

## IdeationPhase

### Define the Problem Statements

Date	16 February 2026
Team ID	LTVIP2026TMIDS91602
Project Name	SmartSorting
Maximum Marks	2 Marks

Customer Problem Statement: This problem statement outlines the key challenges identified in the fruit and vegetable sorting sector, particularly in small-scale industries. Based on multiple user perspectives—including industry owners, sorting workers, and local vendors—the analysis highlights the most pressing issues related to freshness detection, manual sorting inefficiencies, and quality assurance. These challenges directly impact product consistency, customer satisfaction, and operational cost. Addressing them through affordable, AI-based solutions is essential to improve accuracy, reduce waste, and streamline the sorting process in low-resource environments.

<b>I am</b>	Describe customer with 3-4 key characteristics - who are they?	Describe the customer and their attributes here
<b>I'm trying to</b>	List their outcome or "job" the care about - what are they trying to achieve?	List the thing they are trying to achieve here
<b>but</b>	Describe what problems or barriers stand in the way - what bothers them most?	Describe the problems or barriers that get in the way here
<b>because</b>	Enter the "root cause" of why the problem or barrier exists - what needs to be solved?	Describe the reason the problems or barriers exist
<b>which makes me feel</b>	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

Example:



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	I am a small-scale fruit and vegetable industry owner who runs a local sorting and packaging unit	I'm trying to automate the process of identifying and separating rotten or spoiled produce	But I can't afford expensive AI systems or hire skilled technicians to manually sort large volumes daily	Because my budget and workforce are limited, and manual sorting is inconsistent	Which makes me feel stressed and worried about delivering low-quality products to customers
PS-2	I am a worker at a small fruit and vegetable processing unit	I'm trying to quickly check each fruit/vegetable for signs of spoilage	But I often miss subtle signs of rotting or mold due to fatigue and high volume	Because we sort thousands of items manually every day with little time per item	Which makes me feel frustrated and worried about making mistakes that cost the company money