

## Project Design Phase-I Problem – Solution Fit Template

Date	19 September 2022
Team ID	PNT2022TMID15537
Project Name	Project - Estimate the crop yield using data analytics
Maximum Marks	2 Marks

### Problem – Solution Fit Template:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

### Purpose:

- ☐ Solve complex problems in a way that fits the state of your customers.
- ☐ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- ☐ Sharpen your communication and marketing strategy with the right triggers and messaging.
- ☐ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- ☐ **Understand the existing situation in order to improve it for your target group.**

Project Title: Estimate the crop yield using data analytics

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Define CS, fit into CC

Focus on J&P, fit into BE, understand RC

Explore AS, differentiate

Focus on J&P, fit into BE, understand RC

Identify strong TR & EM

Identify strong TR & EM

<div>1. CUSTOMER SEGMENT(S)<div>CS</div></div> <div>1.customer who is unable to estimate the yield of the crop.</div> <div>2.customer find it difficult because it requires more statistical data to be Analyzed</div> <div>3.customer is the person who involved in agricultural sector.</div>	<div>6. CUSTOMER CONSTRAINTS<div>CC</div></div> <div>1.Too much costs of pesticides</div> <div>2.No proper system for efficient storage of natural resources</div> <div>3.Too much of data to be analyzed which is hard to prepare and support.</div>	<div>5. AVAILABLE SOLUTIONS<div>AS</div></div> <div>1.Previously there was no proper tool for estimation farmers estimate on there own by estimating the crop yield by using grain weight and some crop models</div> <div>2. This method do not provide much profit and this is not systematic manner.</div>
<div>2. JOBS-TO-BE-DONE / PROBLEMS<div>J&amp;P</div></div> <div>1.Using minimum resources and increasing productivity</div> <div>2 Advising the customer about marketing.harvesting and crop Rotation</div> <div>3 Promoting less use of pesticides and improving organic farming</div>	<div>9. PROBLEM ROOT CAUSE<div>RC</div></div> <div>1.For an normal individual it is hard to estimate crop yield because it takes long time must data need to be verified and studied which is practical not possible</div> <div>2.No proper system for efficient storage of natural resources</div> <div>3.Too much cost of pesticides and other agriculture products</div>	<div>7. BEHAVIOUR<div>BE</div></div> <div>1.Suggesting the crop to be planted in the coming season can be done by this model by evaluating various criterias</div> <div>2.This application provides a way for crop rotation</div>
<div>3. TRIGGERS<div>TR</div></div> <div>It provokes the customer when they get to know about benefits and features by various communication methods</div>	<div>10. YOUR SOLUTION<div>SL</div></div> <div>To focus on implementing crop yield prediction system by using machine learning techniques by doing analysis on agricultural datasets analyzing various parameters and calculating the maximum crop yield by processing datasets according to the areas of cultivation.By using data analytics techniques the problems will be solved and helps in predicting the productivity of crop, such predictions will be help in business logistics</div>	<div>8.CHANNELS of BEHAVIOUR<div>CH</div></div> <div>8.1 ONLINE This application will run online and all the data will be stored in online platform</div> <div>8.2 OFFLINE There is no offline platform for this model</div>
<div>4. EMOTIONS: BEFORE / AFTER<div>EM</div></div> <div>1 Before using this approach, customer feels complicated, confused because they are too many factors like climatic conditions and prices for better seeds, low demand for the market and very low crop yield which is unmanageable</div> <div>2 After using this application the customer can easily predict crop yield and estimate the profit which improve economic stability</div>		