Project Design Phase Proposed Solution Template

Date	15 February 2025	
Team ID	PNT2025TMID03012	
Project Name		
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	Farmers and agricultural researchers struggle		
	solved)	to accurately track and predict plant growth		
	, ,	stages due to varying environmental conditions		
		and management practices. A data-driven		
		approach is needed to enhance decision-		
		making and improve crop yield.		
2.	Idea / Solution description	Our solution leverages Power BI to analyse		
		environmental		
		factors(temperature,humidity,soil moisture)		
		And management data (fertilization, irrigation)		
		to predict plant growth stages. The interactive		
		dashboards providers insights for optimizing		
		agricultural practices.		
3.	Novelty / Uniqueness	Unlike traditional manual observation		
		methods, our solution uses real-time data		
		analytics and visualization to provide accurate,		
		predictive insights. This reduces guesswork and		
		enhances precision agriculture		
4.	Social Impact / Customer Satisfaction	Farmers can make informed decisions on		
		resource allocation, improving efficiency and		
		sustainability		
5.	Business Model (Revenue Model)	The model can be offered as a subscription		
		based SaaS platform, where farmers,		
		agribusiness, and researchers can access		
		insights through a Power BI dashboards.		
6.	Scalability of the Solution	The solution can be expanded to different		
		crops and regions by integrating more datasets		
		and AI models. It can also be integrated with		
		IoT sensors and automated farm management		
		systems for real-time monitoring.		