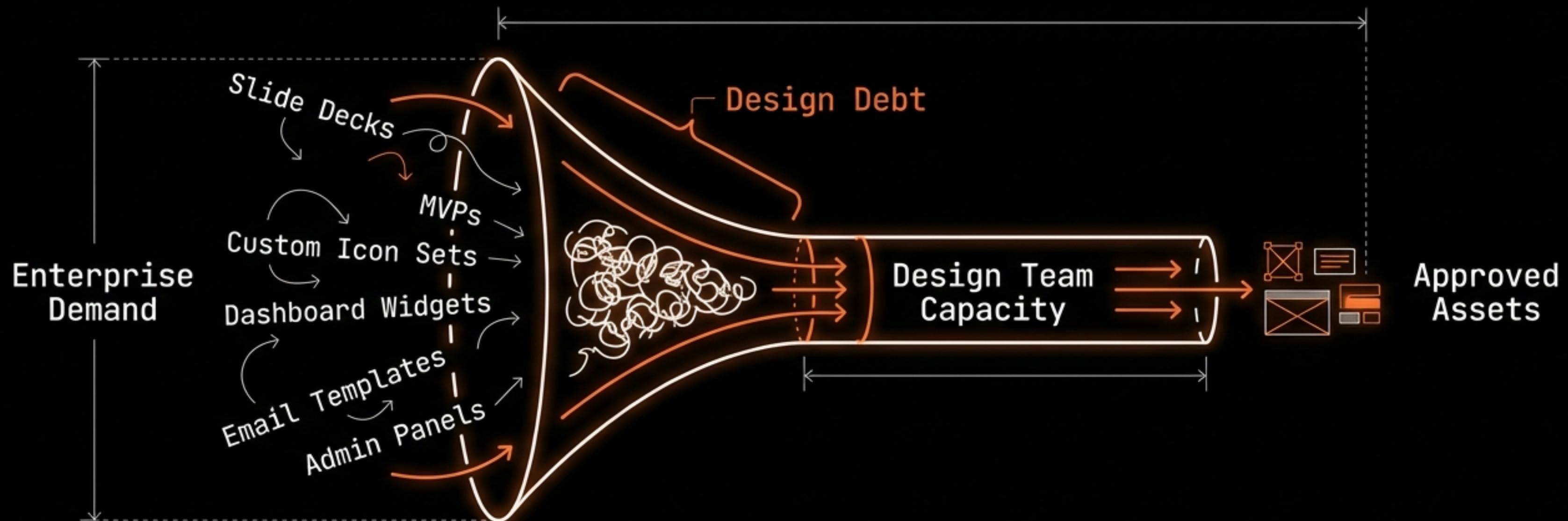


Scaling Enterprise Design Systems through Algorithmic Visual DNA

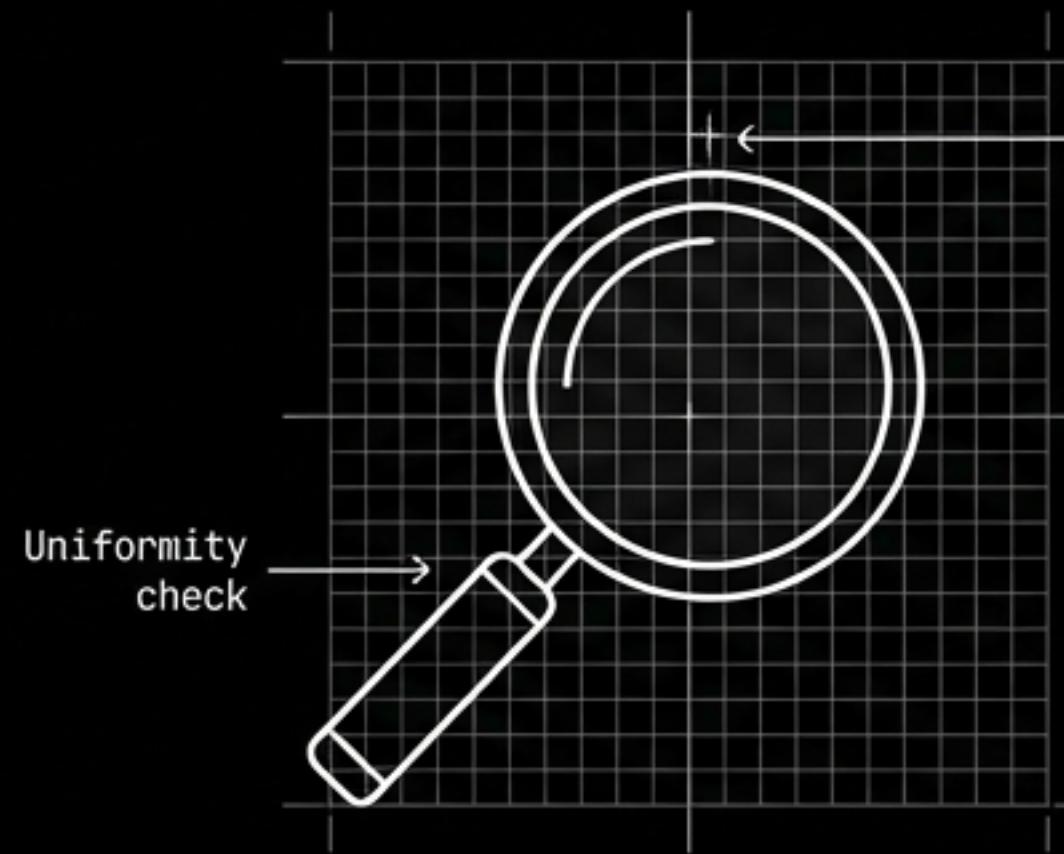
The Enterprise Demand Funnel



In large enterprises, asset demand outpaces human capacity. Hand-crafting individual icons for thousands of screens is fundamentally unscalable.

Conflicting Incentives

The Design System Lead

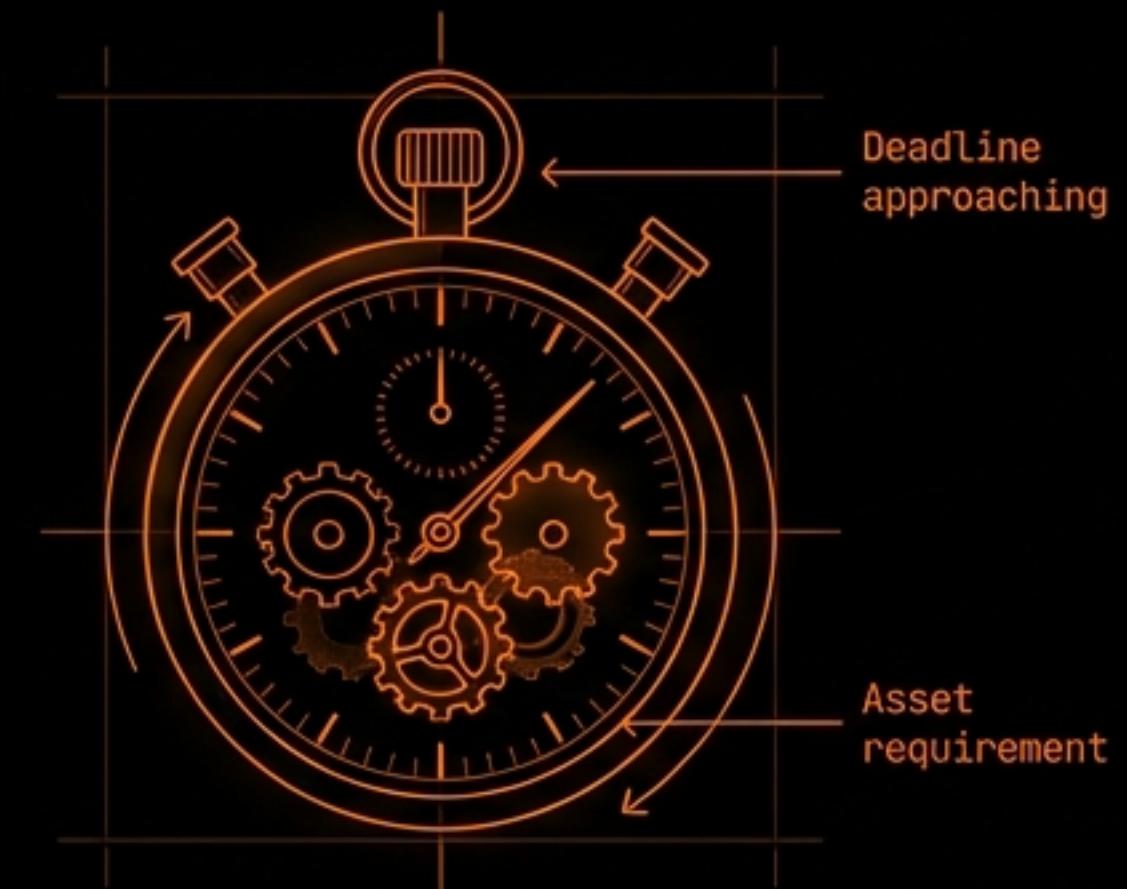


2px stroke weight
specification



FRICITION

The Product Manager



Deadline
approaching

Asset
requirement

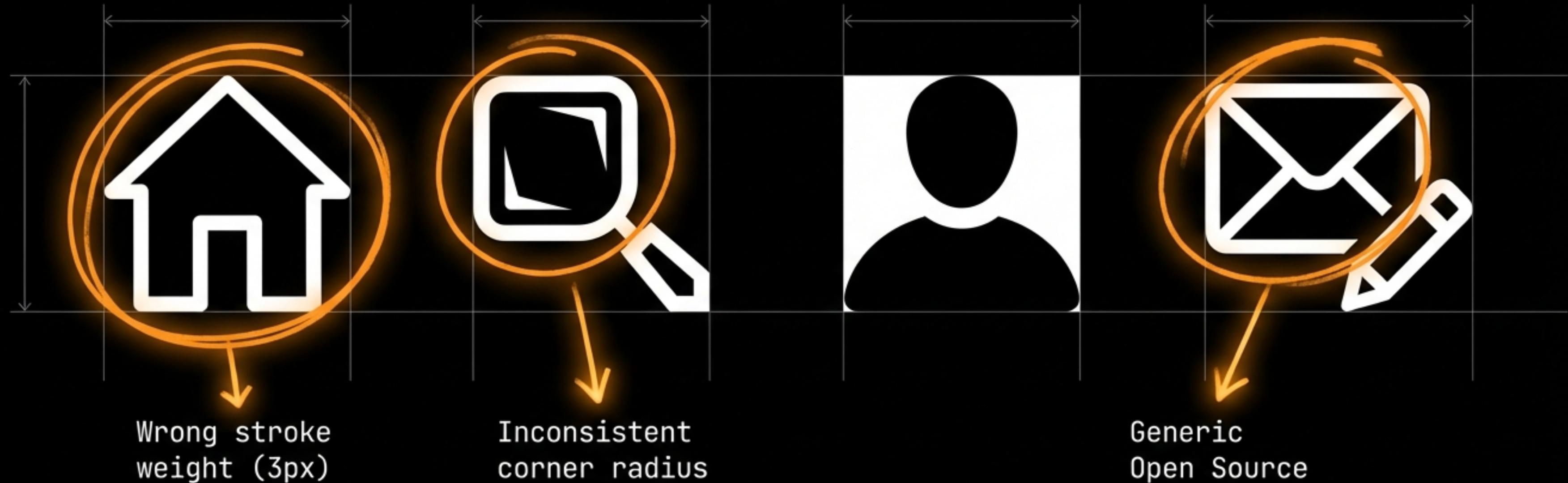
"I need 100+ icons to share the exact same 2px stroke weight."

Pain Point: Fear of 'rogue' assets diluting the brand.

"I need a specific icon for this launch deck immediately."

Pain Point: Blocked by design capacity; lacks Adobe Illustrator skills.

The High Cost of Inconsistency

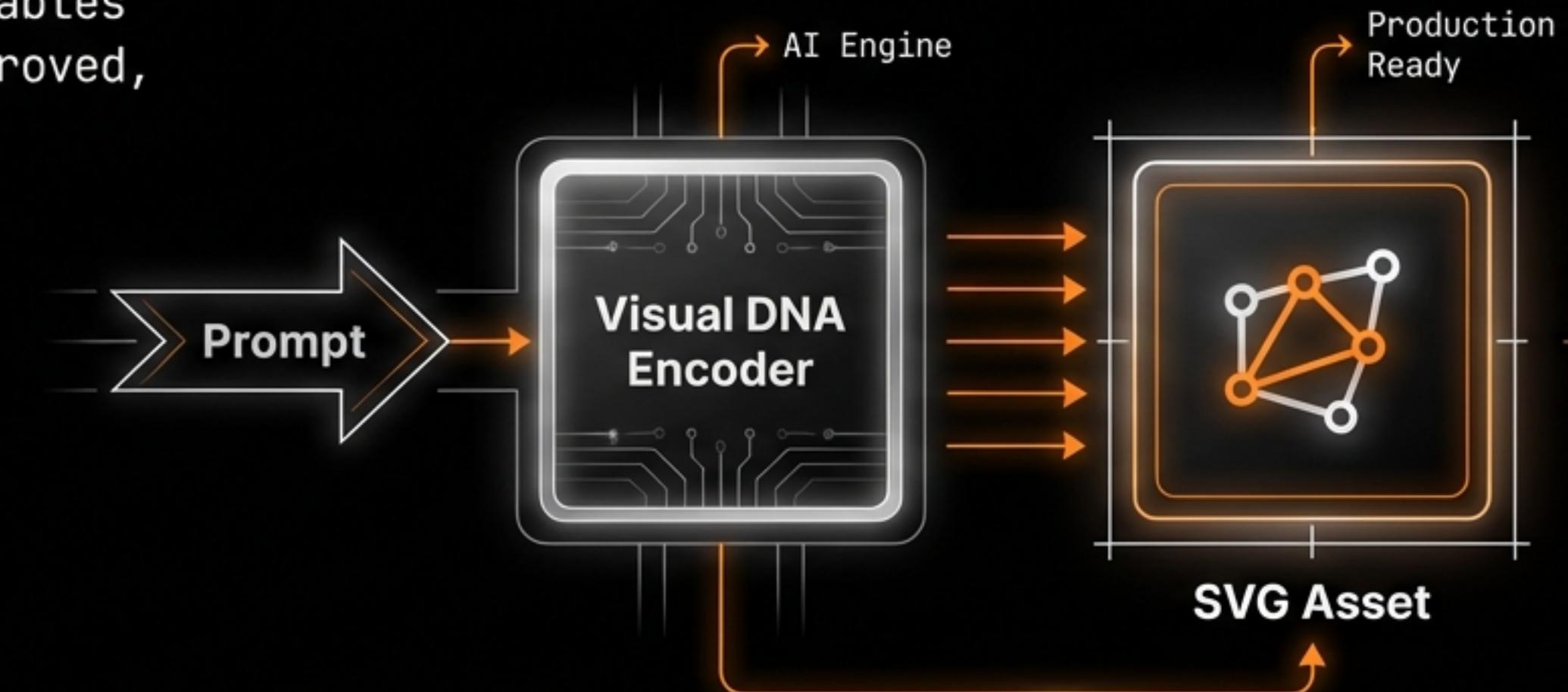


Without a centralized tool, teams download random assets or create non-compliant placeholders, resulting in a fractured user experience.

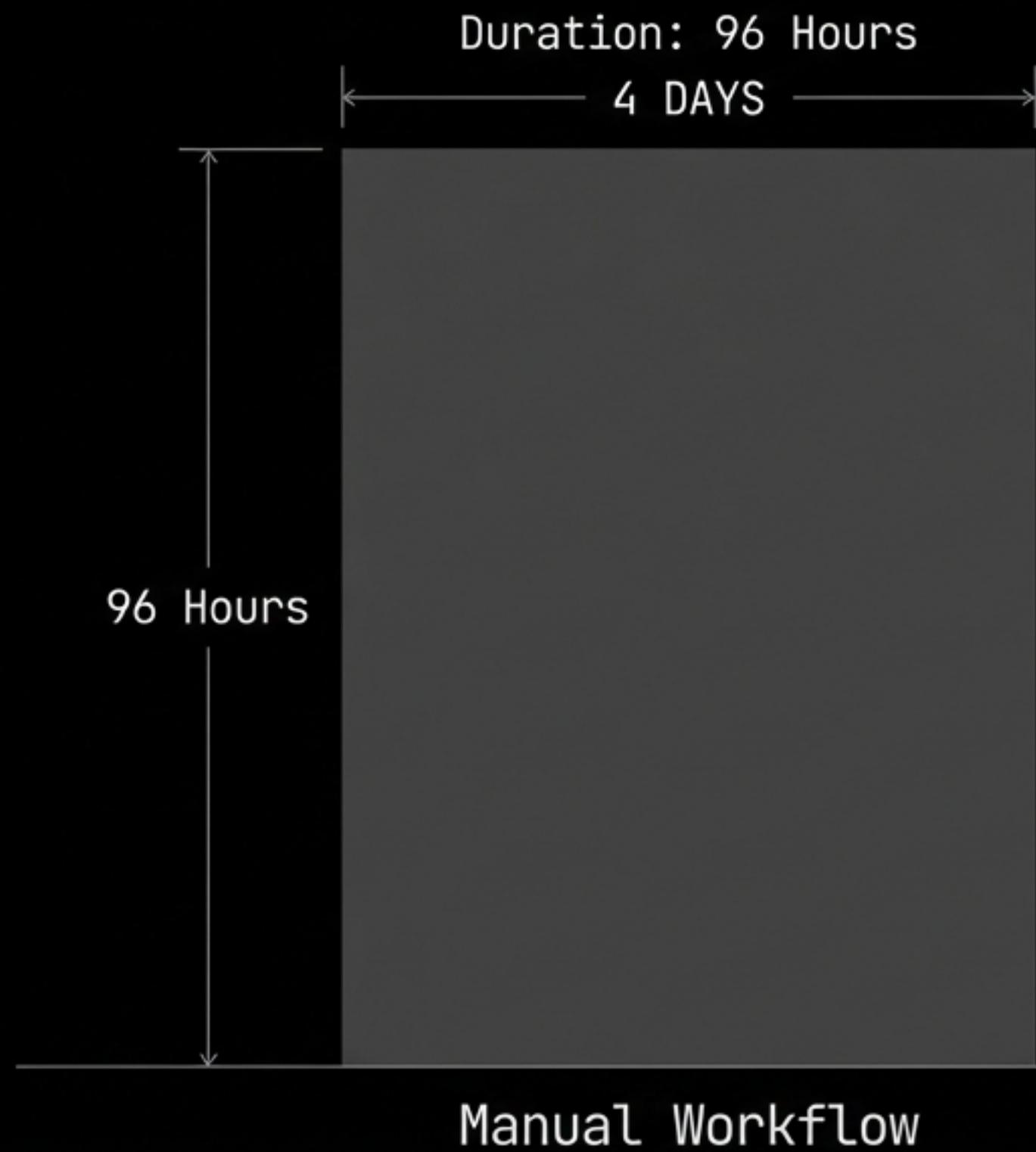
Democratising Professional Ico'nography

AIB is an AI-powered engine that enables non-designers to generate brand-approved, production-ready icons in seconds.

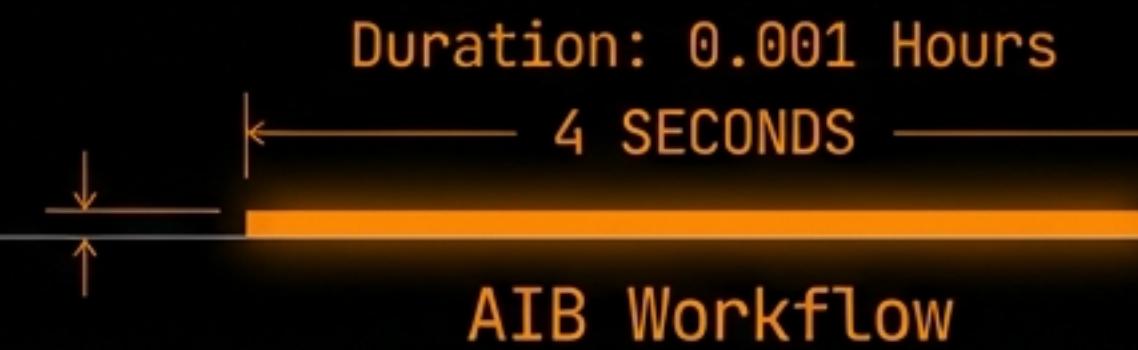
- ✓ **Eliminate Approval Loops**
(Reduction in stakeholder review time)
- ✓ **100% Visual Consistency**
(Adherence to brand guidelines)
- ✓ **Scalable Asset Generation**
(Rapid generation of icon sets)



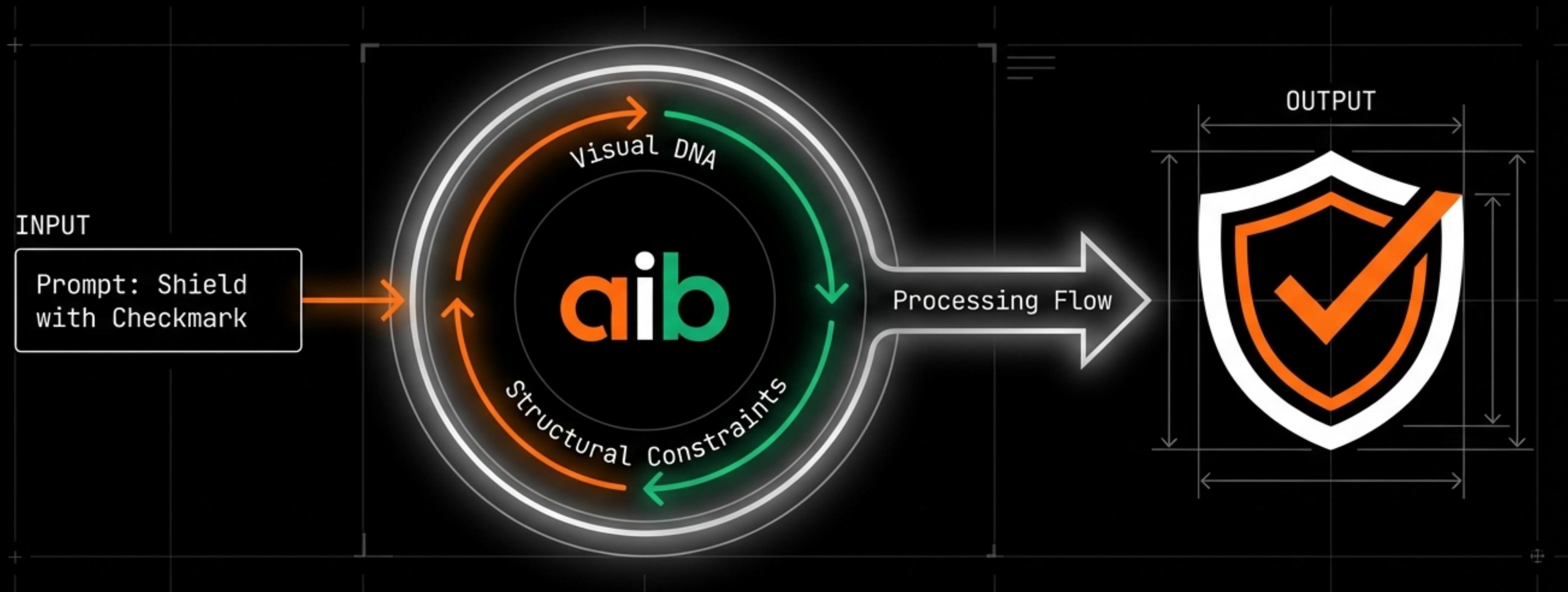
The Monumental Shift



10,000%
Efficiency Gain

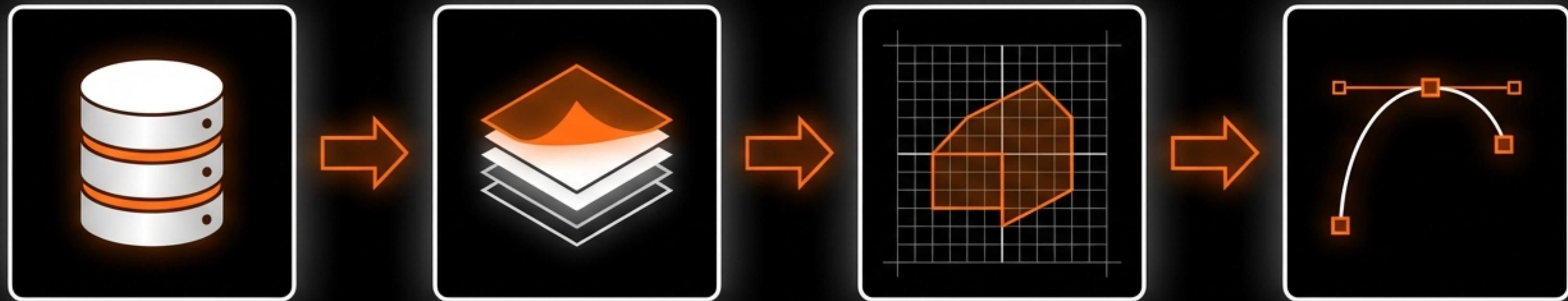


The Intelligent Solution



AIB moves beyond simple text-to-image generation. It is a governed system that enforces brand DNA to deliver production-ready vectors in seconds.

The Architecture Pipeline



Base Model

Stable Diffusion XL

Style Enforcement

LoRA Training

Structure

ControlNet

Post-Processing

Vtracer Pixel-to-Vector

A multi-stage pipeline designed for precision. We do not rely on a single model, but a stack of specialised technologies.

The AI Brain

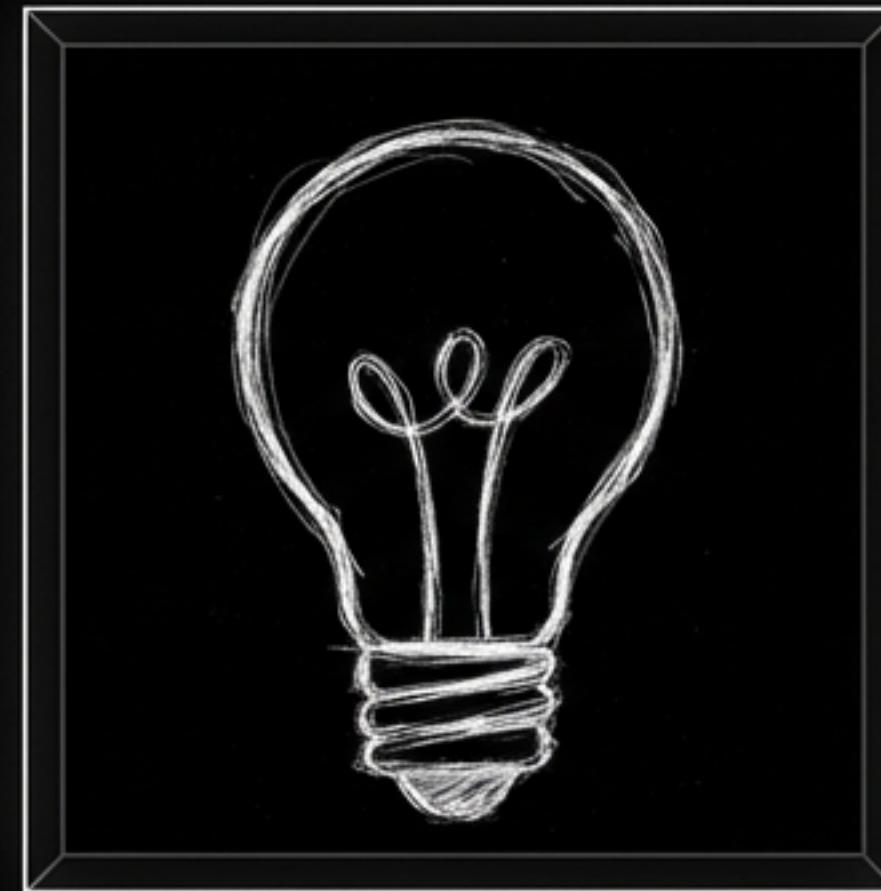
Low-Rank Adaptation (LoRA) Style Enforcement



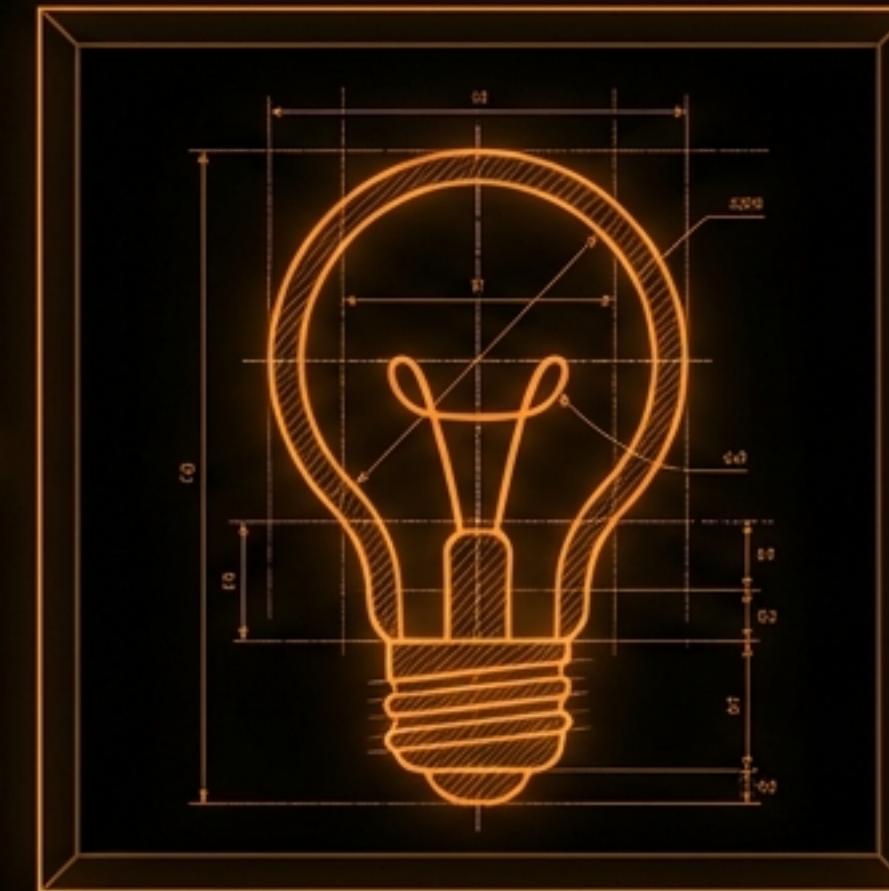
We train a small adapter layer exclusively on our existing icon library. This teaches the model our specific visual language, overriding generic internet styles and achieving 100% style compliance.

The AI Hand

ControlNet: Scribble-to-Icon



Input: User Scribble



Process: ControlNet Structure

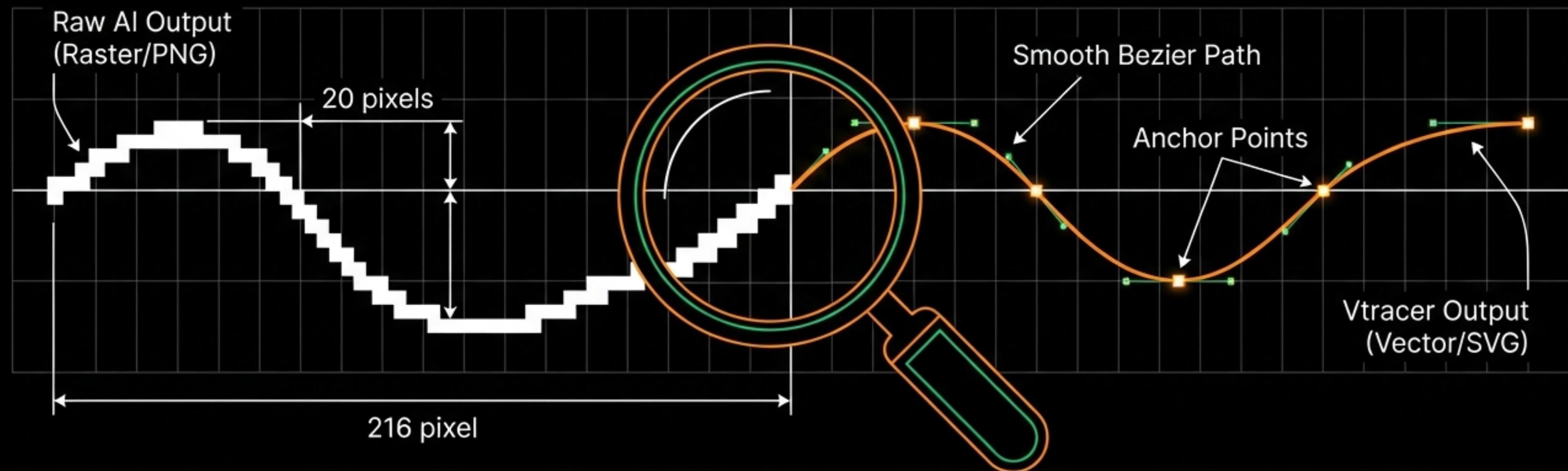


Output: Production Asset

Text prompts are often insufficient for specific metaphors. ControlNet allows non-designers to dictate the composition via rough sketches, while the AI handles the execution.

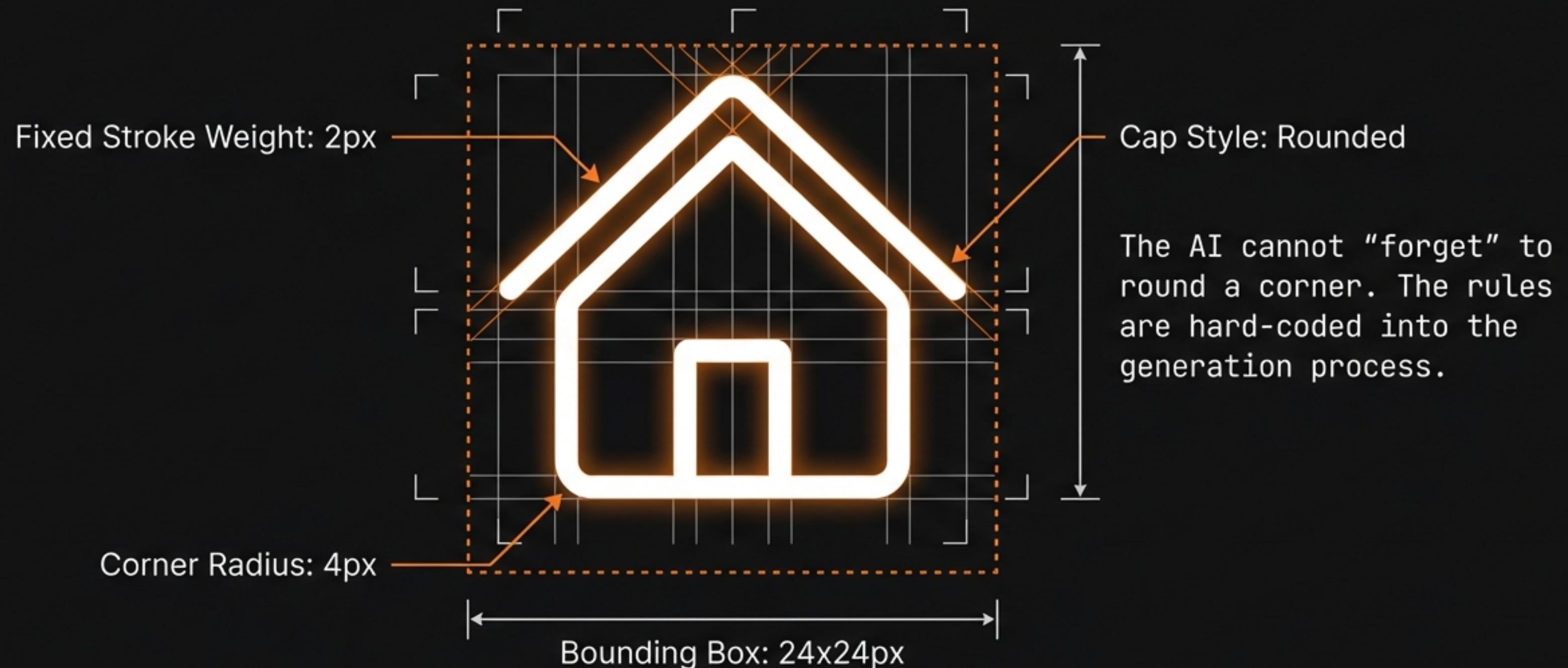
Solving the Last Mile

Automated Raster-to-Vector Conversion (Vtracer).



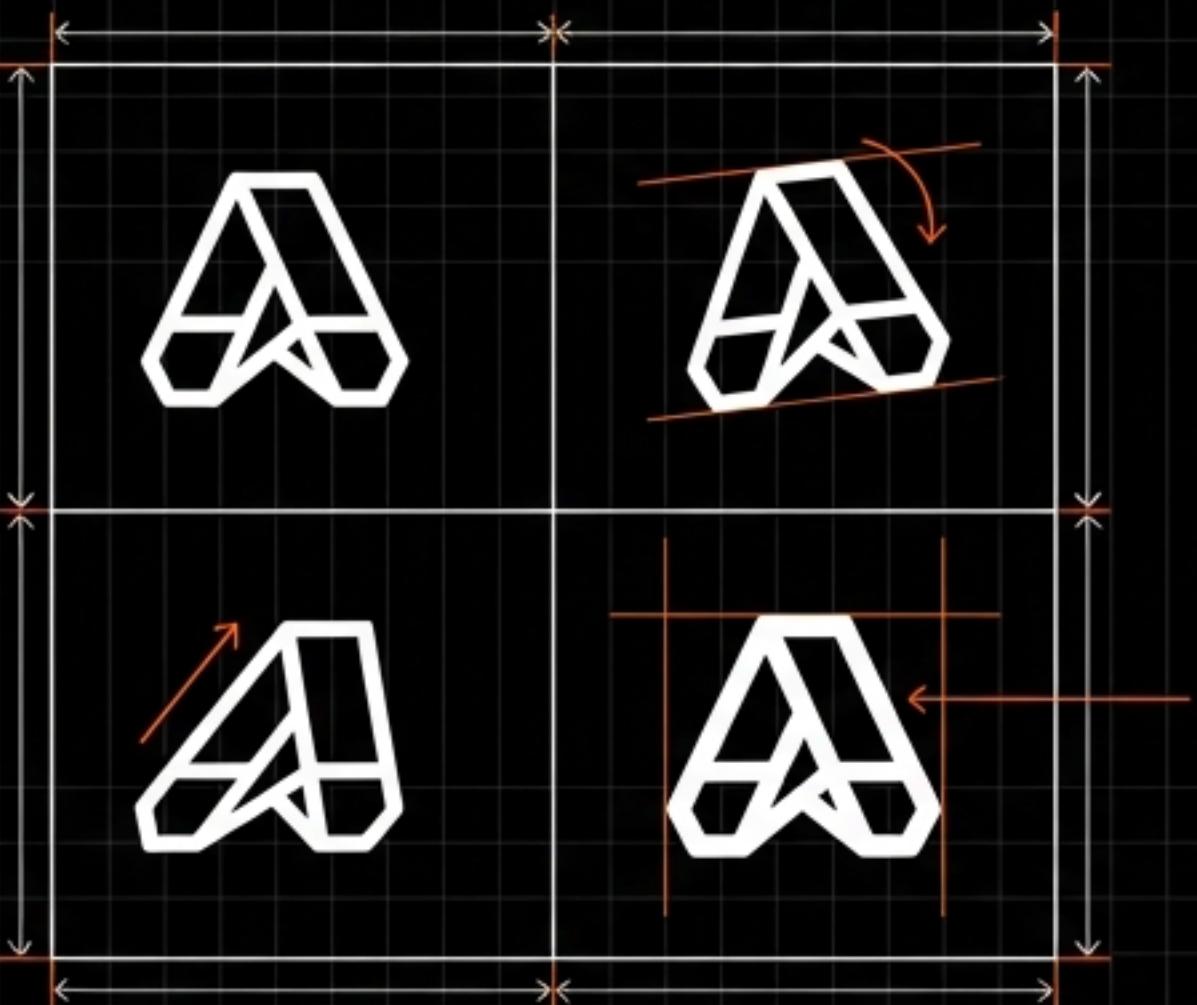
Generative AI creates pixels. Design systems require math. We integrate Vtracer to automatically convert generations into clean, scalable SVG code compatible with the engineering codebase.

Algorithmic Guardrails



Data-Driven Strategy & Training

Synthetic Augmentation



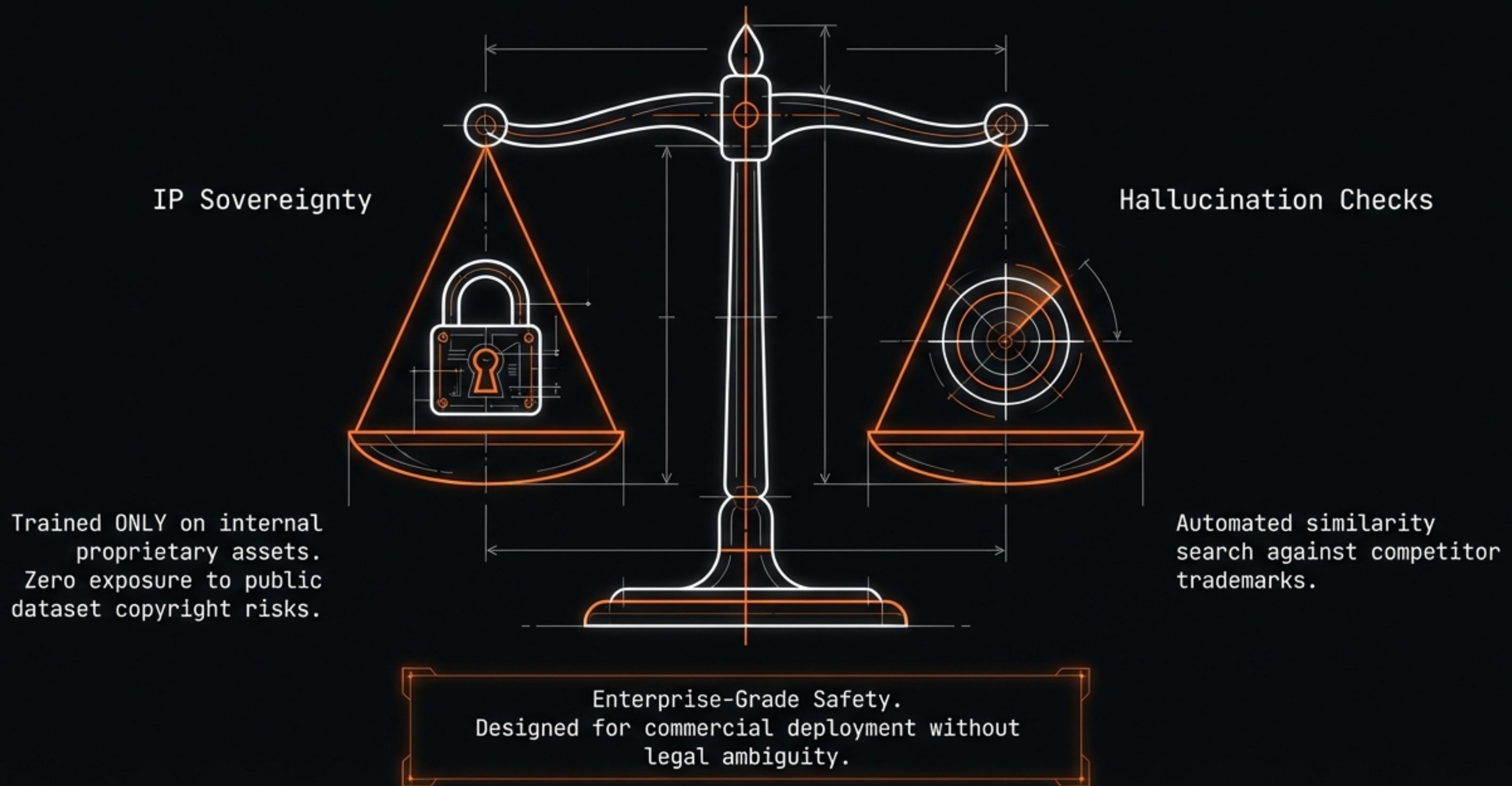
Teaching the model the boundaries of the style through variation.

Negative Prompting

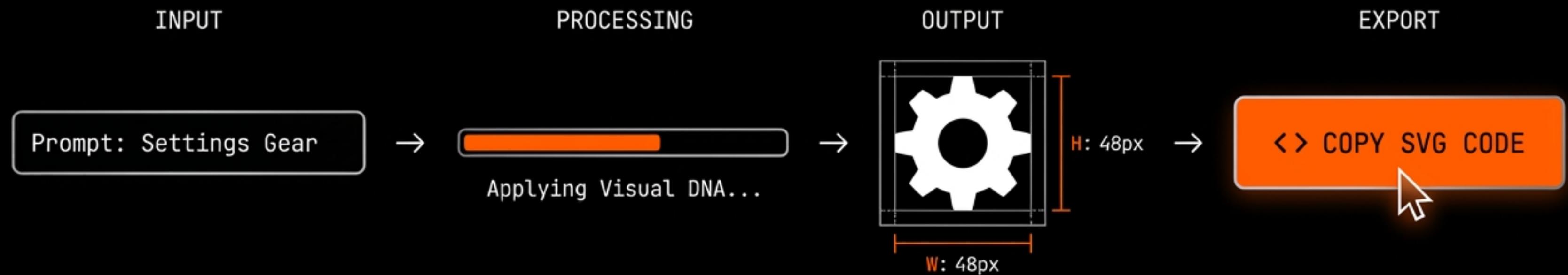
- Gradients
- Drop Shadows
- 3D Rendering
- Complex Detail

We define the brand as much by what it excludes as what it includes.

Ethical & Legal Compliance

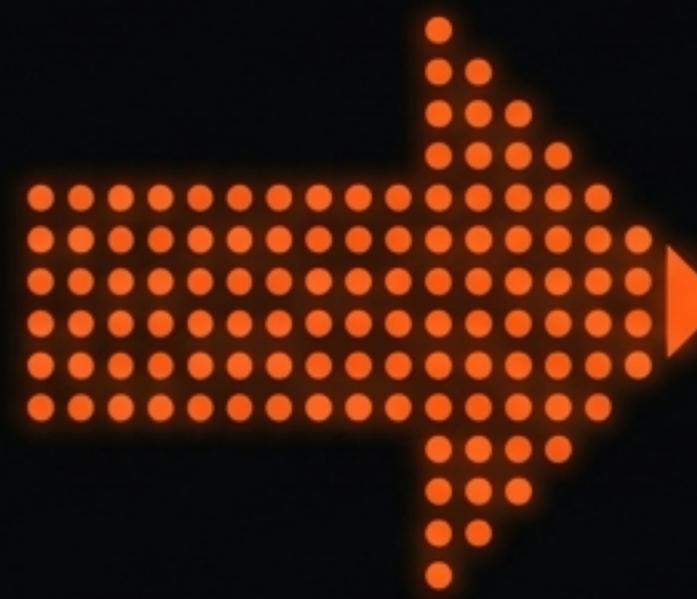


The Frictionless Workflow

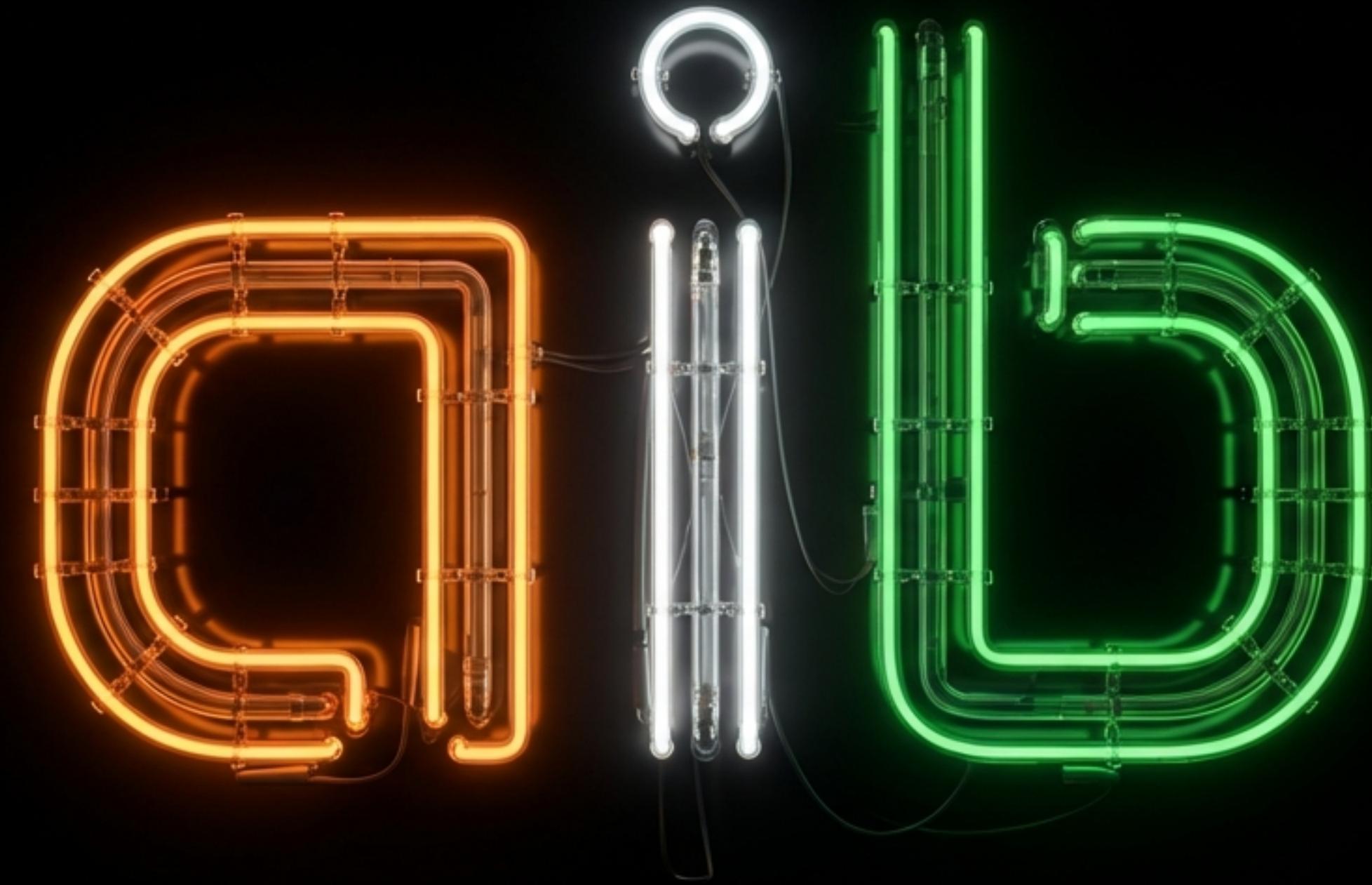


Zero friction. No Jira tickets. No email chains. Immediate asset delivery.

Future Iterations & Roadmap



Designed for continuous commercial deployment and expanding capability.



**Transforming a manual bottleneck into
scalable, democratised infrastructure.**