

## Ideation Phase

### Define the Problem Statements

Date	2 February 2026
Team ID	LTVIP2026TMIDS24988
Project Name	Civil Engineering Insight Studio
Maximum Marks	2 Marks

#### **Customer Problem Statement:**

Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love.

A well-articulated customer problem statement allows you and your team to find the ideal A well-articulated customer problem statement helps in understanding the challenges faced by civil engineers and construction professionals. It enables the team to empathize with users and design an AI-powered solution that simplifies structural analysis and documentation.

#### **Customer Problem Statement**

Project Context: Civil Engineering Insight Studio – AI Powered Analysis Tool

<b>I am</b>  Describe the customer and their attributes	<b>PS-1:</b> I am a civil engineer assessing and documenting infrastructure projects <b>PS-2:</b> I am a construction site supervisor overseeing building and bridge construction
<b>I'm trying to</b>  List the things they are trying to achieve here	<b>PS-1:</b> I'm trying to analyze construction site images and produce detailed engineering reports <b>PS-2:</b> I'm trying to monitor progress and identify materials and structural components
<b>but</b>  Describe the problems or barriers that get in	<b>PS-1:</b> But I find manually describing materials, components, and construction stages consumes too much time and is subjective <b>PS-2:</b> But tracking project progress without automated tools lacks precision and consistency
<b>which makes me feel</b>  Describe the emotions the result from experience	<b>PS-1:</b> Which makes me feel overwhelmed and prone to human error <b>PS-2:</b> Which makes me feel frustrated, stressed, and inefficient in managing site documentation

#### **Example:**



<b>Problem Statement (PS)</b>	<b>I am (Customer)</b>	<b>I'm trying to</b>	<b>But</b>	<b>Because</b>	<b>Which makes me feel</b>
PS-1	A civil engineer responsible for structural inspection and reporting	Analyze construction site images and generate detailed engineering documentation	Manually identifying materials, structural components, and construction stages from images takes too much time and effort	Accurate structural documentation requires technical expertise, careful observation, and structured reporting	Overwhelmed, time-pressured, and concerned about missing critical structural details
PS-2	A construction site supervisor managing multiple infrastructure projects	Monitor project progress and document materials and structural elements using site images	There is no automated tool that provides consistent and structured analysis directly from construction images	Traditional reporting methods rely heavily on manual interpretation and subjective judgment	Frustrated, inefficient, and stressed about maintaining accurate and timely project documentation