

**Ideation Phase**  
**Define the Problem Statements**

Date	31 January 2025
Team ID	LTVIP2025TMID34512
Project Name	Pattern Sense: Classifying Fabric Patterns using Deep Learning
Maximum Marks	2 Marks

**Customer Problem Statement Template:**

"As a designer, manufacturer, or retailer in the textile and fashion industry, I often struggle with accurately identifying and classifying various fabric patterns. This manual process is time-consuming, subjective, prone to errors, and limits my ability to efficiently manage inventory, automate product categorization, and ensure consistency across collections. I need a reliable, automated solution that can classify fabric patterns with high accuracy, regardless of the fabric type or image quality, so I can save time, reduce human errors, and enhance decision-making in product development, quality control, and sales."

Attribute	Description
Industry	Textile, Fashion, Apparel, Interior Design, E-commerce (Textile/Fabric sector)
Role/Person a	Designers, Manufacturers, Retailers, Quality Inspectors, E-commerce Managers, Warehouse Managers
Primary Needs	Automated, accurate, and consistent fabric pattern classification system
Pain Points	Time-consuming manual classification, human error, inconsistent product information, difficulty scaling operations
Technical Comfort Level	Varies: From non-technical staff to tech-savvy users; system needs to be user-friendly and accessible
Decision-Making Factors	Accuracy of classification, ease of integration, speed of processing, cost-effectiveness, scalability
Current Alternatives	Manual visual inspection, traditional cataloging, limited rule-based software (if any)
Desired Outcome	Quick, automated, reliable fabric pattern classification to streamline processes, improve product consistency, and enhance operational efficiency
Geography/Market	Global, especially regions with significant textile and fashion production (e.g., India, China, Europe, USA)
Business Size	Small businesses to large enterprises involved in fabric design, production, or retail

## Example:



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A textile manufacturer managing large-scale fabric production.	Quickly and accurately classify different fabric patterns in my inventory.	Manual classification is slow, prone to human error, and difficult to scale as new designs are introduced frequently.	Visual pattern identification depends on individual expertise, and with hundreds of fabric types, consistency is hard to maintain.	Frustrated, inefficient, and concerned about quality control and meeting customer demands.
PS-2	An e-commerce platform selling fabrics and fashion products.	Ensure that fabric patterns on the website are categorized correctly to help customers find what they need.	Inconsistent pattern classification leads to mislabeling, poor customer experience, and product returns.	Current classification relies on manual tagging by staff with varying levels of expertise.	Worried about losing customer trust, decreasing sales, and damaging the platform's reputation.