Problem-Solution fit canvas 2.0

Define_CS, fit

1. CUSTOMER SEGMENT(S)

a).Diagnostic labs (urban & rural)

b).Hospitals and healthcare providers

c).Pathologists and lab technicians

d).Medical AI companies

6. CUSTOMER CONSTRAINTS

a).Limited computing resources

b).Lack of AI expertise in rural labs

c).Budget constraints for small clinics

d).No consistent internet in remote areas

5. AVAILABLE SOLUTIONS

Manual microscope-based diagnosis

- ➤ Pros: Low cost
- ➤ Cons: Time-consuming, needs expert knowledge

Rule-based image classifiers

- ➤ Pros: Fast
- ➤ Cons: Low accuracy

Some existing AI models

- ➤ Pros: Automated
- ➤ Cons: Not trained on relevant datasets, poor generalization

Explore AS,

Focus on J&P, tap into BE,

2. JOBS-TO-BE-DONE / PROBLEMS

a).Need to classify blood cells accurately for diagnosing diseases

b).Reduce human error in manual classification

c).Speed up blood test result processing

d).Overcome shortage of trained professionals

9. PROBLEM ROOT CAUSE

a).Traditional blood cell classification is heavily dependent on human skill

b).There is no standard, fast, and reliable method available in all areas

c).Rising patient load makes manual classification infeasible

7. BEHAVIOUR

Direct: Use microscope, take cell count manually, consult pathologist

Indirect: Send samples to external labs, rely on delayed reports

Focus on J&P, tap into BE,

Identify strong TR & EM

3. TRIGGERS

TR

Increase in diagnostic errors in under-equipped labs

- Surge in demand for automated healthcare solutions
- Rise of AI adoption in medical fields
- Regulatory push for standardized diagnostics

4. EMOTIONS: BEFORE / AFTER

EM

Before: Confusion, delay, stress, helplessness (especially in rural labs)
After: Confidence, clarity, control, accuracy, reliability

10. YOUR SOLUTION

SL

HematVision is a deep learning-powered system that uses **transfer learning** to classify blood cells accurately.

- Fast, automated image-based classification
- Uses pre-trained CNNs fine-tuned on medical data
- Works offline or on lightweight systems
- Minimizes diagnostic errors and supports pathologists

8.CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

Viewing tutorials on microscope usage

- Accessing cloud diagnostic platforms (if available)
- Watching YouTube videos on blood cell classification

8.2 OFFLINE

Manual microscopy and record keeping

- Printed blood smear atlases
- Training workshops for lab technicians

Extract online & offline CH of BE

AMALTAMA