	<p>ONLINE: Providing online assistance to the farmer, in providing knowledge regarding the pH and moisture level of the soil. Online assistance to be provided to the user in using the product</p> <p>OFFLINE: Awareness camps to be organized to teach the importance and advantages of the automation and IoT in the development of agriculture.</p>