# Customer Problem Statement

Project Title: HEMATOVISION – Advanced Blood Cell Classification Using Transfer Learning

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## Customer Problem Statement Template

Create a problem statement to understand your customer's point of view. The customer problem statement helps focus on what truly matters to create experiences that will benefit the end users — such as lab technicians, hospitals, diagnostic centers, and researchers.  
  
A well-articulated problem statement allows the team to find effective solutions for the challenges faced by these users. It also builds empathy and understanding of how your product will impact their work and experience.

## Problem Statements

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| --- | --- | --- | --- | --- | --- |
| PS No. | I am (Customer) | I’m trying to | But | Because | Which makes me feel |
| PS-1 | A lab technician | Quickly and accurately identify blood cell types from microscope images | Manual classification is time-consuming and error-prone | I need to handle a large volume of samples daily | Frustrated and overwhelmed by slow processes |
| PS-2 | A diagnostic center technician | Improve blood test reporting accuracy and speed | Existing tools are not automated or lack accuracy | We rely heavily on manual validation | Concerned about misdiagnosis and delays |
| PS-3 | A hospital pathologist | Detect rare and abnormal blood cells earlier | Human error can delay diagnosis | Early detection is critical for patient care | Worried about missing important signs |
| PS-4 | A medical researcher | Train models for rare disease blood detection | Data imbalance and variability make training difficult | Transfer learning is underutilized | Limited by current tools and resources |

## Visual Representation of Problem Areas

The diagram below visualizes key stakeholders and the challenges they face in blood cell classification.

