

Project Initialization and Planning Phase

Date	23 July 2025
Team ID	XXXXXX
Project Name	Predicting Plant Growth Stages with Environmental and Management Data Using Power BI
Maximum Marks	3 Marks

Define Problem Statements (Customer Problem Statement):

Crop Growth is influenced by environmental conditions such as temperature, soil moisture, and sunlight, as well as management factors like irrigation and fertilization. Predicting plant growth stages is essential for optimizing resource allocation, reducing crop loss, and increasing yields.

However, traditional plant growth prediction models rely on static datasets and lack real-time adaptability. Power BI can be used to create interactive dashboards that integrate environmental data, visualize growth patterns, and predict optimal farming decisions.

The Customer Problem Statement template helps us focus on what matters to create experiences people will love. A well-articulated customer problem statement allows us and our team to find the ideal solution for our customers' challenges. Throughout the process, we'll also be able to empathize with our customers, which helps us better understand how they perceive our product or service.

I am	Describe customer with 3-4 key characteristics - what are they?	Describe the customer and their attributes here
I'm trying to	List their outcome or "goal" (what are they trying to achieve?)	List the thing they are trying to achieve here
but	Describe what problems or barriers stand in the way - what do they face?	Describe the problems or barriers that get in the way here
because	Explain the "root cause" of why the problems or barriers exist - what leads to the problem?	Describe the reason the problems or barriers exist
which makes me feel	Describe the emotions from the customer's point of view - how does it impact them emotionally?	Describe the emotions the result from experiencing the problems or barriers

Reference: <https://miro.com/templates/customer-problem-statement/>

Example:

I am	I'm trying to	But	Because	Which makes me feel
ABC Greenhouse Manager	Achieve uniform and optional plant growth	I face inconsistent plant growth due to varying soil types, sunlight exposure, and watering schedules.	The lack of data-driven insights has made it difficult to identify the best combination of growing conditions.	Frustrated and concerned about unpredictable yields and the overall health and productivity of the plants.



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A greenhouse manager at ABC Greenhouses responsible for ensuring consistent plant growth across locations.	Achieve uniform and optimal plant growth by standardizing successful growing conditions at all greenhouse sites.	I face inconsistent plant growth due to varying soil types, sunlight exposure, and watering schedules.	The lack of data-driven insights has made it difficult to identify the best combination of growing conditions.	Frustrated and concerned about unpredictable yields and the overall health and productivity of the plants.
PS-2	An organic crop manager at GreenEarth Farms focused on delivering consistent yields across different farm plots.	Achieve reliable and optimal crop growth by identifying and applying the best organic farming practices.	I encounter inconsistent crop growth rates due to unclear combinations of soil, fertilizer, watering, and climate.	There hasn't been a structured, data-driven approach to pinpoint the precise conditions that maximize growth.	Concerned and uncertain about my ability to provide consistent organic yields, affecting farm sustainability.