



AI-POWERED REPAIR

# Repair Smarter with Agentic Vision



## Devices break. Generic guides fail. E-waste piles up.

► *The Opportunity Gap: 50% of self-repair failures stem from inaccurate or generic guidance.*

# AI that **Sees**, **Searches**, and **Guides**



## Multimodal Vision

AI identifies device & fault from a single photo.



## Google Search Grounding

Real-time web search for exact parts & manuals.



## Visual Annotations

Precise bounding boxes show exactly where to fix.

### THE FIXVISION EDGE

Agentic Vision vs. Generic AI

✗ Hallucinations

✓ Search Grounded

✓ Visual Coordinates

# Workflow: Steps 1–2



## 1. Intelligent Upload

Snap a photo. Gemini 2.0 Flash identifies device model and damage type.



## 2. Deep Reasoning

Agentic loop: Think → Search → Act → Observe for accuracy.

# Workflow: Steps 3–4



## 3. Search Grounding

Google Search fetches verified repair manuals and part availability.

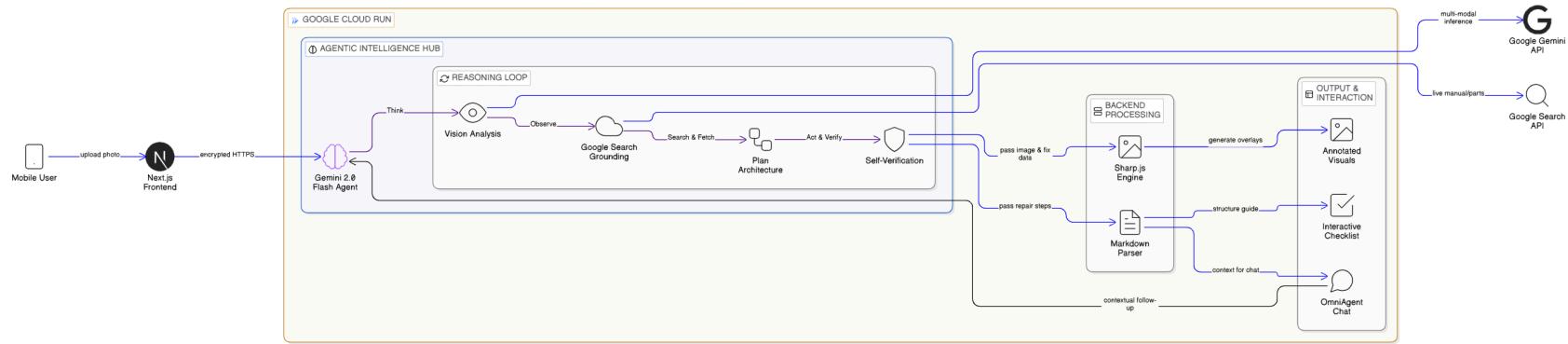


## 4. Visual Output

Sharp.js renders precise bounding boxes on your photo.

The screenshot shows the FxVision software interface. At the top, there's a navigation bar with 'New Scan' and 'DIAGNOSIS REPORT'. Below it, a section titled 'Device Detected: Epson L220 Ink Tank Printer' shows a camera feed of the printer. A blue bounding box highlights a specific area on the printer's front panel. To the right of the camera feed, under 'Issue Identified', it says 'The printer is showing a dual red light error (Paper and Ink indicators), which typically indicates either a "General Error" (such as a paper jam or carriage obstruction) or a "Service Required" error (waste ink pads are full)'. Below this, a 'REPAIR STEPS' section lists 'Step 1: Identify the exact error by checking the "Epson Status Monitor" on your connected computer. It will specifically state if it is a "Paper Jam", "General Error", or "Service Required".' On the far right, there's a 'FOLLOW-UP CHAT' window with a message about discussing the printer and some repair tips like using cotton swabs and isopropyl alcohol.

# Agentic Architecture



Comprehensive Reasoning Loop: Think → Search → Act → Observe



Privacy-First: Stateless processing. No user images are stored.

# Tech Stack



## FRONTEND

### Type-Safe Interface

Next.js 15 + React 19 for a high-performance, responsive web experience.



## INTELLIGENCE

### Visionary Agency

Gemini 2.0 Agentic loop with Google Search Grounding for accuracy.



## BACKEND

### High-Speed Processing

Bun runtime & Sharp.js for sub-second image processing and annotation.



## CLOUD

### Global Infrastructure

Hosted on Google Cloud Run for auto-scaling, low latency, and reliability.

# Strategic Value

TARGETING THE \$500B GLOBAL CONSUMER ELECTRONICS REPAIR MARKET



## High-Precision Diagnosis

Reduces user error by identifying specific component failures visually.



## Circular Economy

Directly contributes to sustainability by extending device lifespans.



## Verified Reliability

Builds trust with official grounding from verified repair manuals.



## User Empowerment

Lowering the technical barrier to entry for complex device repairs.

# Try FixVision AI Live



LIVE DEPLOYMENT

## FixVision AI

[fixvision-ai-233122189624.asia-southeast1.run.app](https://fixvision-ai-233122189624.asia-southeast1.run.app)



*Scan QR & upload a photo of a broken device (e.g., cracked screen)  
to see Agentic Reasoning in action.*

# The Road Ahead

## EXECUTION ROADMAP 2025



### Video Diagnosis

Q2 2025

Live repair stream analysis for dynamic issues.



### AR Guidance

Q3 2025

Hands-free overlays via smart glasses.



### Parts Marketplace

Q4 2025

Direct links to purchase faulty parts.



### Enterprise SDK

2026+

White-label API for manufacturers.

***Repair Smarter.***