

Project Design Phase

Problem – Solution Fit Template

Date	3-Feb-2026
Team ID	LTVIP2026TMIDS65618
Project Name	Hematovision: Advanced Blood Cell Classification using Transfer Learning
Maximum Marks	2 Marks

Problem – Solution Fit Template:

The Problem–Solution Fit means identifying a real problem faced by users and developing a solution that effectively solves it.

In healthcare, manual blood cell analysis is time-consuming, costly, and prone to human errors. Pathologists need to examine blood smear images carefully, which requires high expertise and significant time. In many hospitals, especially in rural areas, there is a shortage of skilled professionals, leading to delayed diagnosis.

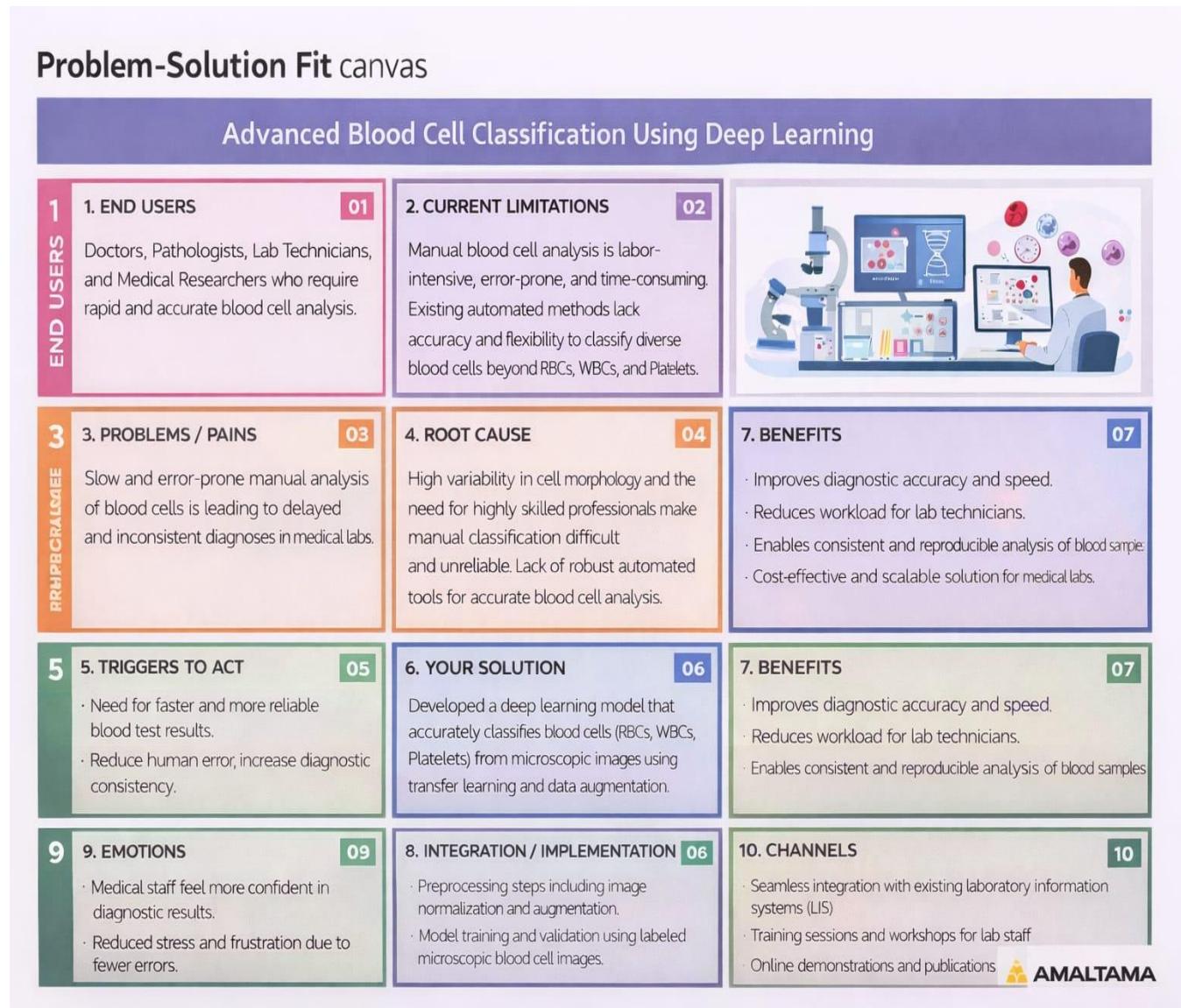
HematoVision solves this problem by using transfer learning-based deep learning models to automatically classify blood cells from images. The system improves accuracy, reduces diagnosis time, and supports medical professionals in making faster and better decisions.

This project helps in building an intelligent, reliable, and efficient system for blood cell classification.

Purpose:

- ✓ To automate blood cell classification using deep learning.
- ✓ To reduce manual effort and human errors in diagnosis.
- ✓ To improve accuracy and speed in medical analysis.
- ✓ To provide cost-effective diagnostic support.
- ✓ To assist doctors and lab technicians in healthcare centers.
- ✓ To enable easy access to medical analysis in remote areas

Template:



References:

1. <https://www.ideahackers.network/problem-solution-fit-canvas/>
2. <https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe>