

Project Design Phase-I
Proposed Solution Template

Date	05 November 2022
Team ID	PNT2022TMID29071
Project Name	Estimate the Crop Yield using Data Analytics
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Agriculture is the backbone of the Indian economy and provides a basic need for human survival. Many farmers in India are not receiving the projected crop output due to weather fluctuations and other factors. So in this case, farmers must have timely advice to estimate future crop productivity, and analysis must be performed to assist farmers in maximizing crop production
2.	Idea / Solution description	The solution is to develop a dashboard that displays the dataset of variables, including weather, yield from past years, data extraction from records, and irrigation facility. The dashboard displays these statistics collectively and offers guidance on how to increase production yield.
3.	Novelty / Uniqueness	Visualizing the relationship between various parameters and identify suitable weather conditions and soil type for each crop. Optimized and accurate visualization.
4.	Social Impact / Customer Satisfaction	Farmers will be able to understand the suitable crop conditions and can plan accordingly to increase crop yield and revenue
5.	Business Model (Revenue Model)	Crop yield will be affected due to various reasons such as soil fertility, weather conditions, rainfall etc which in turn affects the revenue. The analysis of suitable conditions related to each help increase crop yields and revenue.
6.	Scalability of the Solution	The insights gained from analysis of different parameters such as weather conditions and soil type etc crop yield can be increased.