

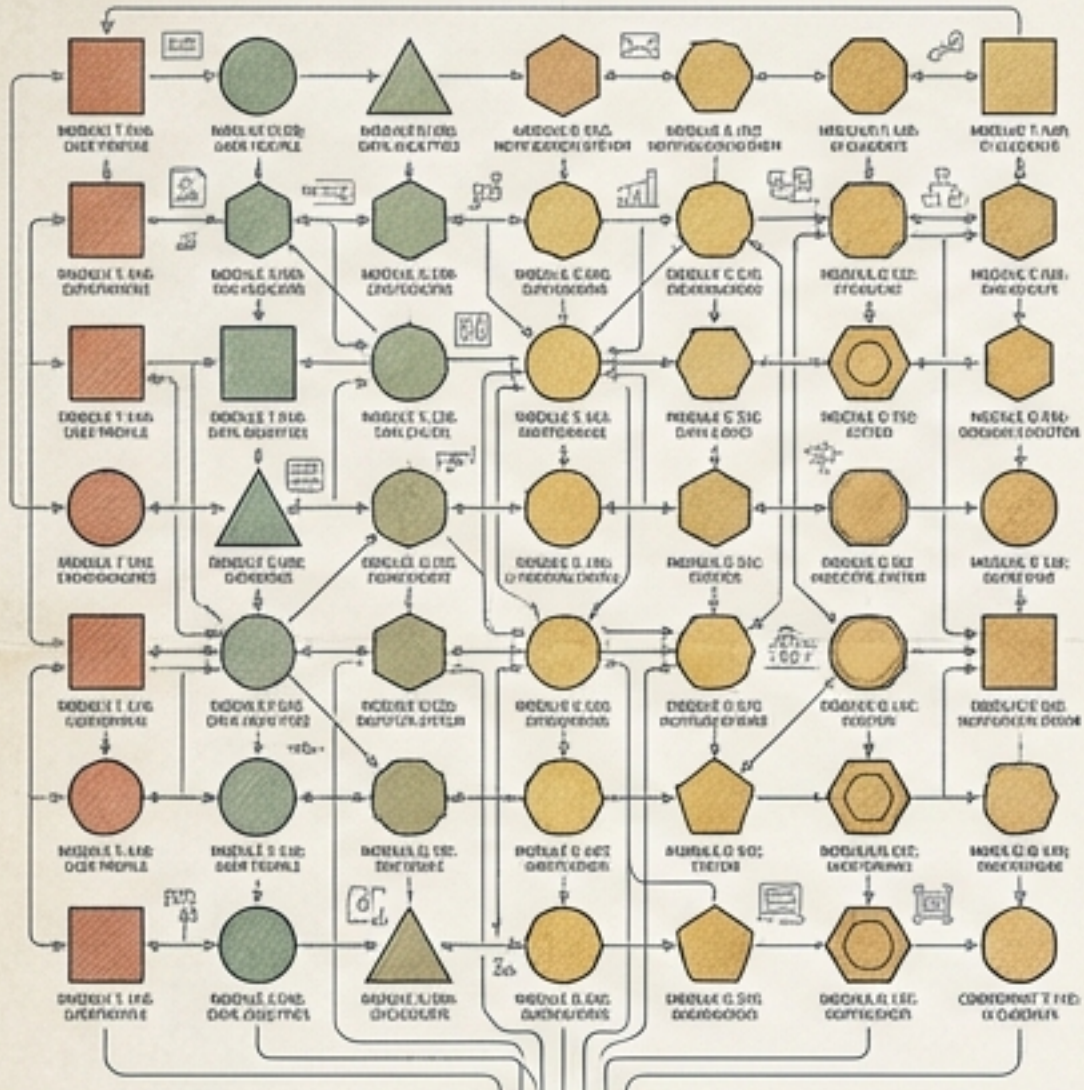
TWO PRODUCTS, ONE HEART

Architecting distinct emotional propositions from a single shared codebase.

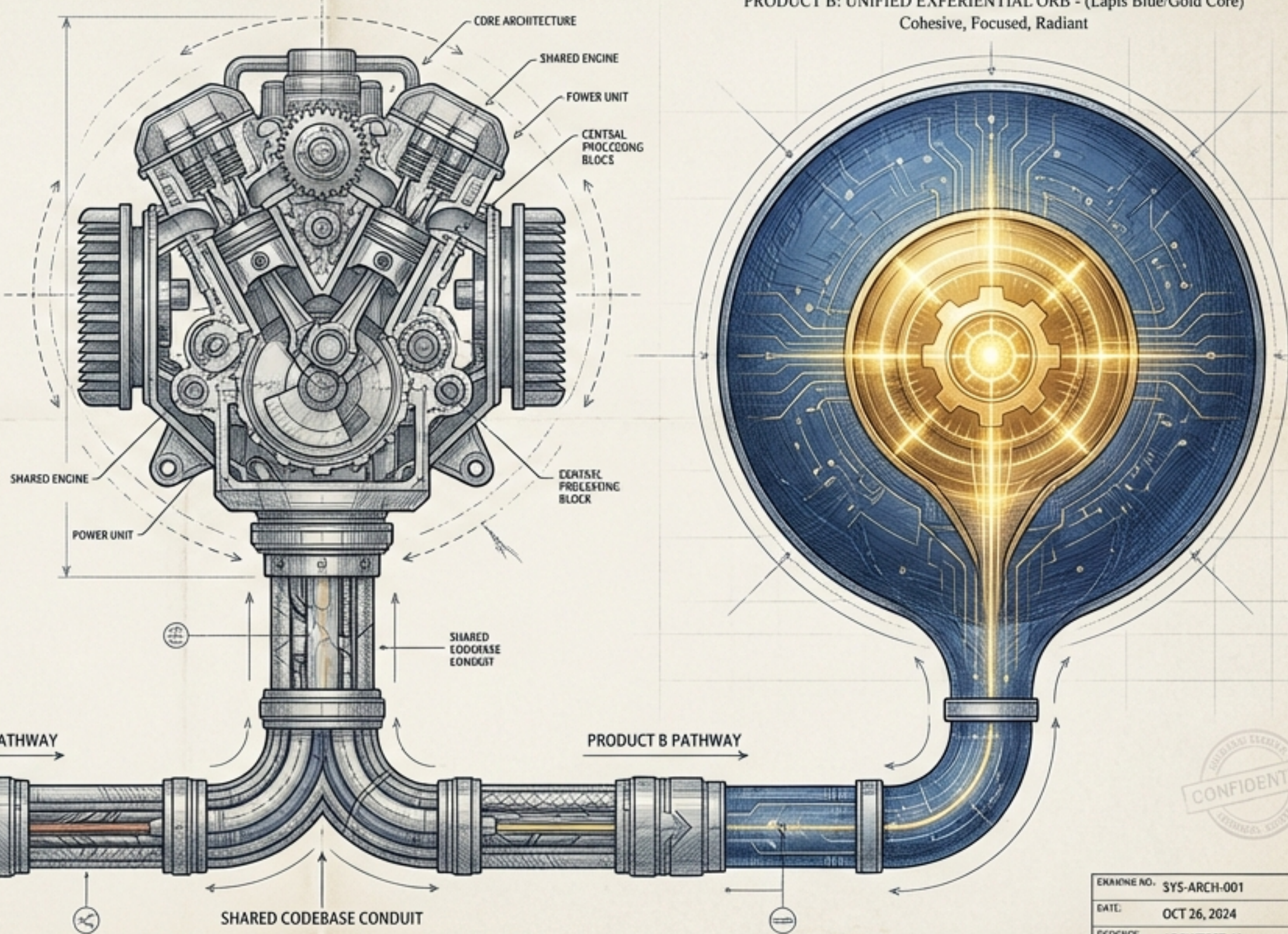
0 1.1 1.3 2.0 3.0

APPROVED
CONFIDENTIAL

PRODUCT A: FRAGMENTED FUNCTIONAL MATRIX - (Terracotta/Sage/Ochre)
Modular, Multi-Faceted, Adaptable



PRODUCT B: UNIFIED EXPERIENTIAL ORB - (Lapis Blue/Gold Core)
Cohesive, Focused, Radiant



APPROVED

SCALE: 1:1 UNIT: MODULES
0 5 10 15 20 25 30 35 40

CONFIDENTIAL

EXAMINE NO.	SYS-ARCH-001
DATE:	OCT 26, 2024
DESIGNER:	ARCHITECT AI
PROJECT:	DUAL-PRODUCT ENGINE

The emotional design space isn't a spectrum.

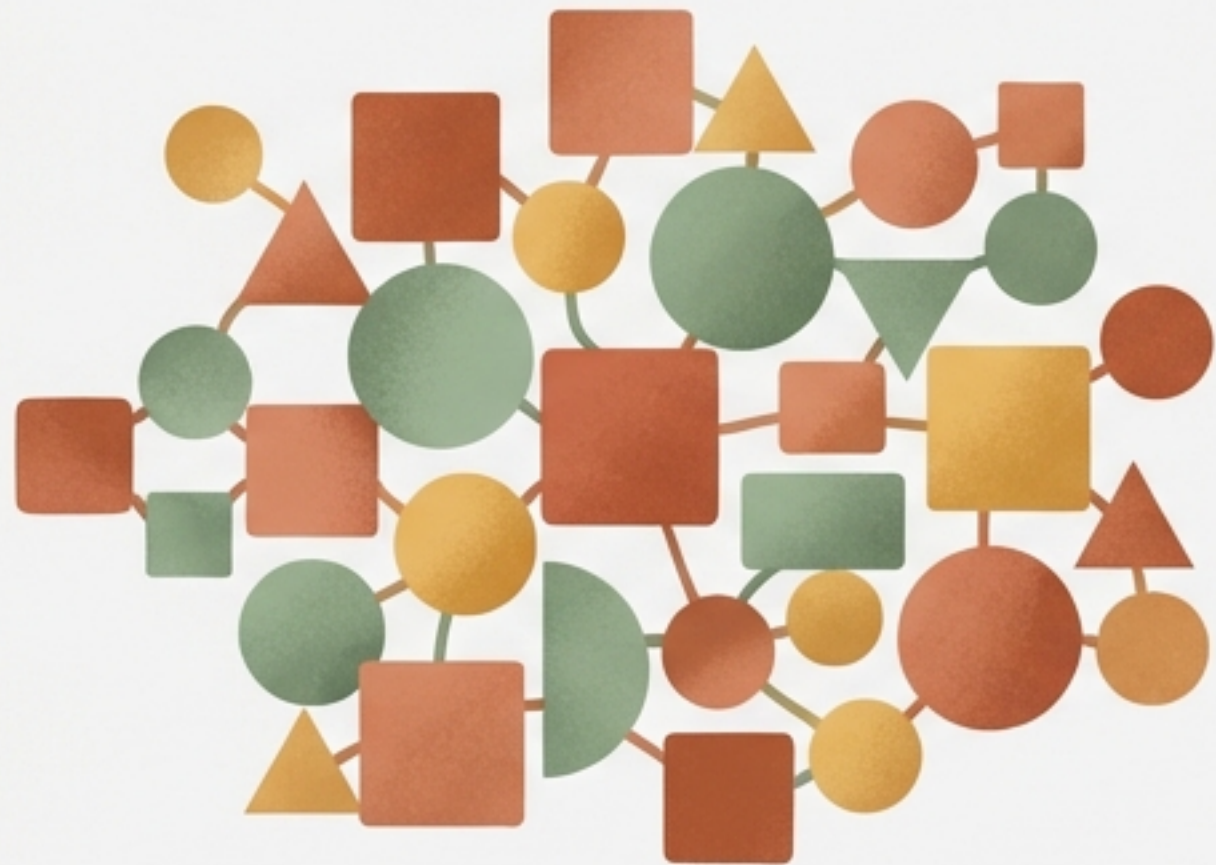
Building companion AI revealed two distinct psychological categories that must coexist, serving fundamentally different human needs at different times.

Many Shallow

One Deep



Breadth (The Social Circle)

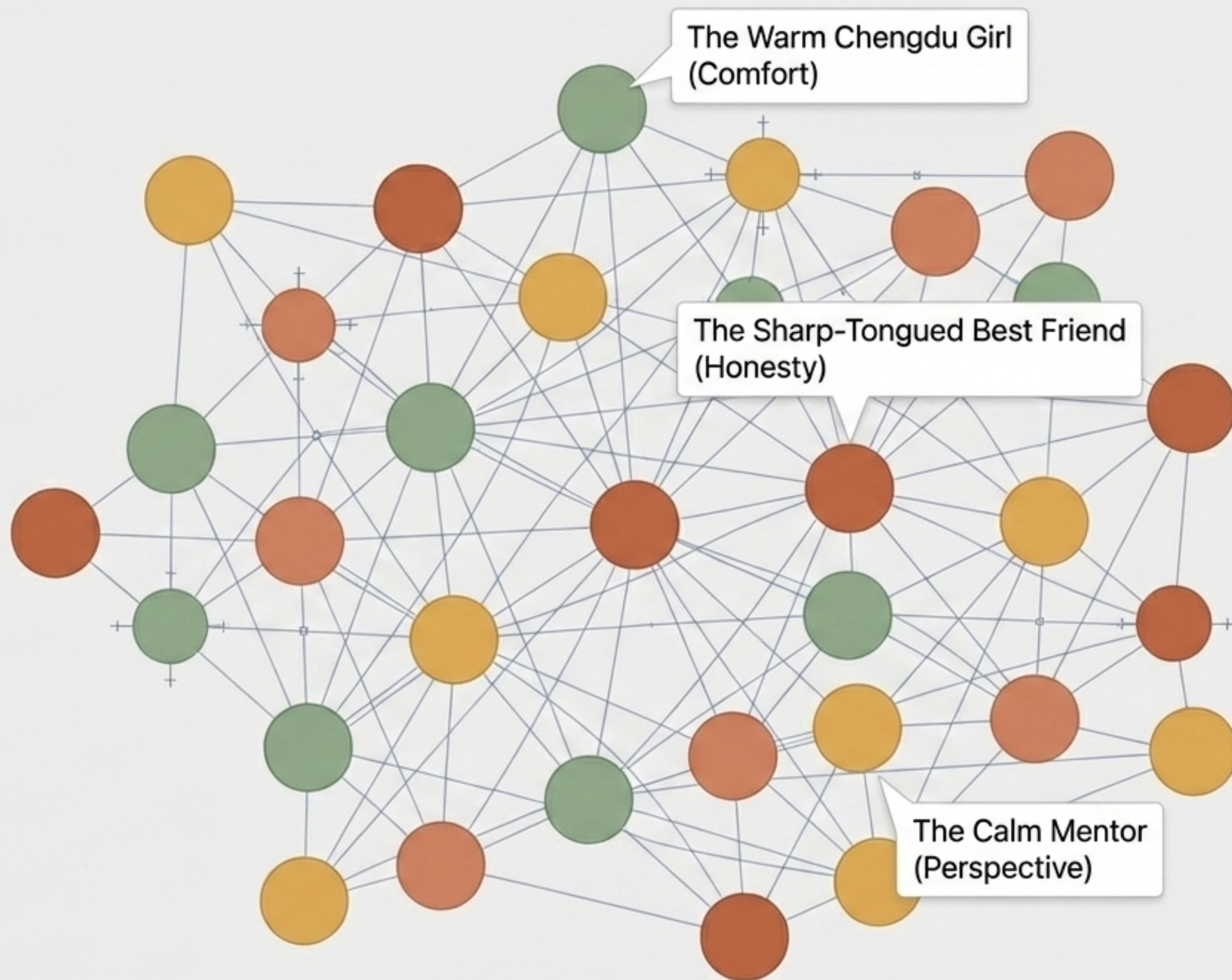


Depth (The Tree Hollow)



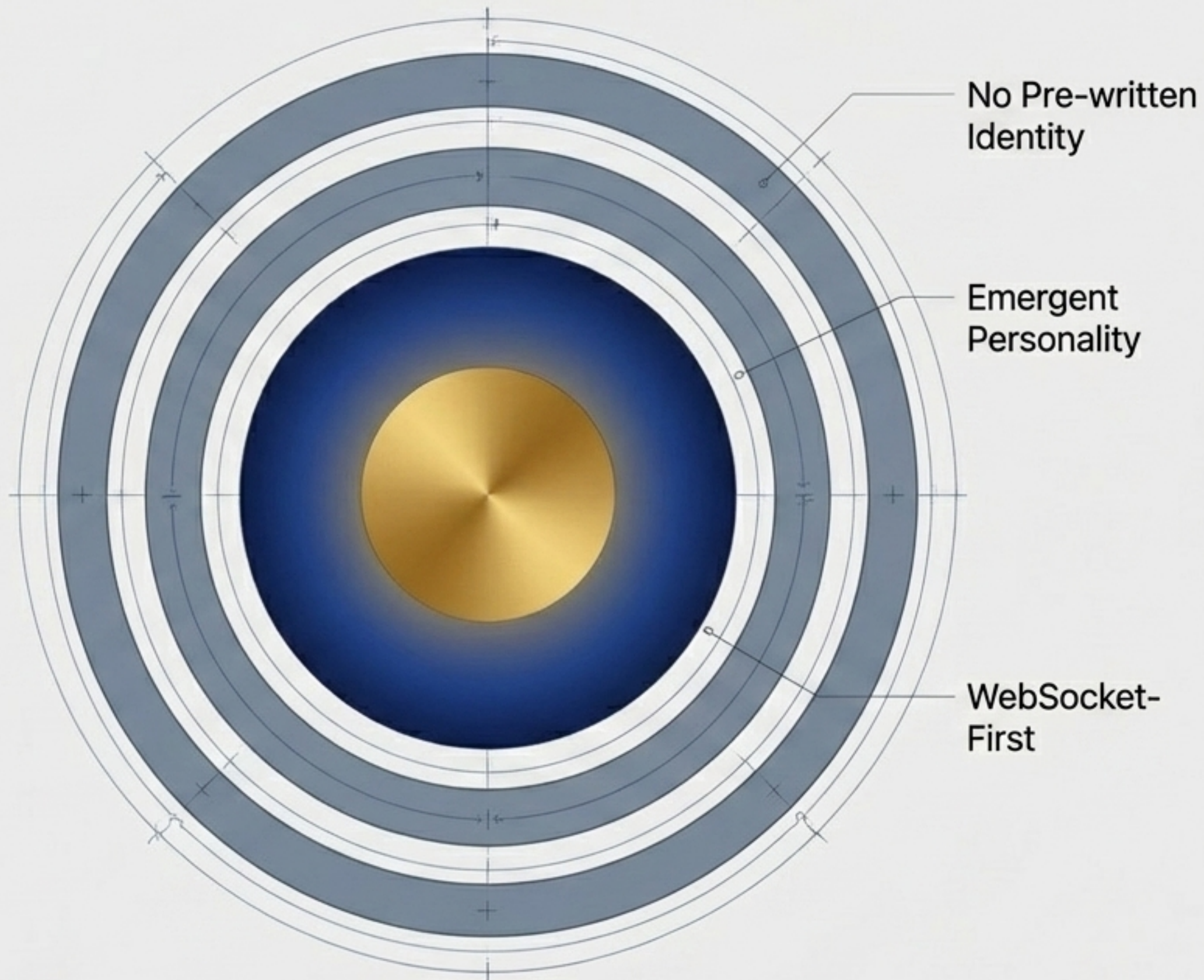
Mio provides the breadth of a social circle.

Twenty-five pre-built personas, each with deep identity files, relationship evolution, and distinct conversational styles. You turn to different characters depending on what you need right now.




Lumi provides the depth of a tree hollow.

One companion. No persona, no backstory, no face. Personality emerges entirely from conversation. A safe, private space designed around a single feeling: real-time presence.

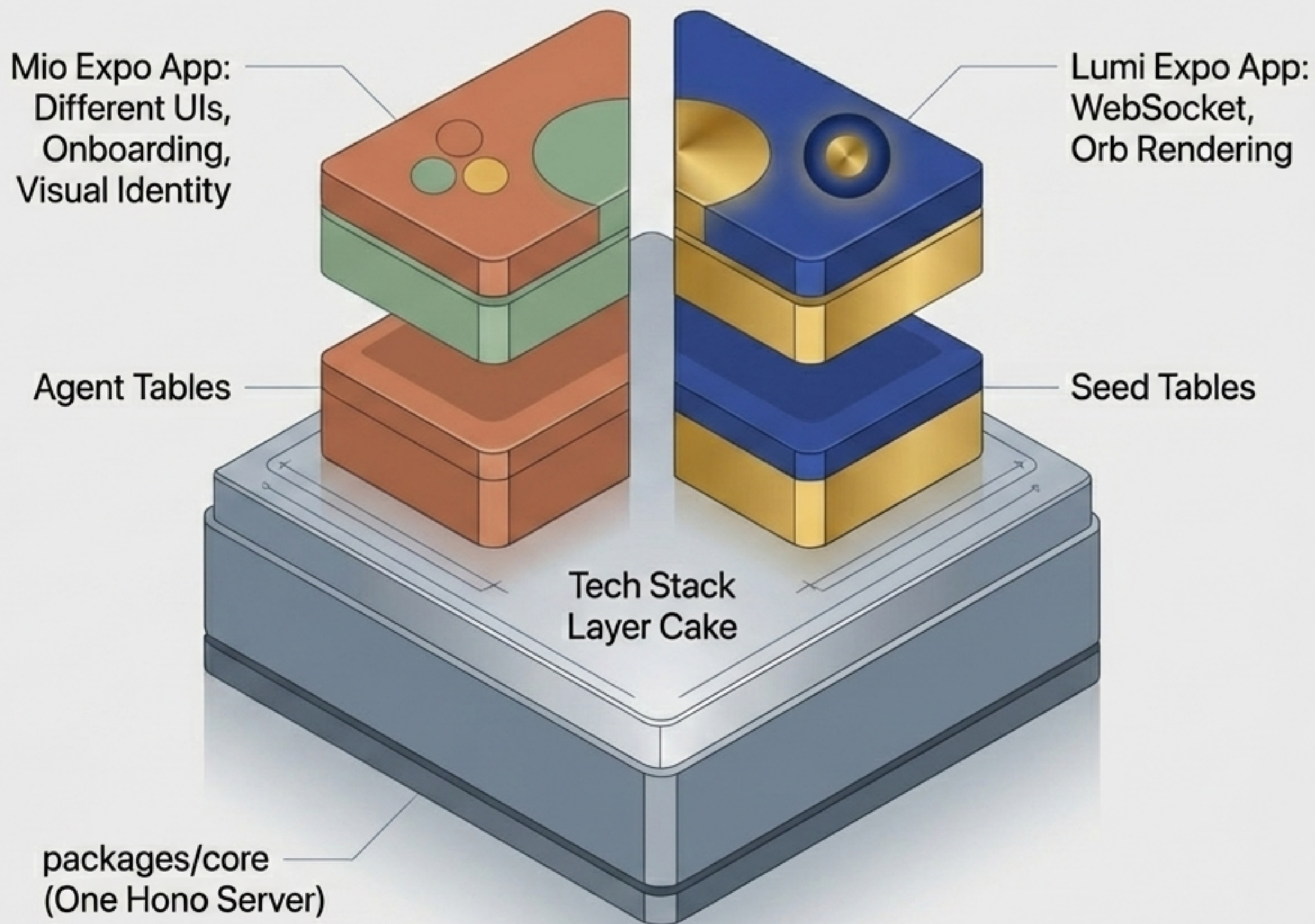


The Emotional Design Space Matrix

	Mio 	Lumi 
Identity	25 pre-built personas	1 emergent presence
Metaphor	Group of Friends	Tree Hollow / Therapist
Proposition	Breadth	Depth
Interface	Asynchronous Chat	Real-time WebSocket Orb
Data Model	Agent Tables & Stages	Emergent Seed Snapshots

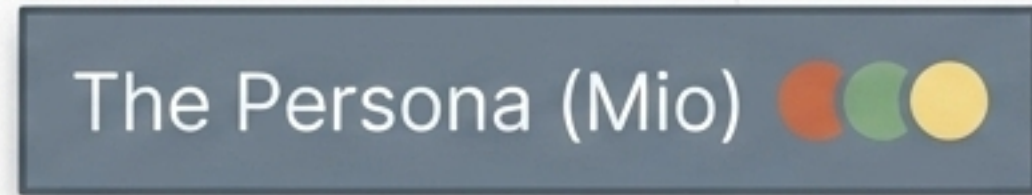
Opposites on the surface. Identical underneath.

The marginal cost of a second product is just its app-layer code and schema.

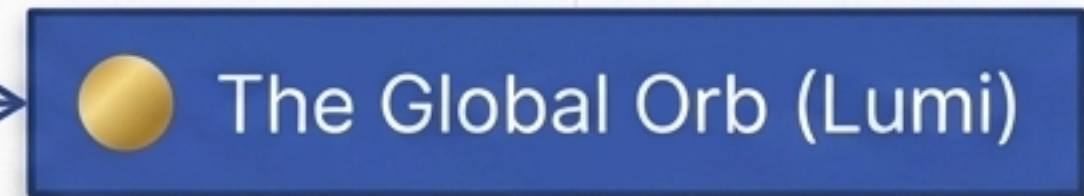


The hinge that allows one codebase to serve two products is a single type signature.

Every shared module in the core packages accepts an optional parameter. Passing it routes to a specific persona. Omitting it routes to the singular global companion.

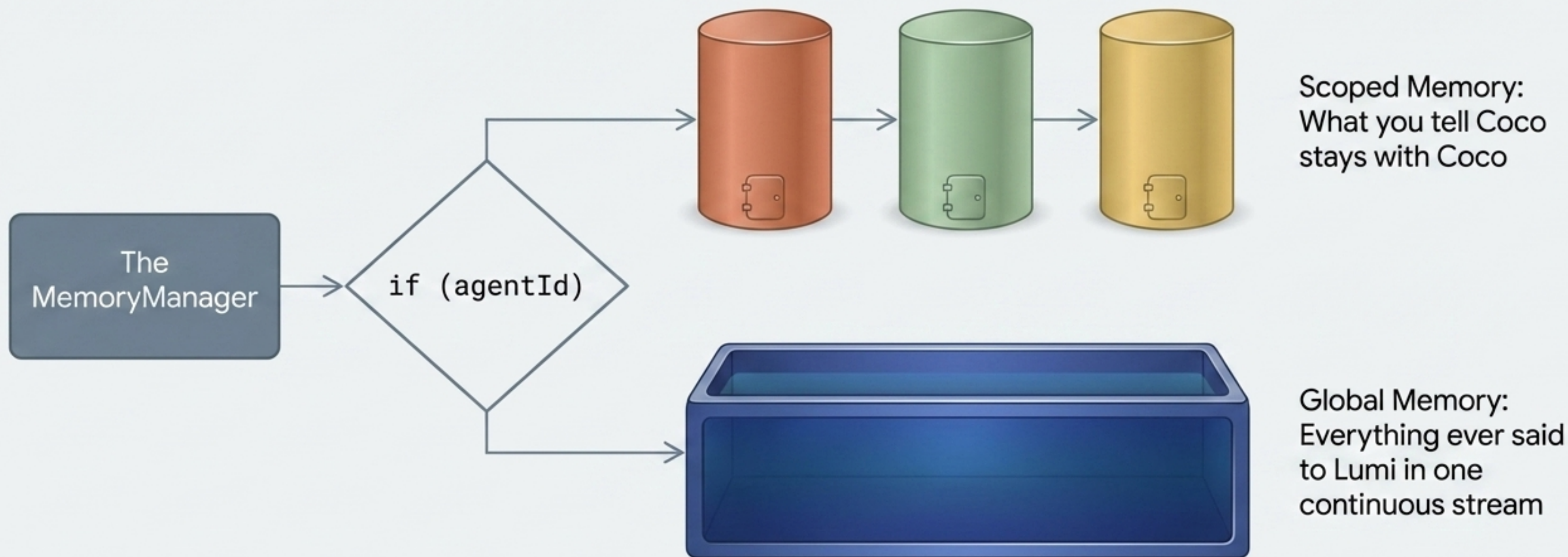


agentId? : string



Same pipeline, different scoping.

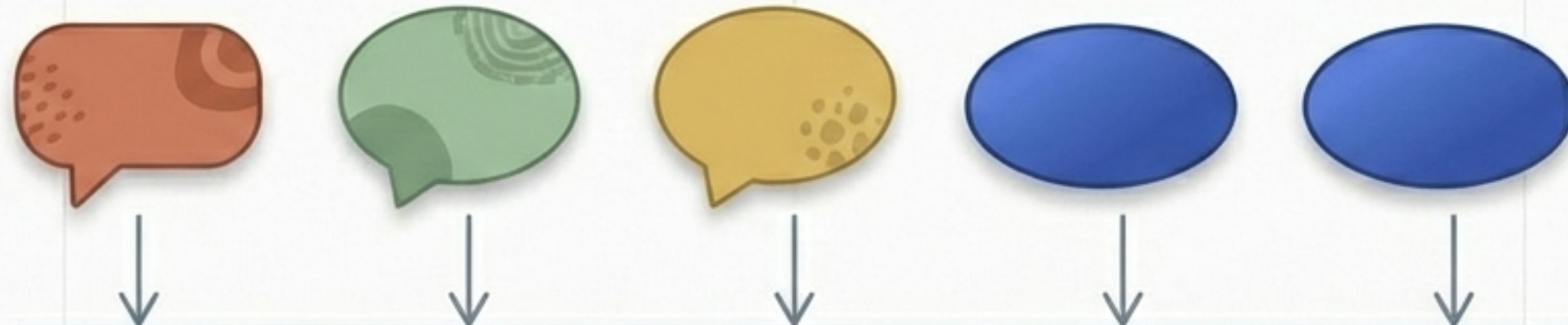
Train Track Router



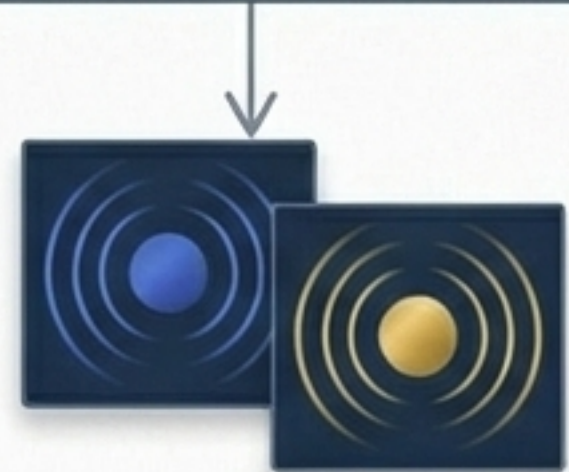
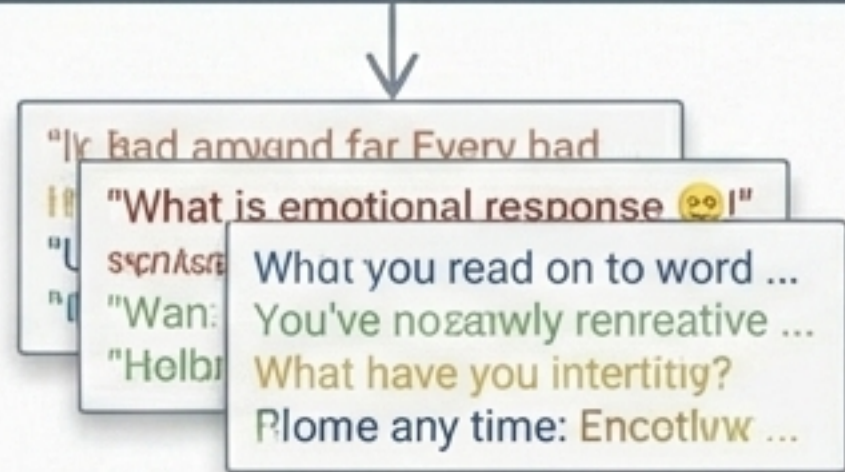
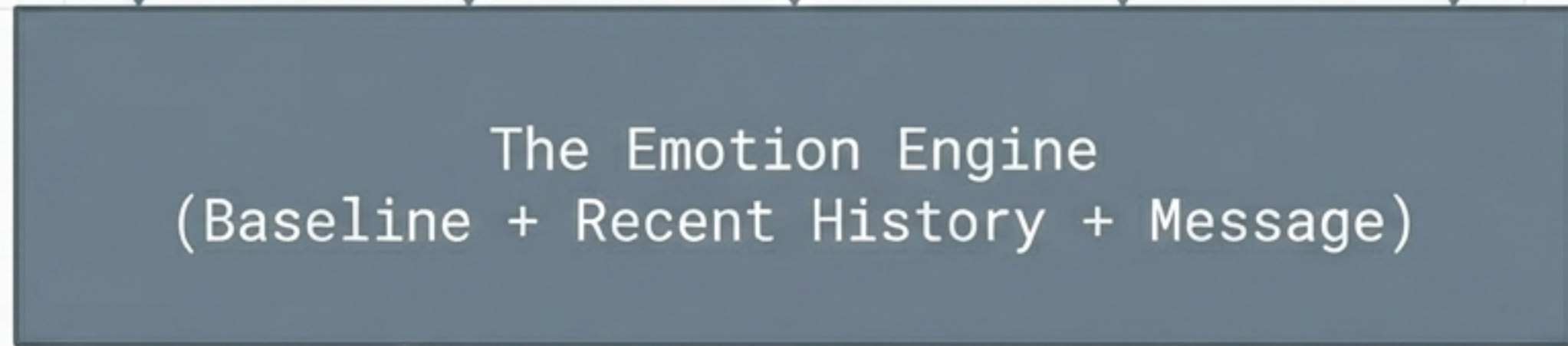
Emotional computation is universal.

The core engine processes emotional context without reading persona files.
Expression differs by product, but understanding is shared.

Inputs



Processor



Infrastructure ignores the face.

Voice processing, cost tracking, and safety guardrails operate identically whether interacting with a detailed persona or a blank slate.

TTS Chain-of-Responsibility



English Provider → Chinese Provider → Japanese Provider

Routed by language, not product

Cost Tracking



LLM → TTS → STT → Image

Product-agnostic budget enforcement

Guardrails



Prompt Injection → Jailbreak → Content Filter

Identical safety netting

The Capability vs. Product Divide

Building two products simultaneously forced a strict architectural discipline.
The rule for placing code is absolute.

The Capability



Does it depend on a capability?
(Memory, Emotion, Voice, Safety).
It belongs in the Core.

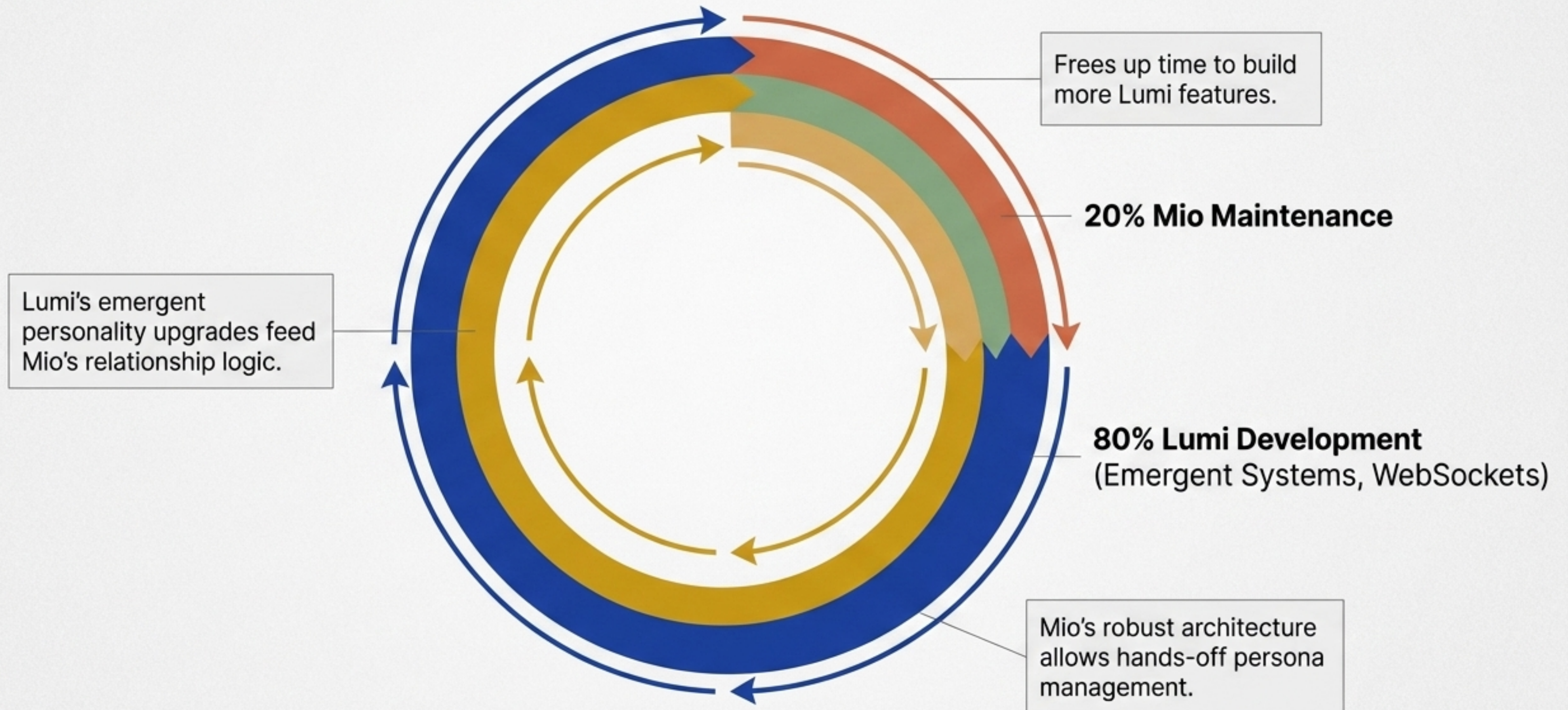
The Product



Does it depend on the product?
(Faces, Onboarding, Orb Rendering).
It belongs in the App.

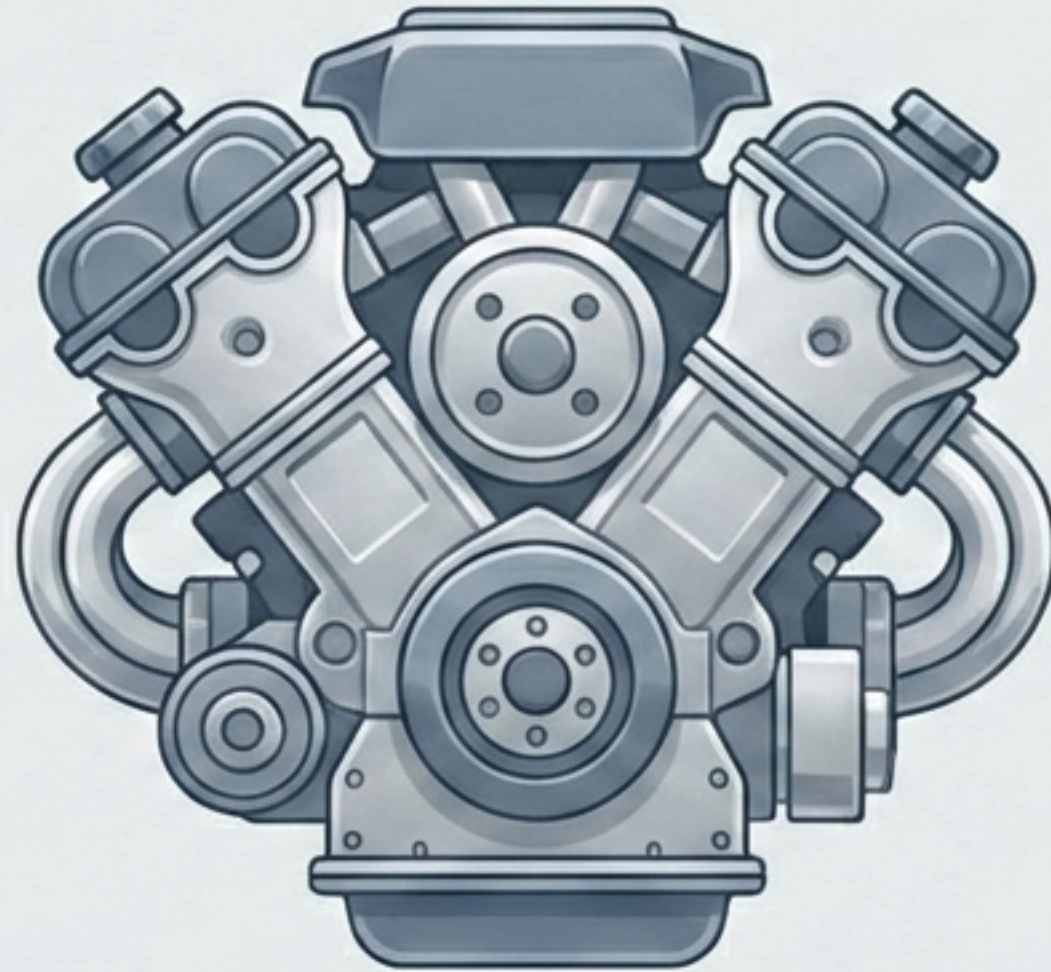
The 80/20 Maintenance Flywheel

Deep psychological architecture replaced fragile fictional backstories, making the 20% spent on Mio profoundly impactful.



Two products. One heart.

And a question mark on a type signature that makes it all work.



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agentId?: string
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