**Ideation Phase**

**Define the Problem Statements**

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| --- | --- |
| Date | 31 January 2025 |
| Team ID | LTVIP2025TMID35810 |
| Project Name | **hematovision-advanced-blood-cell-classification-using-transfer-learning** |
| Maximum Marks | 2 Marks |

**Customer Problem Statement Template:**

Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love.

A well-articulated customer problem statement allows you and your team to find the ideal solution for the challenges your customers face. Throughout the process, you’ll also be able to empathize with your customers, which helps you better understand how they perceive your product or service.

Graphical user interface, text, application, email

Description automatically generated

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

**Example:**

Chart, treemap chart

Description automatically generated

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Problem Statement (PS)** | **I am (Customer)** | **I’m trying to** | **But** | **Because** | **Which makes me feel** |
| PS-1 |  |  |  |  |  |
| PS-2 |  |  |  |  |  |

Problem Statement: I am: A hematologist, pathologist, or diagnostic lab technician responsible for analyzing blood samples. I’m trying to: Accurately and quickly classify different types of blood cells to diagnose conditions like anemia, infections, and leukemia. But: Manual classification is time-consuming, prone to human error, and requires highly trained experts. Because: Microscopic image analysis is complex, and subtle differences between cell types can be easily missed. Which makes me feel: Frustrated and concerned about delayed or inaccurate diagnoses, which can impact patient care and outcomes. Additional Problem Statements:

PS-1 (Doctors): I am a doctor who relies on timely and accurate blood reports. I’m trying to provide early treatment for patients. But delays and misclassifications in lab results can misguide treatment. Because manual analysis takes time and has limitations in accuracy. Which makes me feel helpless and stressed about patient safety

. PS-2 (Patients): I am a patient waiting for my blood test results. I’m trying to understand my health condition quickly. But the diagnostic process is slow and sometimes requires repeated tests. Because manual classification and reporting can take hours or even days. Which makes me feel anxious and uncertain about my health.