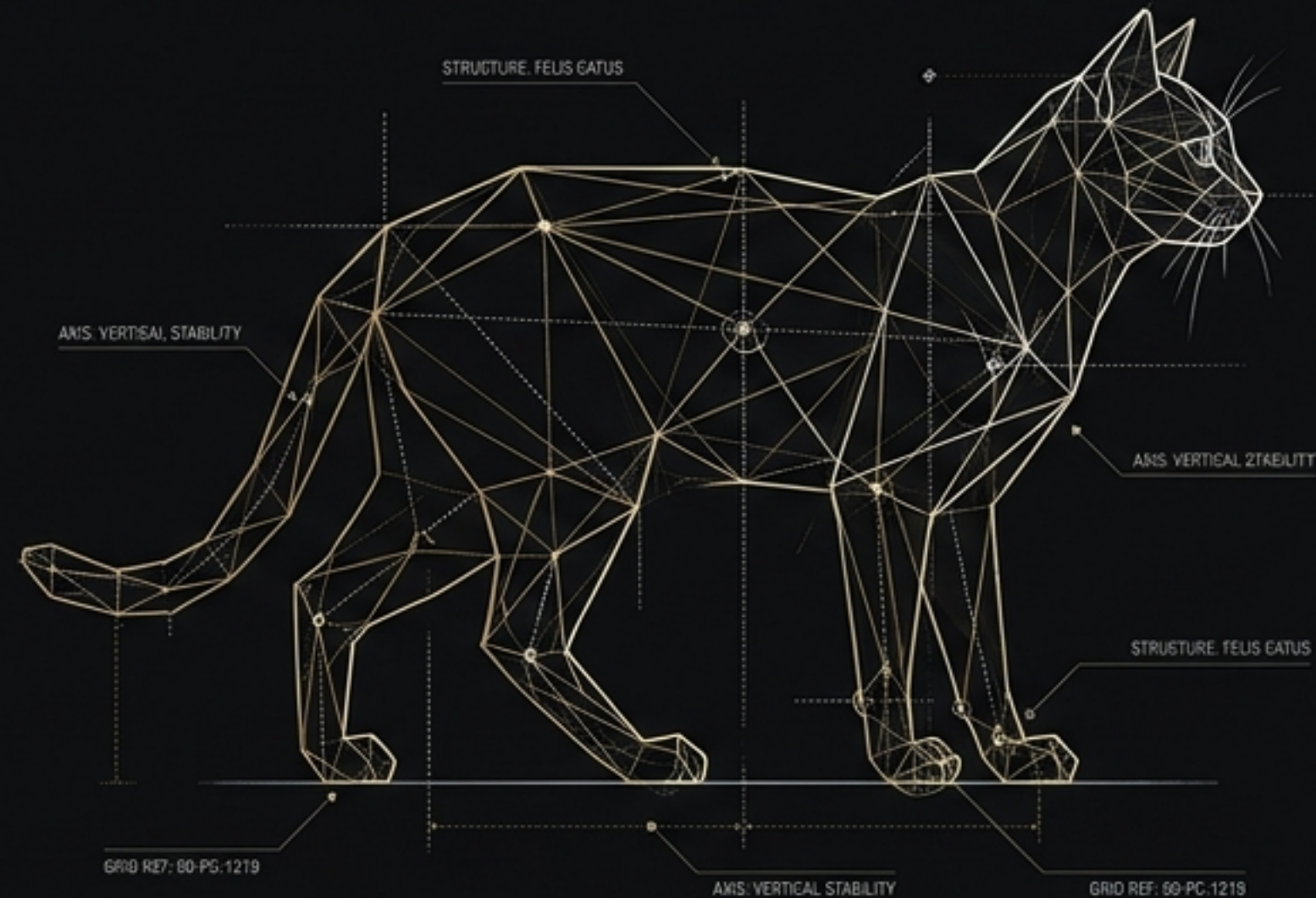


PanPanMao Build Diary

Days 12-19: The Feature Explosion

From an interesting prototype to a multi-vertical platform in one week.



7 Product
Verticals

700 Commits

1 Working
Economy

1 Overhauled
Identity

The week engineering became the easy part.

Three Pillars of Rapid Scale



The Credit Economy

Incentive design, referral state persistence, and global user onboarding.

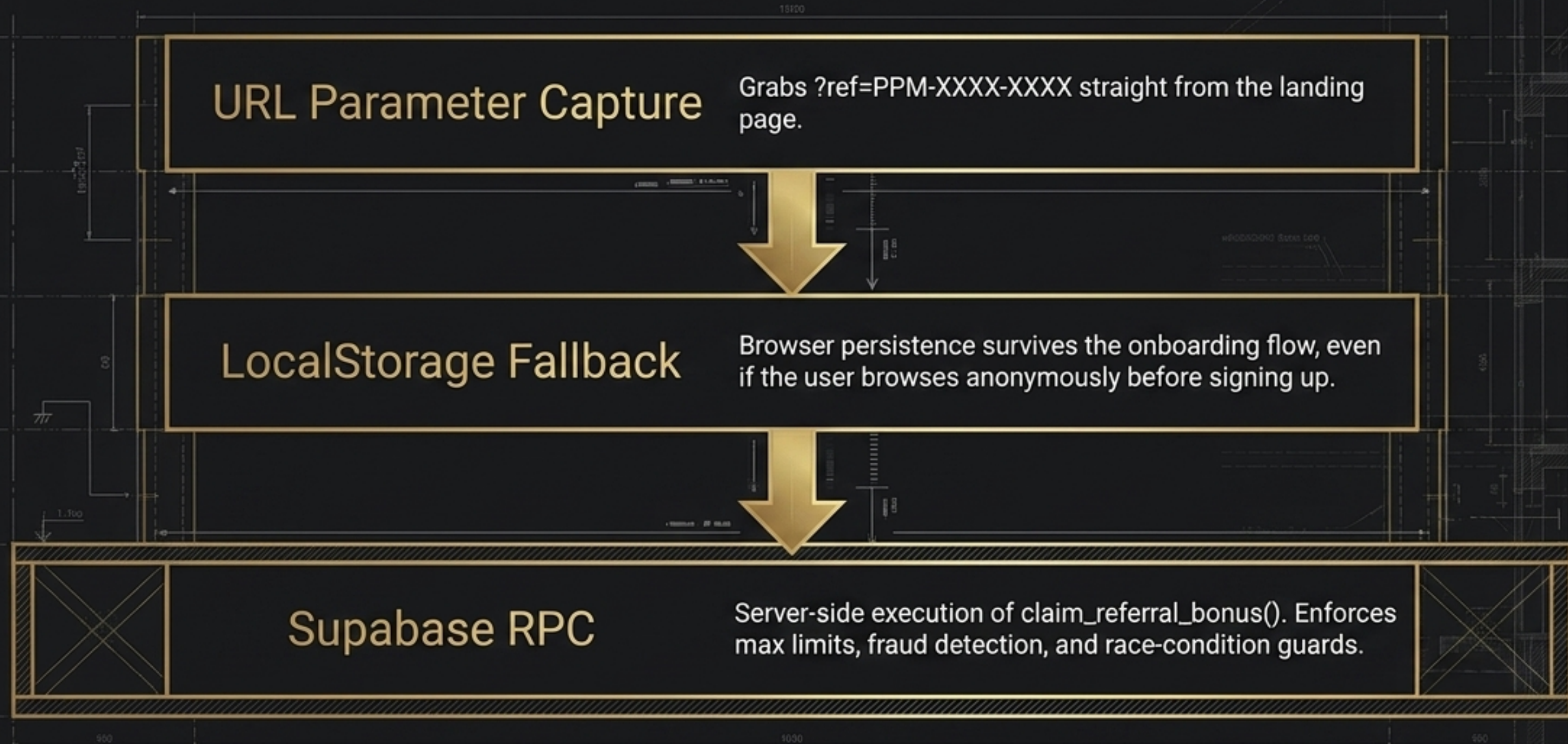
The AI Magic (Xiangshu)

In-browser MediaPipe pipelines merged with gender-specific multimodal LLM outputs.

The Visual Identity

Evolving from a cozy prototype mascot into a trusted, dark luxury oracle.

The 3-Layer Referral Architecture



Incentive Design Matrix

The Model	Asymmetric: 10 credits for referrer, 3 for referee.	Symmetric: 5 credits for referrer, 5 for referee.
User Sentiment	Feels extractive. I am using my friend to get credits.	Feels like mutual benefit. A genuine gift.
Outcome	Sluggish adoption.	Immediate spike in referral volume.

Insight: Incentive design is heavily psychological.
The “optimal” math rarely wins against perceived fairness.

Solving the "Chicken or Egg" Guardrail Bug

New User
Signup



usage_log
check



Account
Created



Context: PR #59 introduced a critical onboarding failure. The `link_referral()` function began rejecting valid new users.

The Flaw: The system attempted to check the user's `usage_log` to verify eligibility before the user had existed long enough to generate one.

Takeaway: Do not build systemic guards against events that logically cannot happen yet.

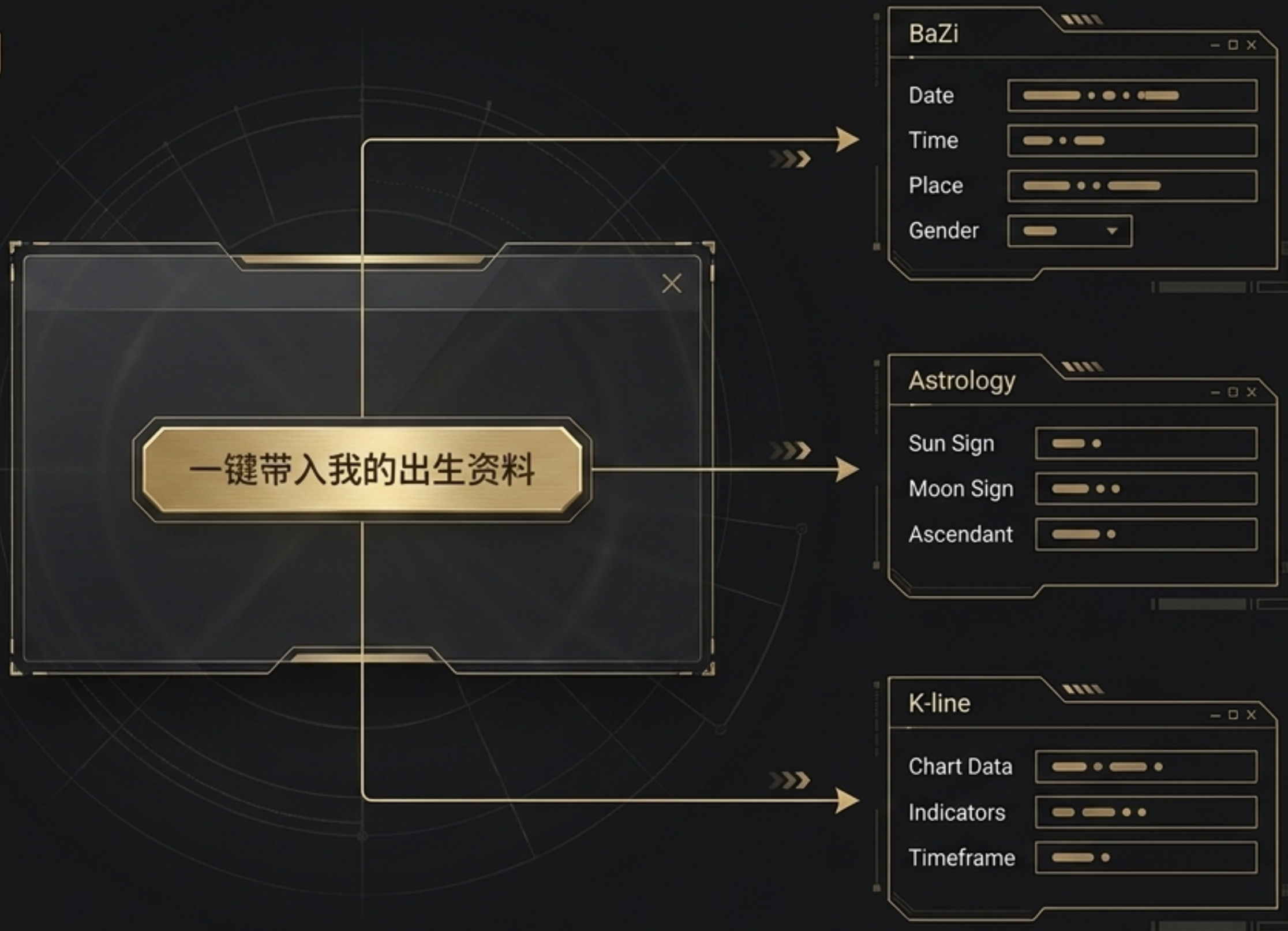
Global Onboarding & Data Liquidity

Feature: PR #41 UX Overhaul

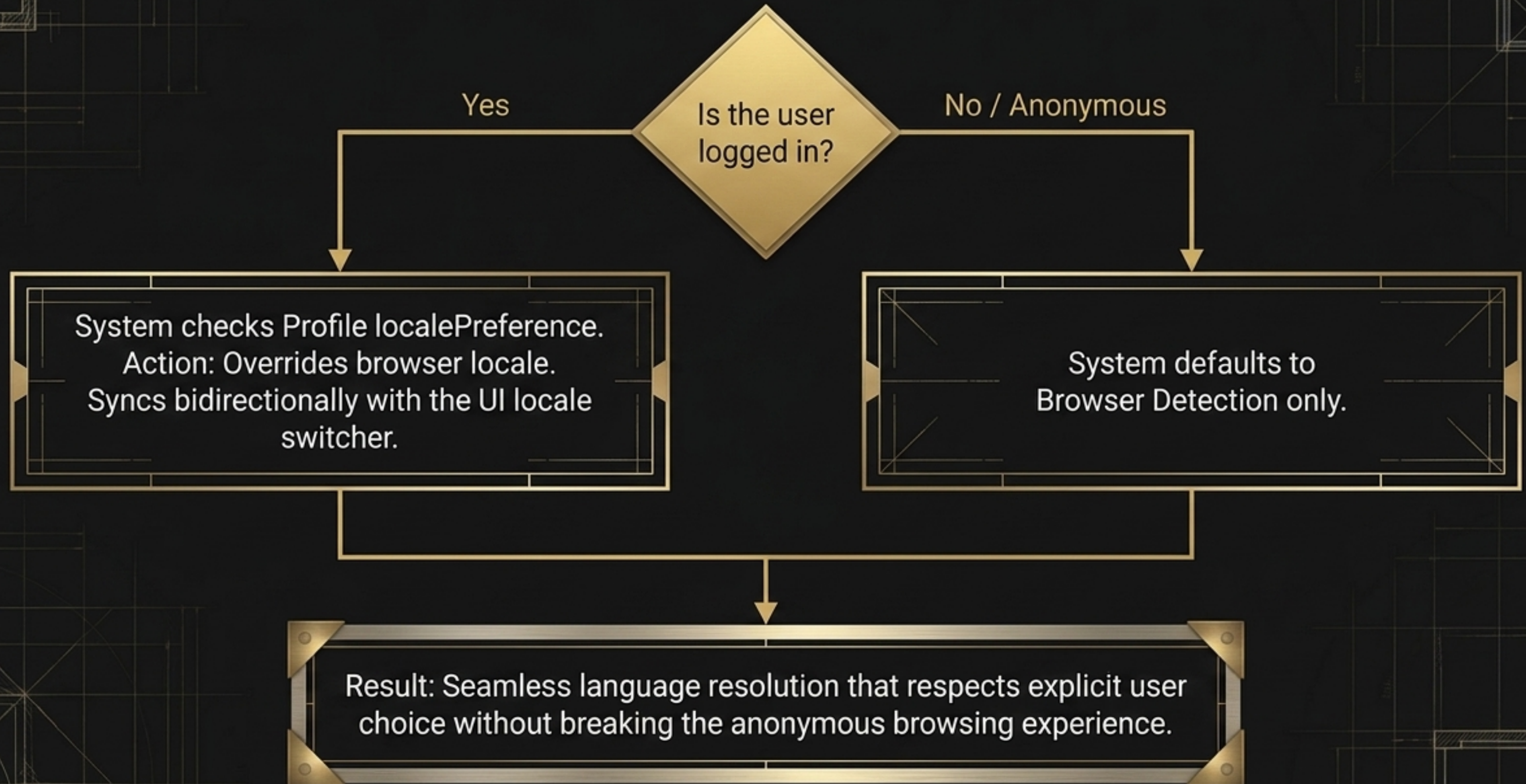
A global modal blocks authenticated users until their base profile (name, gender, birth time/place) is complete.

Mechanism: Enter data once.

The Quick-Fill button auto-populates complex inputs across all 7 product verticals instantly.



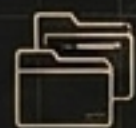
The Locale Decision Tree



Building Xiangshu: The Most Ambitious Feature

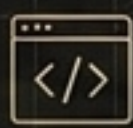


56



Files Changed

6,881



Lines Added

15



Commits

Zero to production in exactly 4 days.

The Client-Side ML Pipeline (MediaPipe)



100% Client-Side. Zero server round-trips for computer vision.

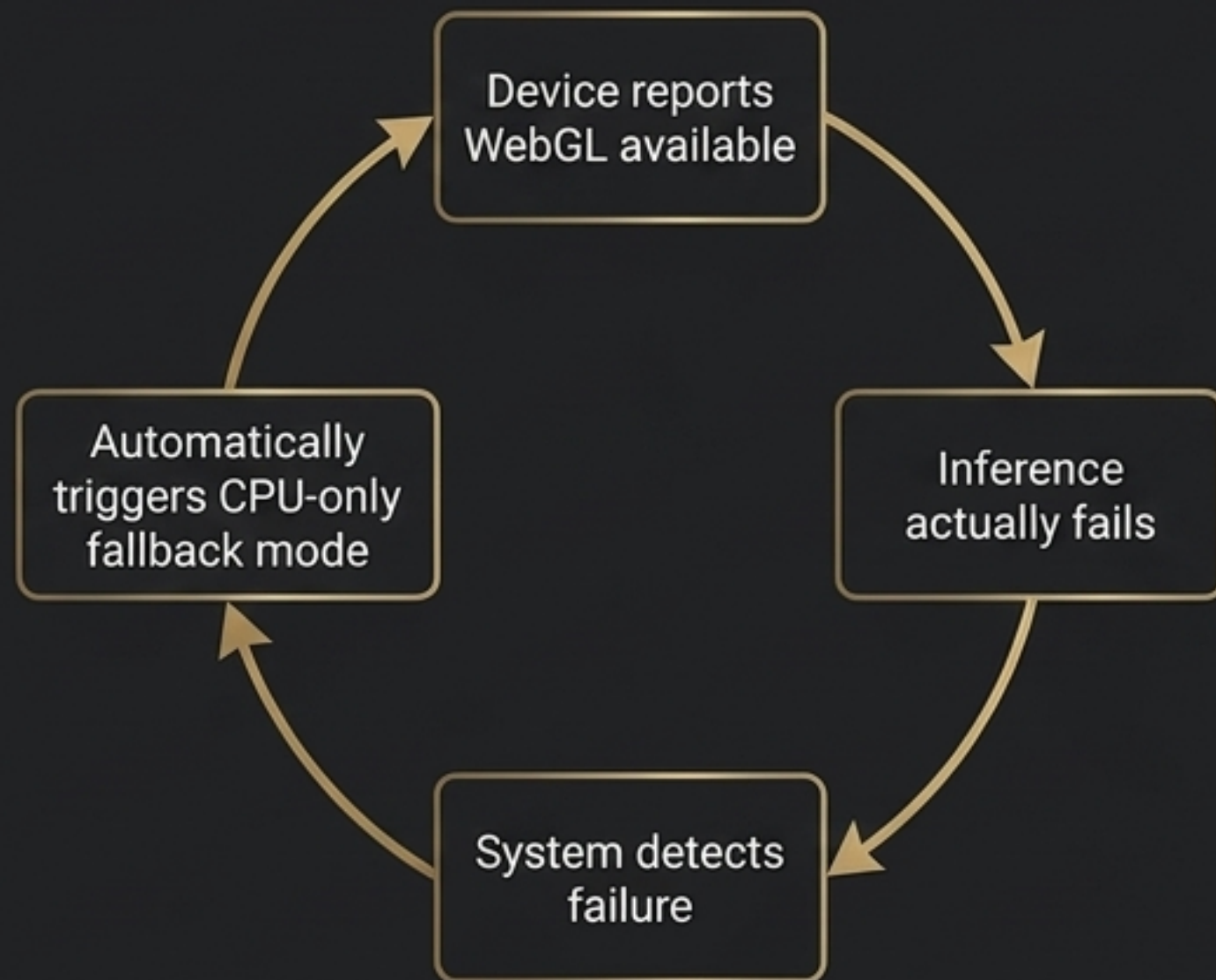
Real-time Feedback & The Fallback Loop

Feedback



A 60fps BlazeFace detection preview proves to the user the camera is actively working before capture.

Self-Healing



PR #35: No silent crashes.

Asset Localization for Global Reach



The Problem:

Users in China could not reliably reach `cdn.jsdelivr.net` for the ~3MB WASM binaries, breaking the camera feature entirely.

The Solution (PR #50):

Bypassed the CDN completely.

Moved all WASM and MediaPipe model files to app-hosted assets.

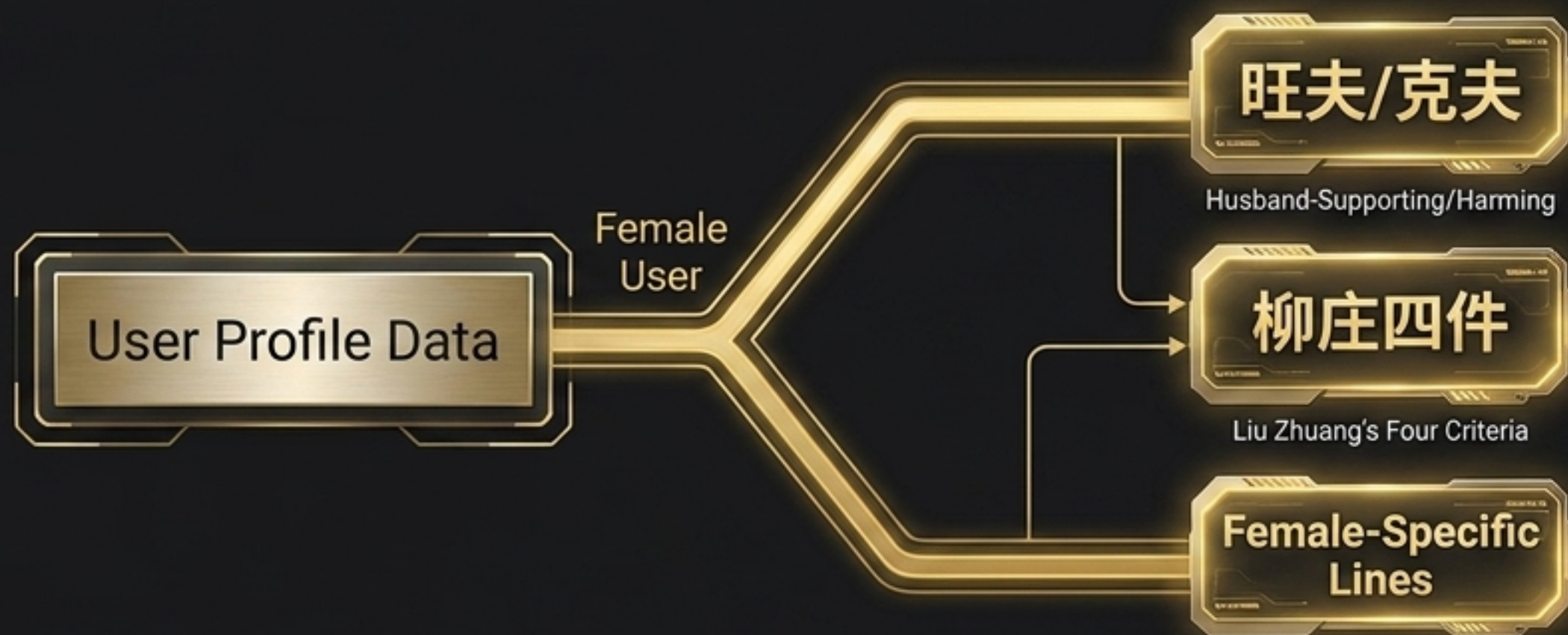
Guaranteed instant, reliable access regardless of global firewall restrictions.

The 4-Layer Multimodal Prompt Architecture

Context: Preventing Claude/Gemini from generating generic palm readings.



Dynamic Gender-Specific Knowledge Injection



Mechanism

Prompts are not static; they adapt dynamically based on the profile data saved during onboarding.

Example

Female users receive highly targeted analysis parameters injected directly into the LLM prompt. Triggers evaluation for husband-supporting/harming patterns, Liu Zhuang's four criteria, and female-specific palm line deviations.

The Visual Evolution: Positioning Dictates Trust

Old

Aesthetic

Warm Brown / Cozy.

Mascot Role

Cute, friendly cat mascot.

User Perception

Entertainment, lighthearted.

New

Aesthetic

Deep Blacks / Metallic Gold.

Mascot Role

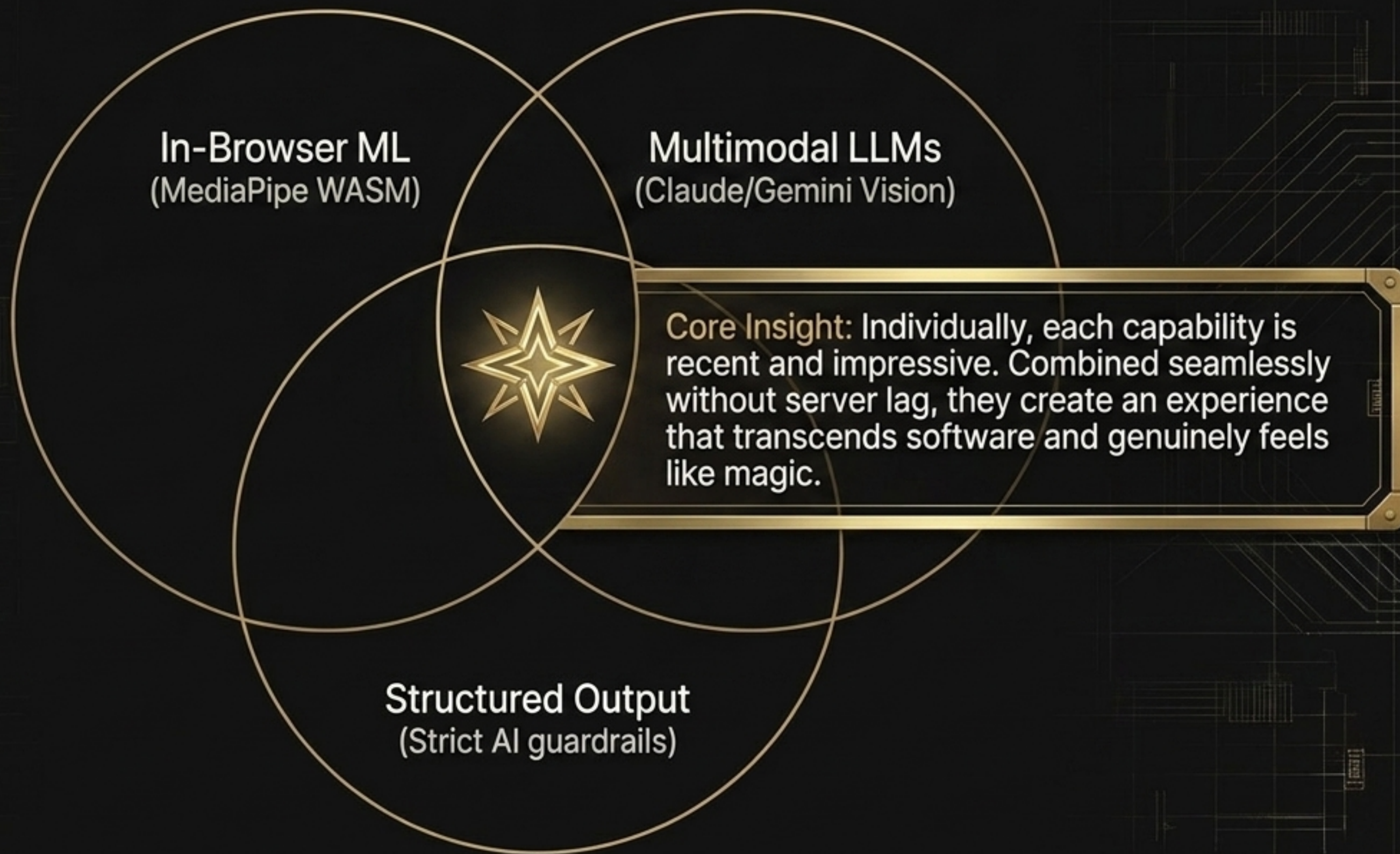
Mysterious, authoritative oracle.

User Perception

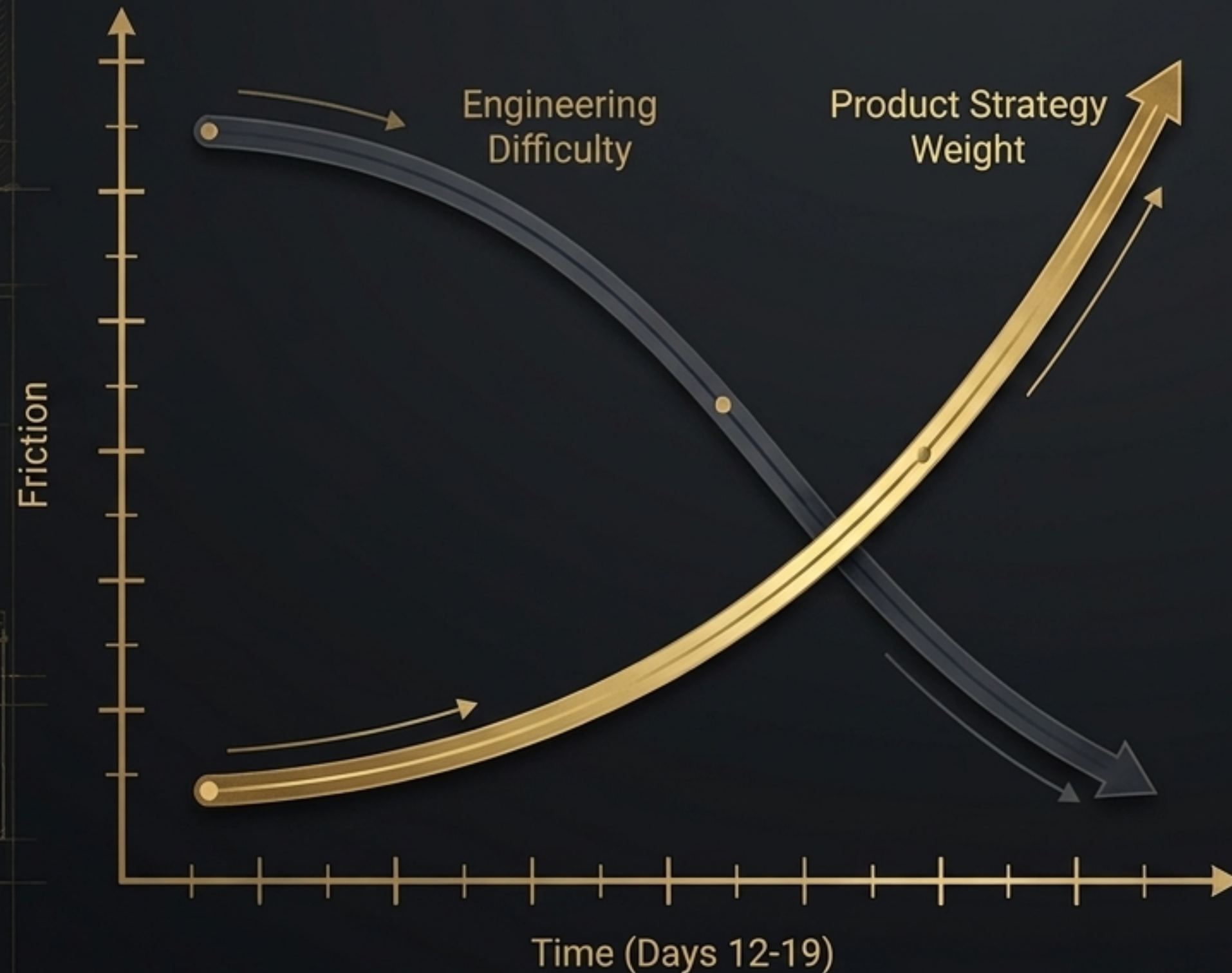
Trustworthy, Professional.

Insight: Users come with serious life questions regarding career, health, and relationships.
'Cozy' undermined gravity. Dark luxury matches the weight of their intent.

The Convergence of Magic



SYNTHESIS: The Flipping Bottleneck



The Reality at Day 19: With modern tooling, AI, and precise architecture, engineering velocity can match almost any idea.

The Paradigm Shift: The bottleneck has flipped. The engineering is now the easy part.

The New Challenge: The true difficulty is pure product strategy—deciding exactly what to build next, how to position it, and how to price it.