# Project Title: Estimate the crop yield using data analytics Project Design Phase-I - Solution Fit Template Team ID:  PNT2022TMID39239

## 1. CUSTOMER SEGMENT(S)

Traditionally the analysis was based on various seasons and climatic changes. Since they had no idea about different techniques to improve productivity, they kept using the regular manures and usual irrigation techniques

Most of the farmers are not sure about the crop yield and what products to be used to get maximum productivity. They have no source to gain information about this.

Farmers who wants to predict crop yield in their field

**Define CS, fit into CC**

Who is your customer?

**6. CUSTOMER CONSTRAINTS**

**CS**

**5. AVAILABLE SOLUTIONS**

Which solutions are available to the

**Explore AS, differentiate**

**CC**

**AS**

i.e. working parents of 0-5 y.o. kids

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.

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 notetaking

**2. JOBS-TO-BE-DONE / PROBLEMS J&P**

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

**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?

i.e. customers have to do it because of the change in regulations.

**RC**

**7. BEHAVIOUR**

**BE**

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)

To address the problem they usually use the regular manures that could improve productivity to some extent. For prediction they usually depend on the climatic and seasonal changes.

Farmers have very less knowledge about why the crops get damaged because of various reasons. This is why they are not able to gain maximum profit out of it. The need for this job is to meet out this disadvantage.

Our aim is to predict the crop yield in order to provide the farmers with the best crops with minimal expenditure.

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

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

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| --- | --- | --- | --- | --- |
| **Identify strong TR & EM** | **3. TRIGGERS TR**  What triggers customers to act? i.e. seeing their neighbor installing solar panels, reading about a more efficient solution in the news.  Seeing other farmers getting good productivity rates compared to their yield. | **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 behavior.  By choosing a dataset and performing analysis on it to find various trends out of it, we will be recommending farmers various techniques to improve productivity based on location, soil type etc. | **8. CHANNELS of BEHAVIOUR CH**  **8.1 ONLINE**  What kind of actions do customers take online? Extract online channels from #7  NIL  **8.2 OFFLINE**  What kind of actions do customers take ofﬂine? Extract ofﬂine channels from #7 and use them for customer development.  Information and various techniques to improve productivity will be provided to the farmers. | **Extract online & offline CH of BE** |
| **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.  They get confused about the mistake that happened in the process. They get frustrated to |