Ideation Phase Define the Problem Statements

| Date | 27 June 2025 |
|---------------|--|
| Team ID | LTVIP2025TMID39904 |
| Project Name | Pattern Sense: Classifying Fabric Patterns using Deep Learning |
| Maximum Marks | 2 Marks |

Customer Problem Statement Template:

In the textile and fashion industries, identifying and categorizing fabric patterns (e.g., floral, striped, polka dot, geometric) is essential for inventory management, design cataloguing, quality control, and customer recommendation systems. Traditionally, this task relies on manual inspection, which is time-consuming, subjective, and prone to inconsistency.

With the growth of digital fashion platforms and large-scale textile production, there is a pressing need for an automated, scalable, and accurate method to classify fabric patterns from images.

| l am | Describe customer with 3-4 key characteristics - who are they? | Describe the customer and their attributes here |
|------------------------|--|---|
| I'm trying to | List their outcome or "Job" the care about - 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 bothers them most? | Describe the problems or barriers that get in the way here |
| because | Enter the "root cause" of why the problem or barrier exists – what needs to be solved? | 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/



| Problem Statement (PS) | I am (Customer) | I'm trying to | But | Because | Which makes me feel |
|------------------------------|---|--|--|---|--|
| PS-1 | Fashion designer | Quickly and accurately classify different fabric patterns (e.g., striped, floral, checkered) | The manual process of identifying and categorizing fabric patterns is time-consuming and error-prone | The visual complexity and similarity among fabric patterns make consistent classification difficult | Frustrated and concerned about delays, mislabeling, and quality inconsistency |
| PS-2 | E-commerce platform manager (for fashion/clothi ng) | Automatically tag and organize fabric products by their visual pattern for easier search and filtering | Relying on manual tagging by staff leads to inconsistenci es and delays | Different people interpret fabricpattern s differently, and handling large volumes is overwhelmin g | Worried about poor customer experience, search inefficiency, and loss in potential sales |