



Automated Icon Builder

Scaling Enterprise Design Systems
through Algorithmic Visual DNA

SECTION 01: INTRODUCTION

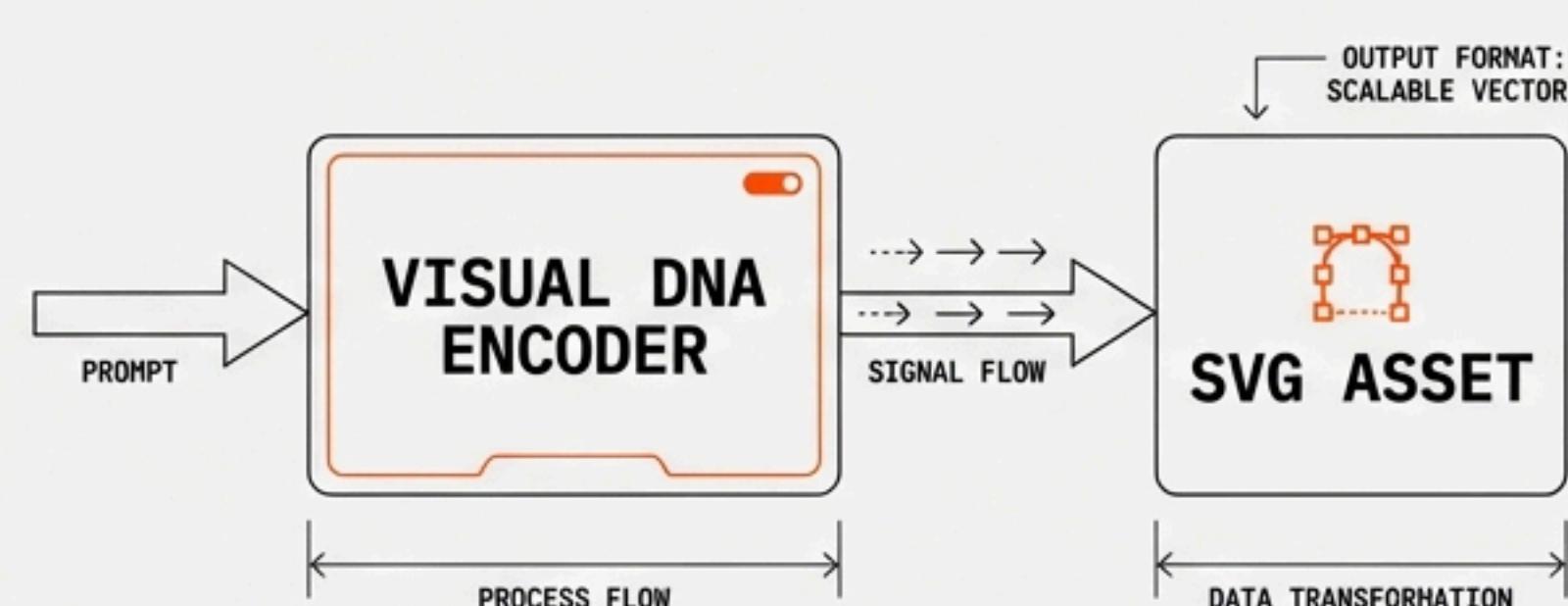
DEMOCRATISING PROFESSIONAL ICONOGRAPHY.

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

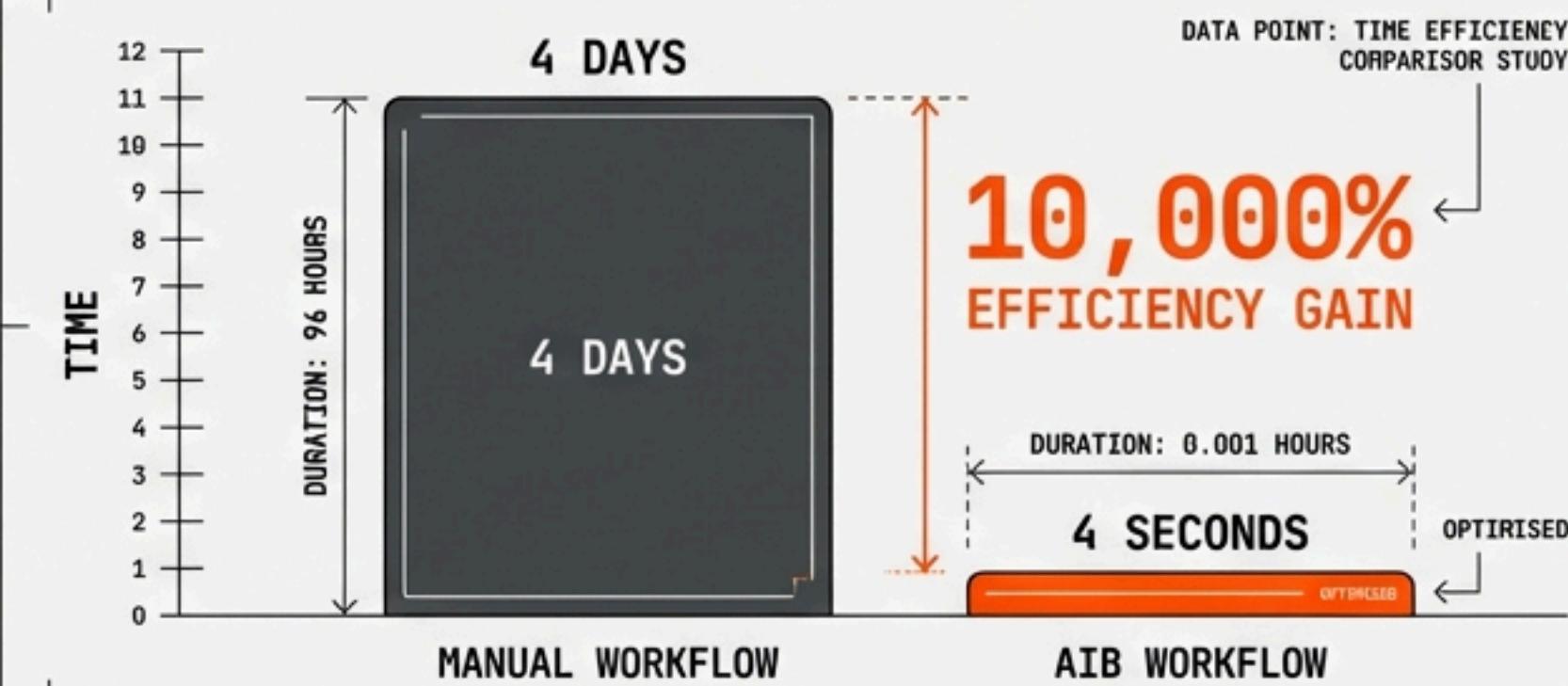
SECTION 03: VALUE PROP

- ELIMINATE APPROVAL LOOPS.** Reduction in stakeholder review time.
- 100% VISUAL CONSISTENCY.** Adherence to brand guidelines.
- SCALABLE ASSET GENERATION.** Rapid generation of icon sets.

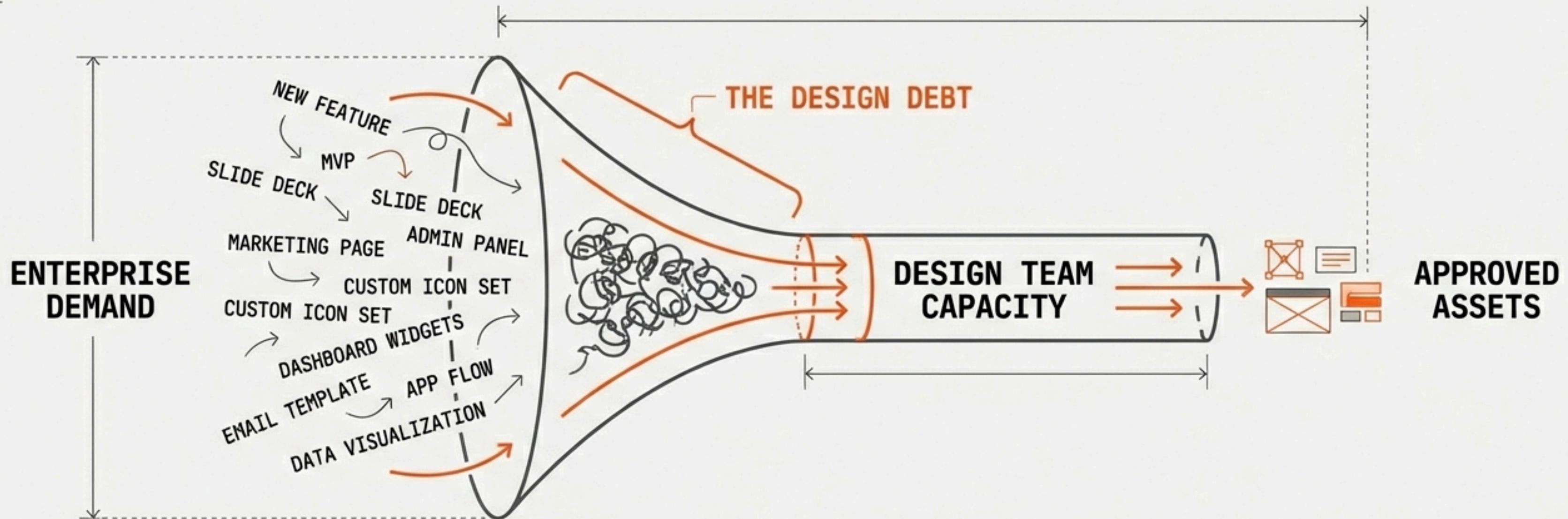
SECTION 02: THE MECHANISM



SECTION 04: KEY METRIC



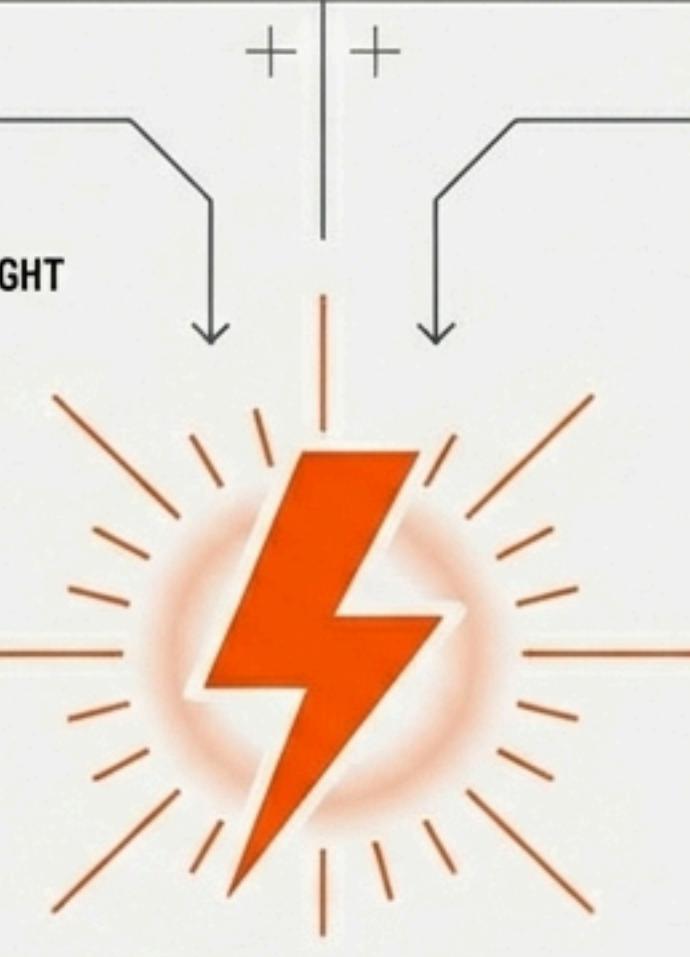
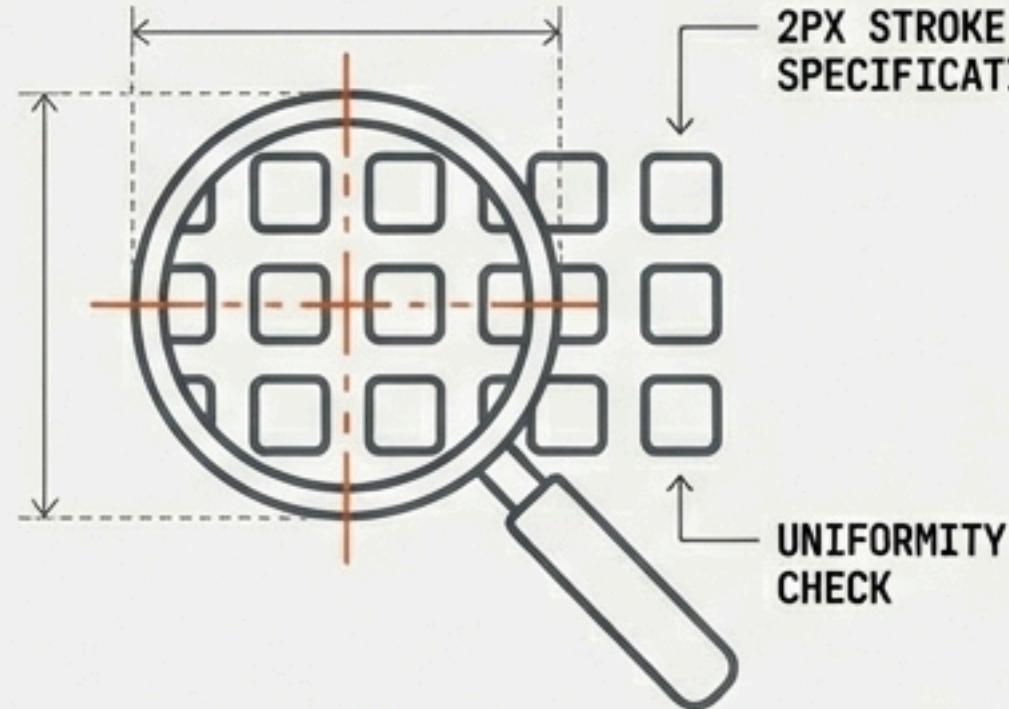
THE DESIGN BOTTLENECK.



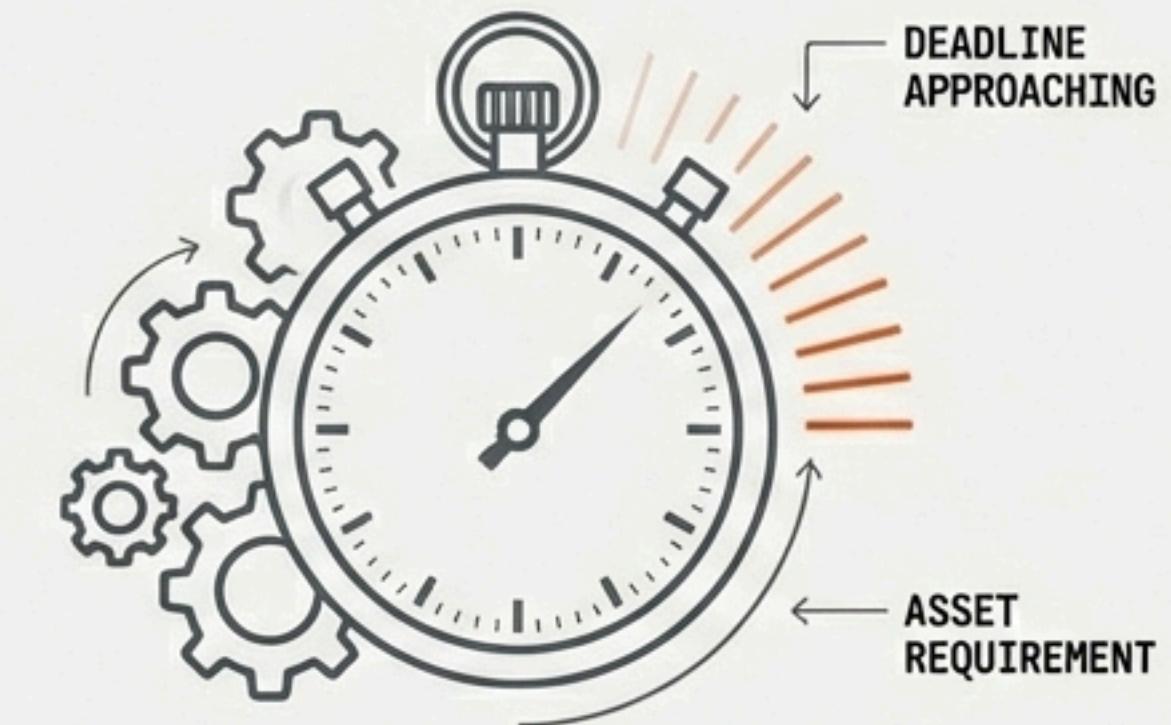
IN LARGE ENTERPRISES, ASSET DEMAND OUTPACES HUMAN CAPACITY. HAND-CRAFTING INDIVIDUAL ICONS FOR THOUSANDS OF SCREENS IS FUNDAMENTALLY UNSCALABLE.

CONFLICTING INCENTIVES: SPEED VS. PRECISION

THE DESIGN SYSTEM LEAD



THE PRODUCT MANAGER



FRICTION

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

PAIN POINT

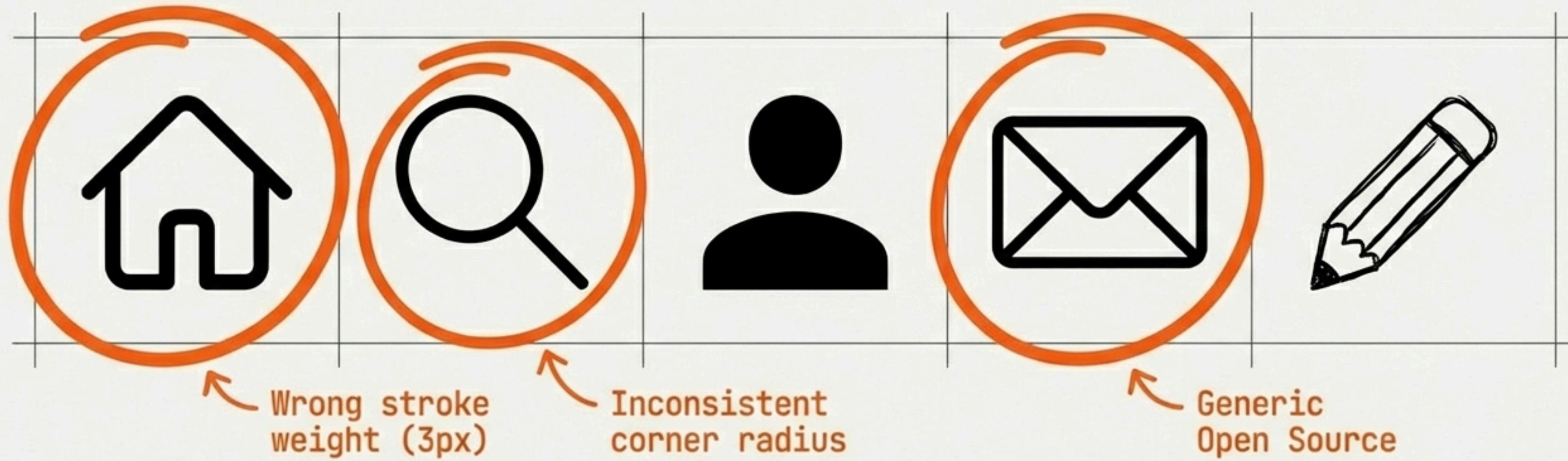
Fear of 'rogue' assets diluting the brand.

PAIN POINT

Blocked by design capacity; lacks Adobe Illustrator skills.

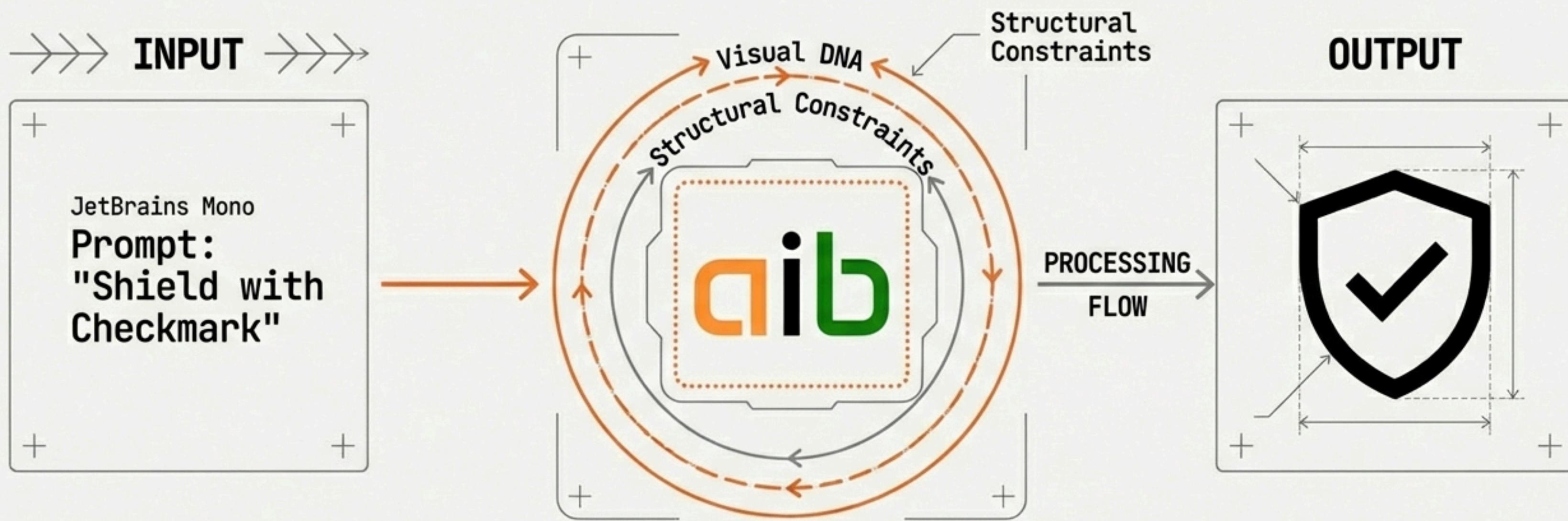
THE HIGH COST OF INCONSISTENCY.

WALL OF SHAME



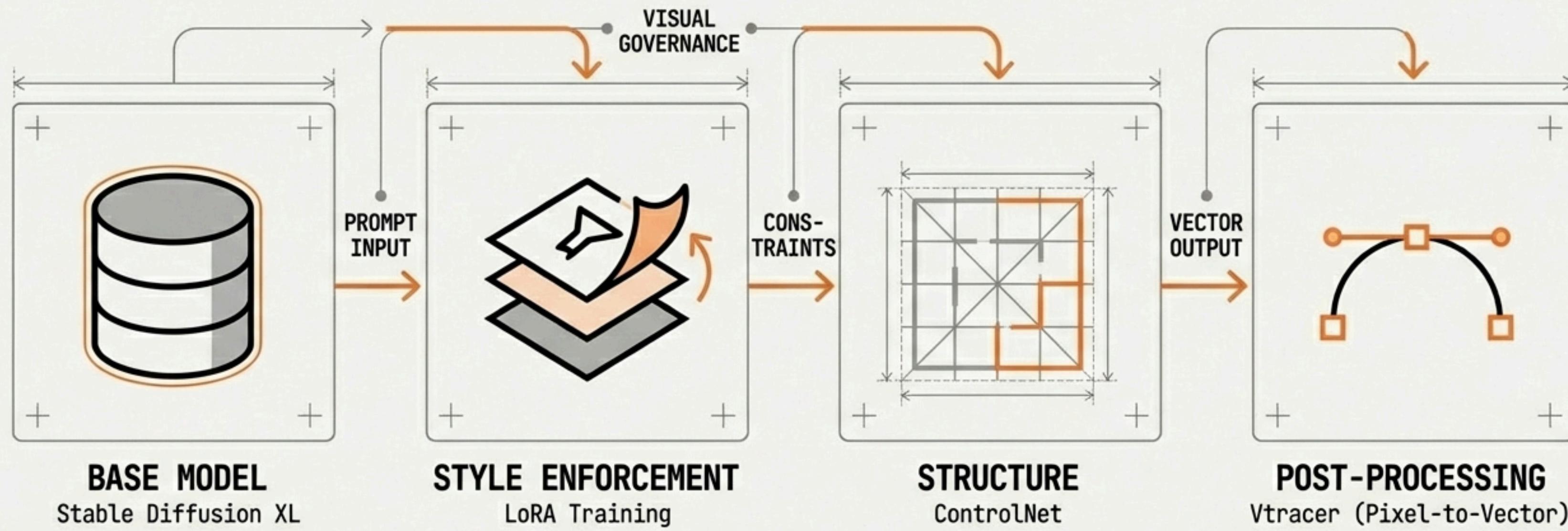
Without a centralized tool, teams download random assets or create non-compliant placeholders, resulting in a fractured user experience.

INTRODUCING 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: FROM PROMPT TO VECTOR

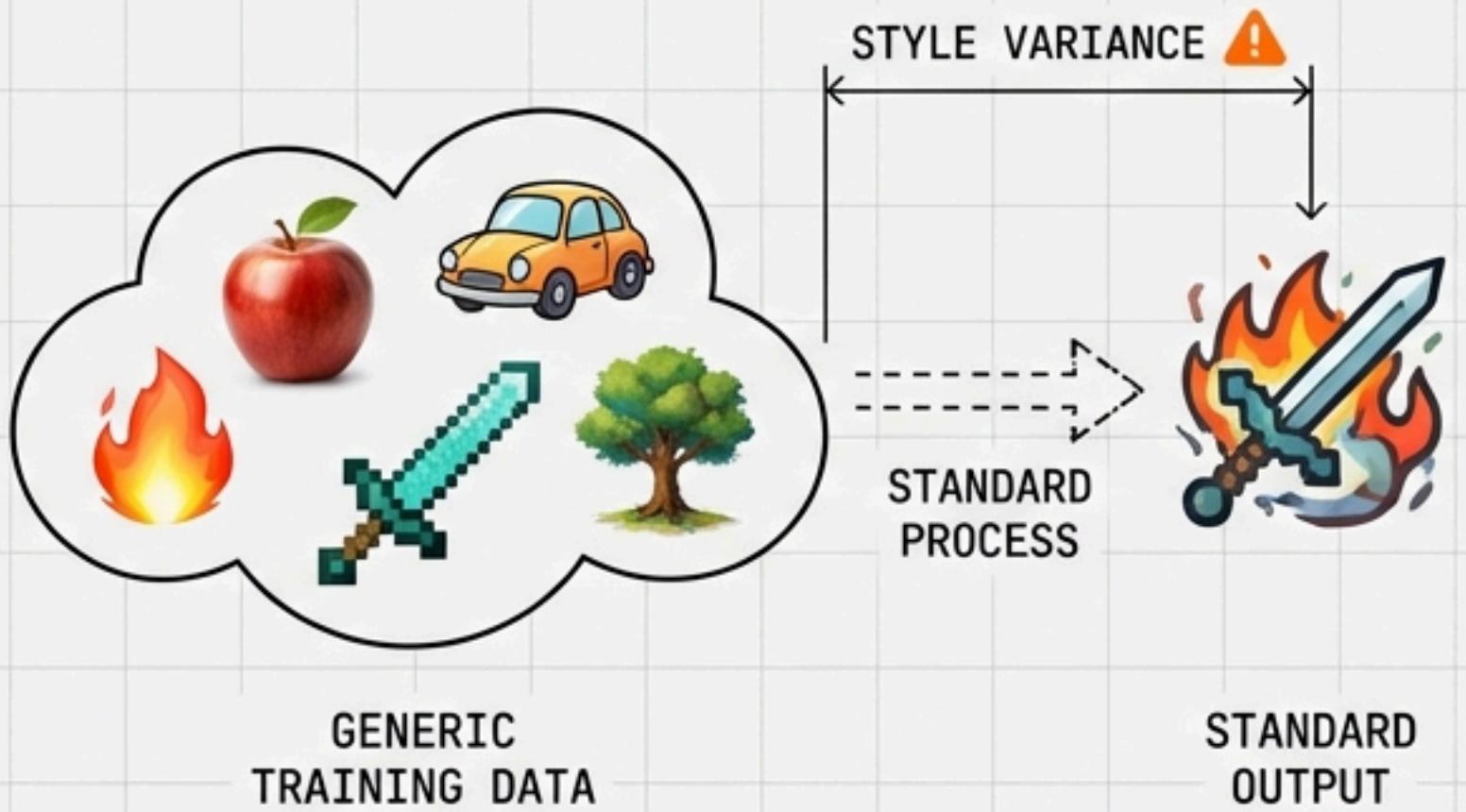


A multi-stage pipeline designed for precision. We do not rely on a single model, but a stack of specialised technologies.

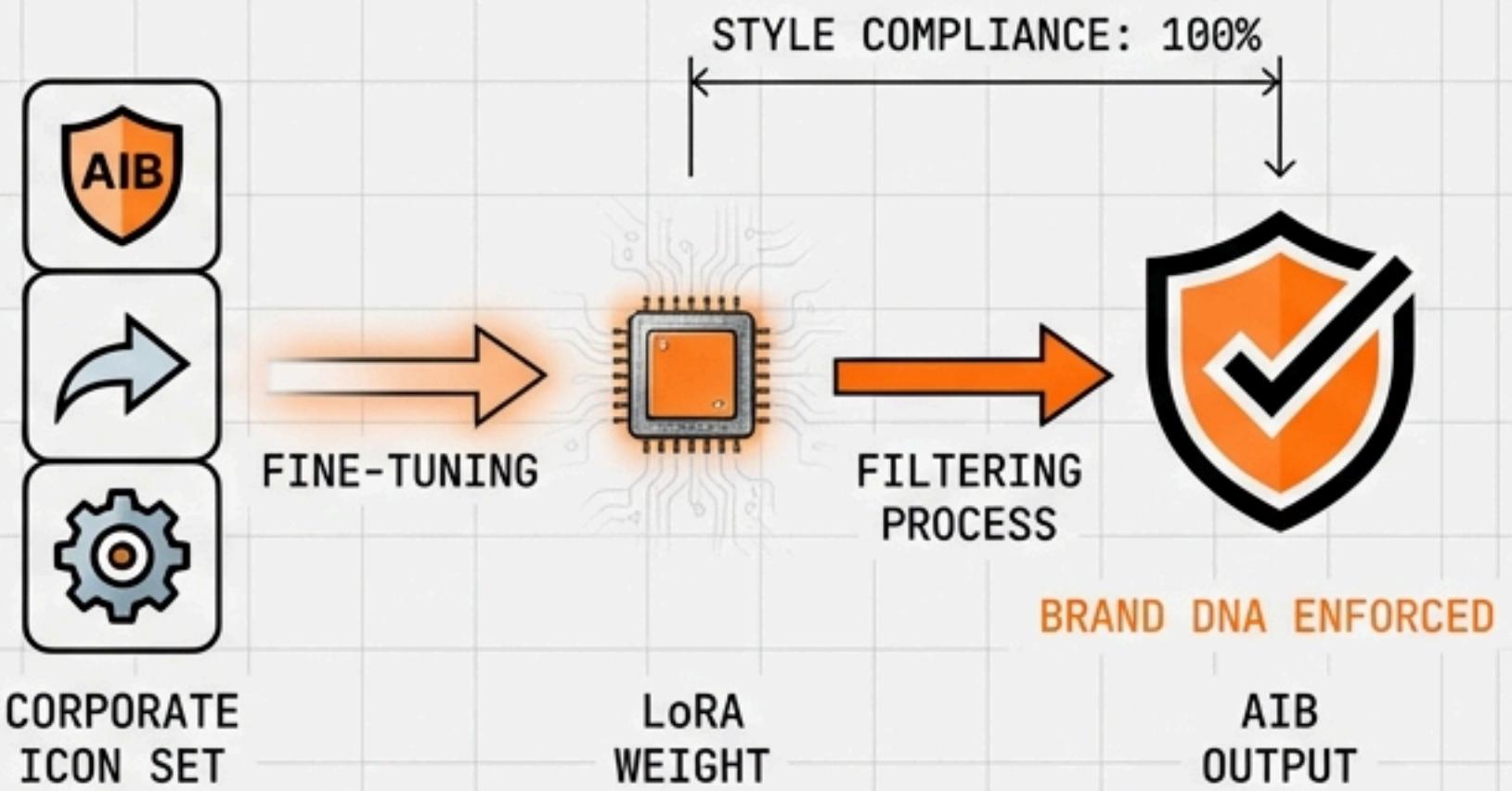
STYLE ENFORCEMENT: THE AI “BRAIN”

Low-Rank Adaptation (LoRA)

WITHOUT LoRA



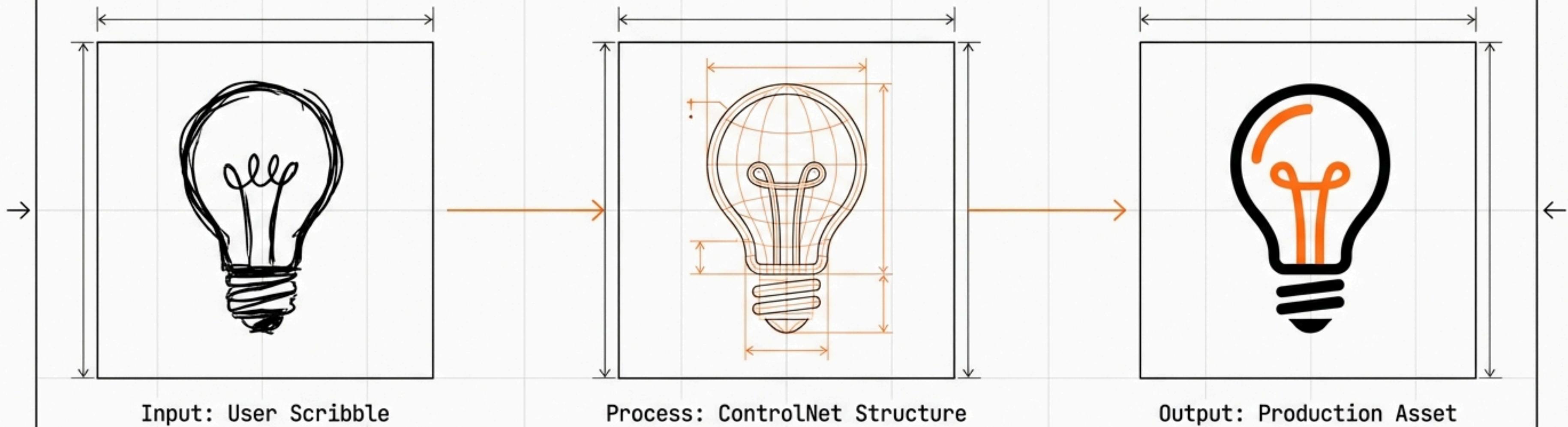
WITH LoRA



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

STRUCTURAL CONSTRAINTS: THE AI "HAND"

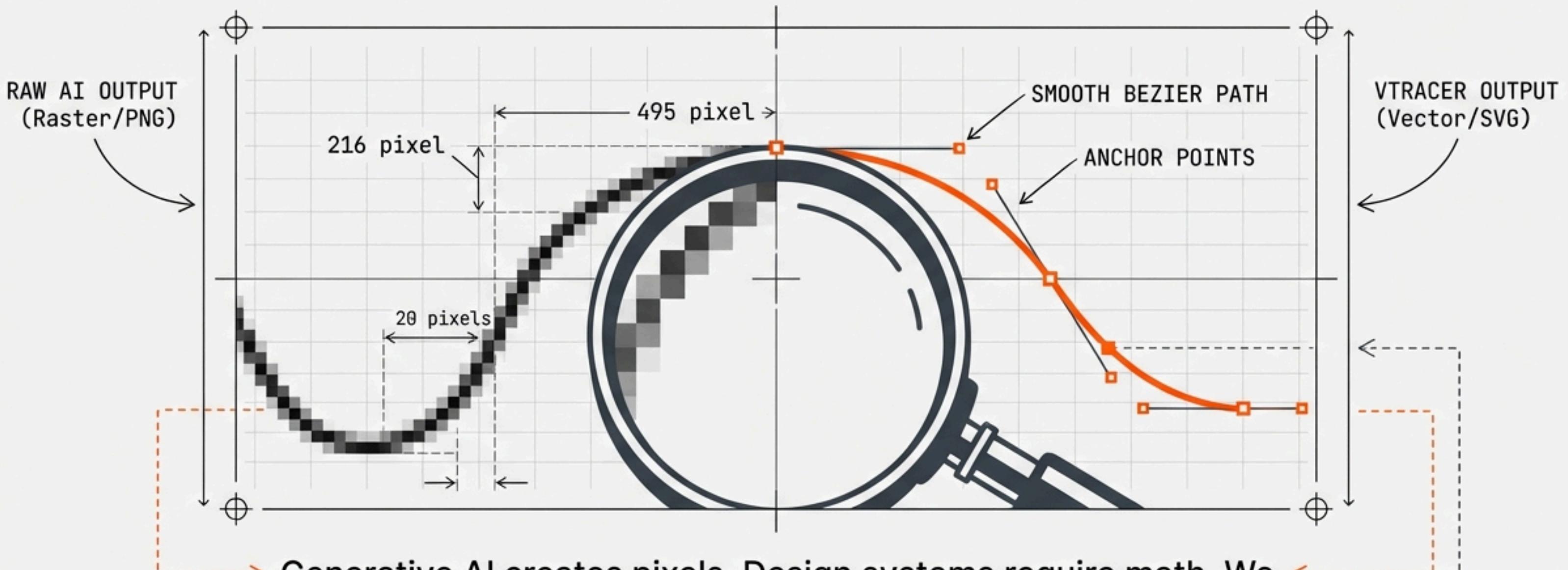
ControlNet: Scribble-to-Icon



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: PIXEL TO VECTOR

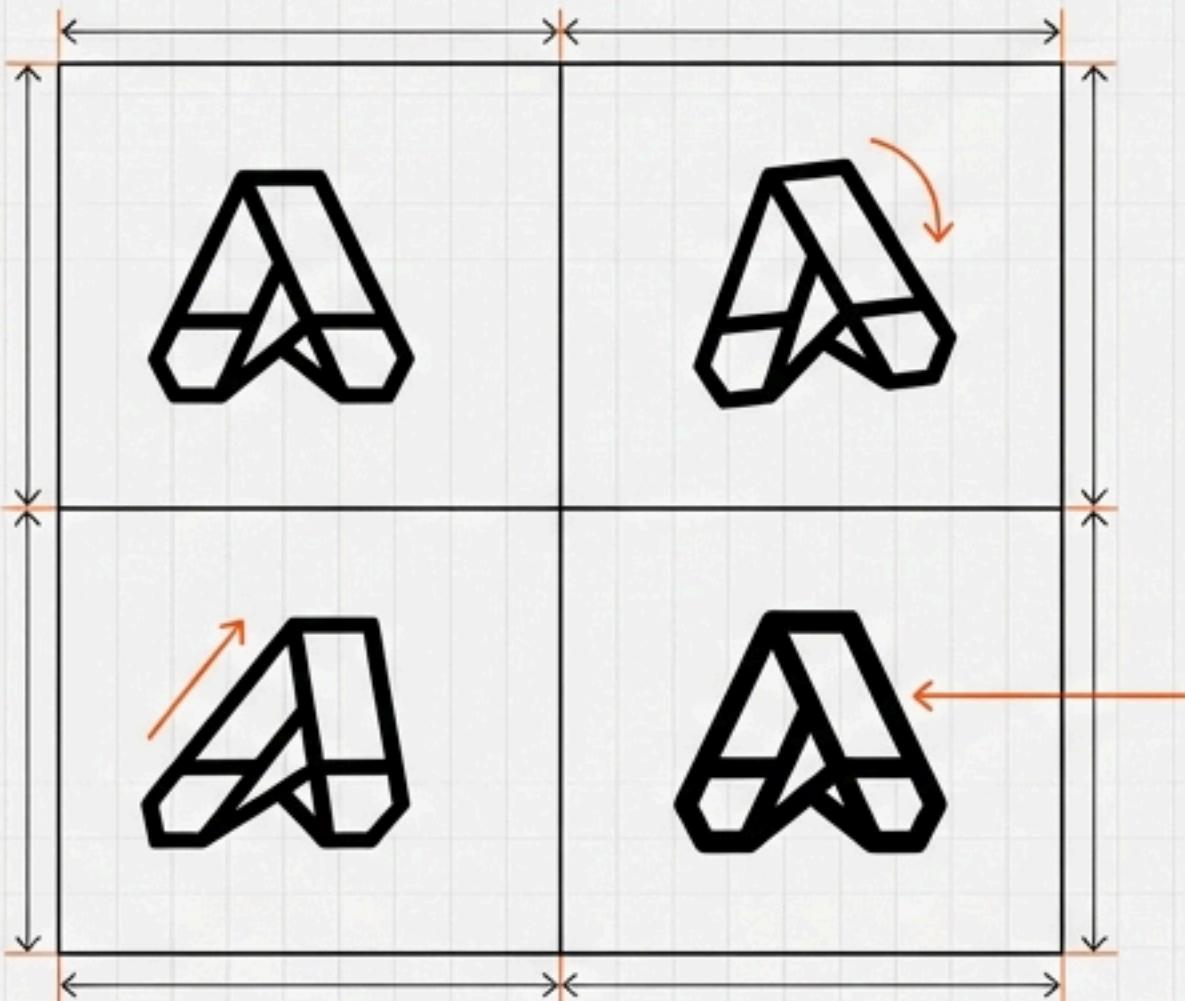
JetBrains Mono: Vtracer Integration: Automated Raster-to-Vector Conversion



→ 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.

DATA-DRIVEN STRATEGY & TRAINING

Synthetic Augmentation



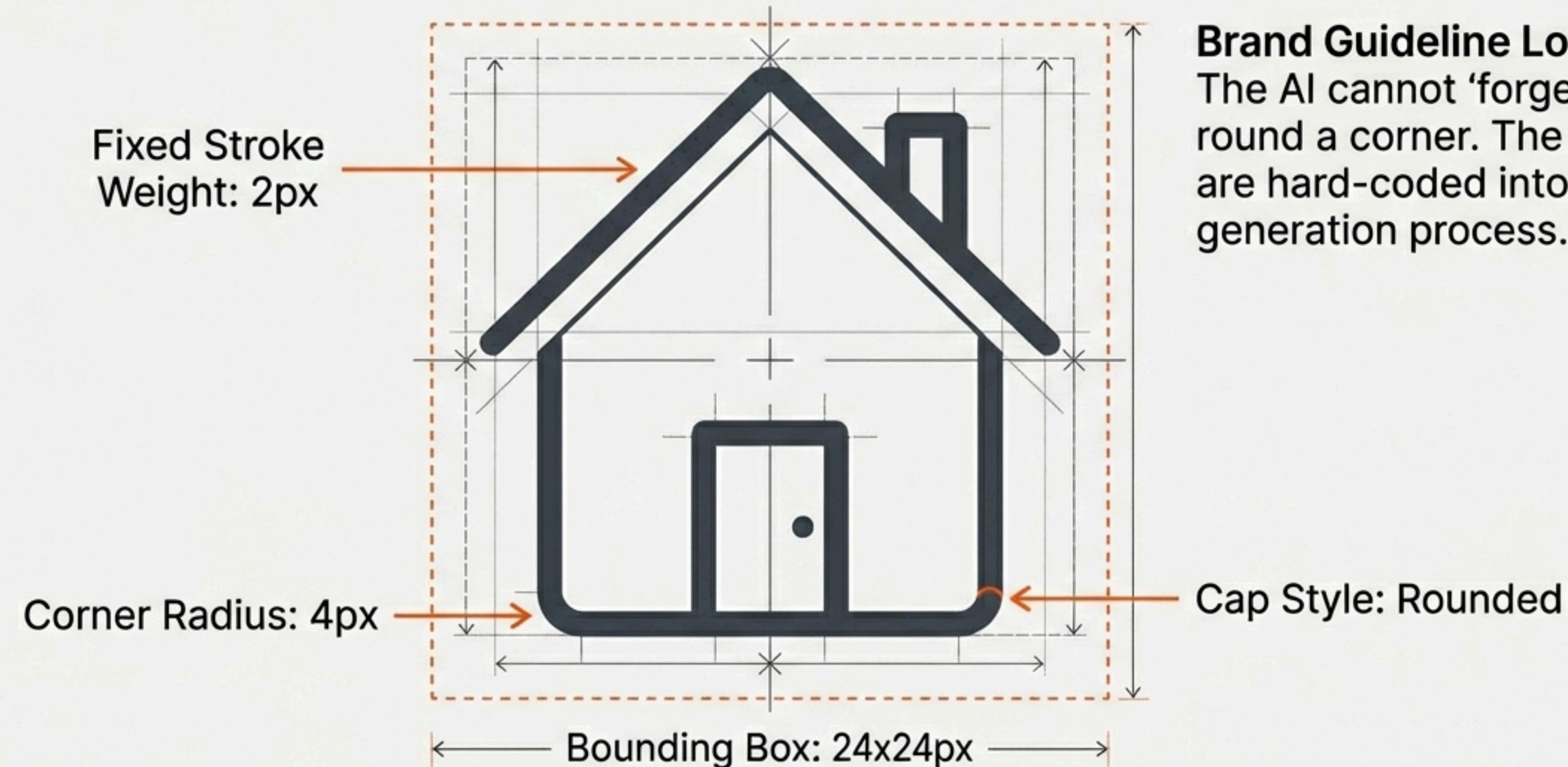
Teaching the model the boundaries of the style through variation.

Negative Prompting

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

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

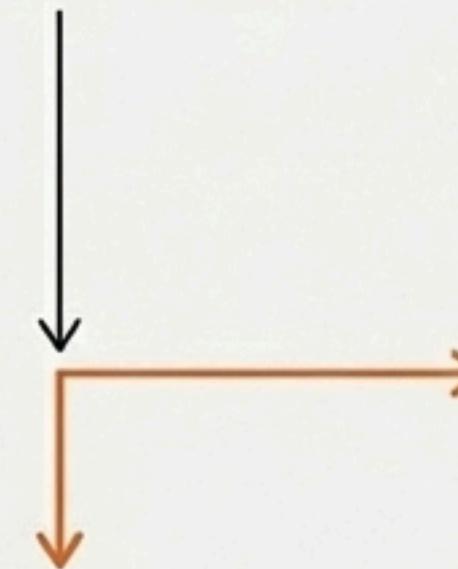
ALGORITHMIC GUARDRAILS



Brand Guideline Lock.
The AI cannot 'forget' to round a corner. The rules are hard-coded into the generation process.

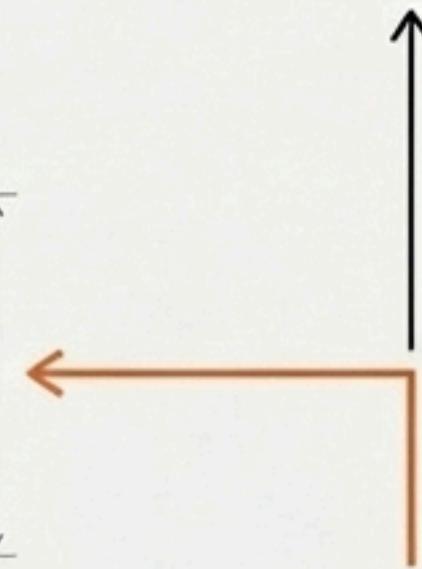
ETHICAL & LEGAL COMPLIANCE

IP Sovereignty



Trained ONLY on internal
proprietary assets. Zero
exposure to public
dataset copyright risks.

Hallucination Checks

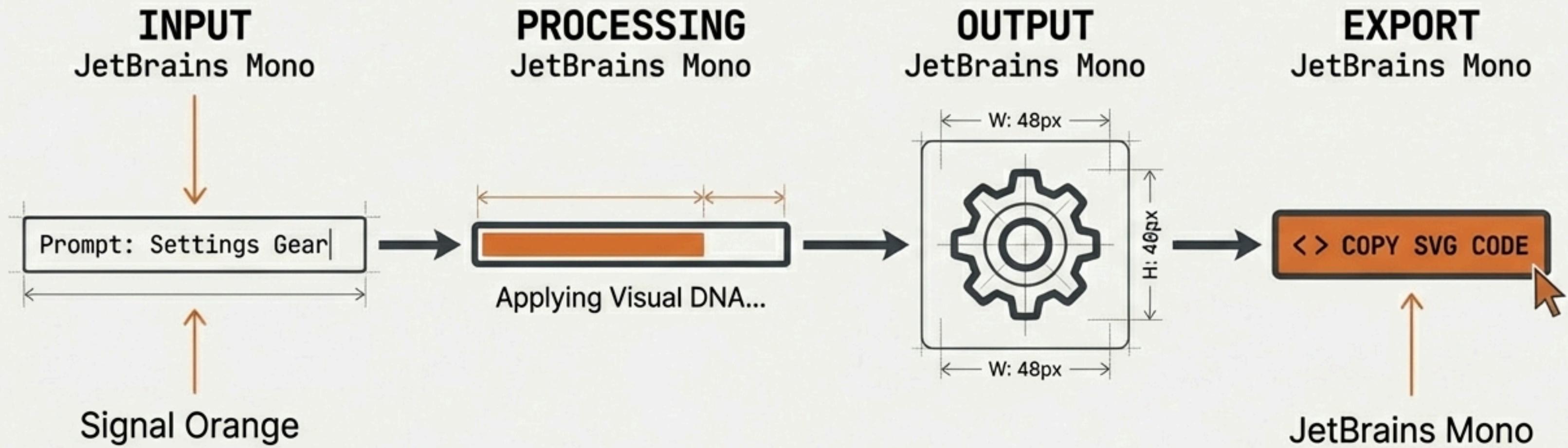


Automated similarity
search against
competitor trademarks.

Enterprise-Grade Safety.

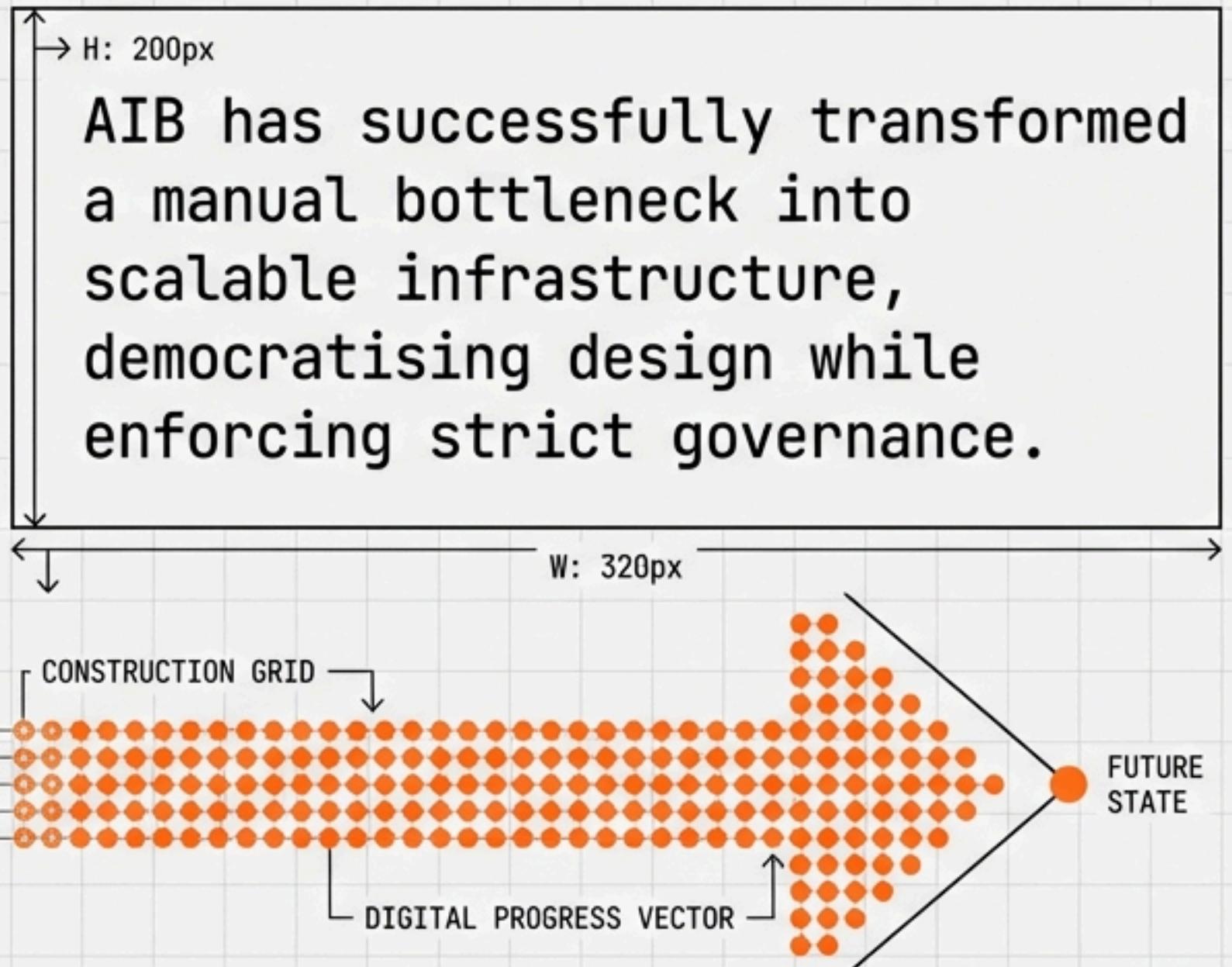
Enterprise-Grade Safety. Designed for commercial deployment without legal ambiguity.

THE USER WORKFLOW



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

Inter Tight FUTURE ITERATIONS & ROADMAP



ROADMAP LIST ↑V. LIST

- Q3: Shape-to-Icon Conversion (Advanced ControlNet) ← A.C.N. MODULE
T: 90 days → PROGRESS >
- Q4: Multi-Asset Expansion (Illustration & UI Elements) ← M.A.E. SUITE
T: 120 days → PROGRESS >
- 2025: Full Design System Integration (Figma Plugin) ← F.D.S.I. PLUGIN
T: YR 2025 → PROGRESS >

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