**Project Title:** Smart Farmer – IoT Enabled Smart Farming Application **Project Design Phase-I** - **Solution Fit Template Team ID:** PNT2022TMID04642

**Focus on J&P, tap into BE, understand RC**

**Explore AS, differentiate**

**Deﬁne CS, ﬁt into CC**

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 notetaking

The irrigation process is automated and the data collected from the sensors and the weather data can be used by the farmers

**AS**

**5. AVAILABLE SOLUTIONS**

Which solutions are available to the customers when they face the problem

What constraints prevent your customers from taking action or limit their choices

of solutions?

Using many sensors is difficult. An unlimited or continuous internet connection may be required for success.

**CC**

**6. CUSTOMER CONSTRAINTS**

**CS**

**1. CUSTOMER SEGMENT(S)**

Who is your customer?

The customers for this product are farmer. The goal of the product is to help them, monitor field parameters remotely. This product can saves agriculture from extinction.

**Explore AS, differentiate**

**Define CS, fit into CC**

Use a proper drainage system to overcome the effects of excess water from heavy rain. Use of hybrid plants that are resistant to pests.

**BE**

**7. BEHAVIOUR**

What does your customer do to address the problem and get the job done?

**RC**

**9. PROBLEM ROOT CAUSE**

What is the real reason that this problem exists? What is the back story behind the need to do this job?

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.

**J&P**

**2. JOBS-TO-BE-DONE / PROBLEMS**

Which jobs-to-be-done (or problems) do you address for

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. your customers? There could be more than one; explore different sides.

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**Identify song TR & EM**

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| --- | --- | --- | --- | --- |
| **Identify strong TR & EM** | **3. TRIGGERS TR**  What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efﬁcient solution in the news.  Farmers find it difficult to provide correct amount of irrigation. Inadequate water supply reduces yields and affects farmers' profit levels. Farmers have a hard time predicting the weather. | **10. YOUR SOLUTION SL**  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.  The app 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. | 1. **CHANNELS of BEHAVIOUR CH**     1. **ONLINE**   What kind of actions do customers take online? Extract online channels from #7   * 1. **OFFLINE**   What kind of actions do customers take ofﬂine? Extract ofﬂine channels from #7 and use them for customer development.  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.  OFFLINE: Awareness camps to be organized to teach the importance and advantages of the automation and IoT in the development of agriculture. |  |
| **4. EMOTIONS: BEFORE / AFTER EM**  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.  BEFORE: Lack of weather predicting and forecasting → Random decisions → low yield. AFTER: Data from reliable source → correct decision → high yield |