

Problem-Solution Fit Canvas

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Project Name: Pattern Scene - Classifying Fabric Patterns Using Deep Learning

1. Customer Segment(s)

Textile manufacturers

Fashion designers

E-commerce fabric sellers

Garment quality control teams

2. Jobs-to-be-Done / Problems

Identify fabric patterns accurately and consistently

Automate tagging and cataloging for inventory

Reduce misclassification and delays in processing

3. Triggers

Onboarding new fabric inventory

Receiving inconsistent tags from vendors

Planning photo shoots or style-matching for designs

4. Emotions: Before / After

Before: Frustrated, uncertain, overwhelmed

After: Confident, efficient, in control

5. Available Solutions

Manual tagging based on human judgment

Barcode or spreadsheet-based pattern recording

Basic image sorters not trained on fabrics

Cons: Time-consuming, inconsistent, not scalable

6. Customer Constraints

Limited technical expertise in textile teams

Budget constraints for small to medium businesses

Poor internet access in remote factories or workshops

7. Behaviour

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Ask internal staff to visually sort & tag

Use spreadsheets to track fabric types

Sometimes skip tagging or use generic categories

8.1 Online Channels

Uploading photos to internal ERP or cloud folders

Using WhatsApp/Email to send photos for review

8.2 Offline Channels

Verbal tagging during QC

Handwritten notes in inventory logs

9. Problem Root Cause

Pattern classification is subjective and lacks standardized criteria

Manual methods don't scale or align with digital transformation in fashion supply chains

10. Your Solution

A web-based and mobile-ready system powered by deep learning (CNN) that classifies fabric patterns instantly from images, logs them to a database, and helps users receive consistent, confident predictions—even in batch uploads or API-integrated pipelines.