

## Ideation Phase

### Define the Problem Statements

Date	31 January 2025
Team ID	LTVIP2025TMID32512
Project Name	Classifying fabric patterns using deep learning
Maximum Marks	2 Marks

#### Customer Problem Statement Template:

Professionals in the fashion, textile, and interior design industries often face significant challenges when it comes to identifying, classifying, and selecting fabric patterns. Currently, these processes are manual, time-consuming, and prone to human error, leading to inefficiencies in production and design workflows. For fashion designers and manufacturers, sorting through thousands of fabric samples slows down the creative process. In the textile industry, undetected defects or irregularities in fabric patterns can compromise quality control, resulting in customer dissatisfaction and financial loss. Similarly, interior designers struggle to quickly find suitable patterns for furnishings and decor that align with their creative vision. There is a clear need for an intelligent, automated solution that can accurately classify fabric patterns, detect defects, and assist in pattern selection. *Pattern Sense* addresses this need using deep learning techniques to streamline pattern recognition, improve quality assurance, and enhance decision-making across these industries.

<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

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

#### Example:



Problem	I am	I'm trying to	But	Because	Which makes me feel
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Statement (PS)	(Customer)				
PS-1	A fashion designer / textile quality controller / interior designer	Quickly and accurately classify fabric patterns and detect any design defects or find matching designs	The current process is manual, time-consuming , and prone to human error	There is no intelligent system that can automate fabric pattern recognition and assist in quality control or design matching	Frustrated, delayed in decision-making, and concerned about production efficiency and quality
PS-2	A product development manager at a textile company	Ensure that only high-quality, defect-free patterned fabrics go into production	Visual inspection is inconsistent and dependent on human judgment	Minor pattern irregularities are often missed without advanced automated tools	Worried about customer complaints, product returns, and brand reputation