

Project Design Phase
Proposed Solution Template

Date	03 December 2025
Team ID	PNT2025TMID01160
Project Name	Predicting plant growth stages with environmental and management data using Power Bi
Maximum Marks	2 Marks

Proposed Solution Template:

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Farmers face challenges in accurately predicting plant growth stages due to varying environmental management practices. Inaccurate predictions can lead to inefficient resource utilization ,lower yields and increased costs.
2.	Idea / Solution description	This solution leverages Power BI to integrate and analyze environmental data(temperature,humidity,soil,moisture) and management data(fertilize use,irrigation)
3.	Novelty / Uniqueness	Uses PowerBi advanced analytics and visualization capabilities to present actionable insights
4.	Social Impact / Customer Satisfaction	Helps farmers optimize resources reducing waste and improving sustainability Increases crop-yield and quality by providing precise growth stage predictions
5.	Business Model (Revenue Model)	Subscription based model for farmers and agribusinesses
6.	Scalability of the Solution	Can be scaled to differents crops and climatic regions by incorporating diverse datasets