

AI-Assisted Design System Modernization

PORTFOLIO CASE STUDY
By Steve Moore
Principal Product Design Leader

A governed approach to rebuilding and presenting a token-based design system.

How design judgment, controlled AI execution, and verification turned a fragmented library into a usable system for design and engineering.

11

SYSTEM PAGES

120

LIVE SPECIMEN INSTANCES

660

CLEAR TOKEN BINDINGS

Role: Design-system strategy, governance, component architecture, and AI-assisted quality control

THE STARTING POINT

A robust library existed, but it was hard to use and hard to present.

The task was not to replace the system. It was to preserve its intent, organize it, and make it governable.



Source inventory

Components, variants, and product patterns were piled onto working pages. The source needed protection, not cosmetic rearrangement.



Inconsistent presentation

Documentation pages lacked a consistent visual model and readable hierarchy for reviewers or future contributors.



Binding gaps

Raw values and historic styling existed alongside foundations. A blanket “fix everything” pass would have created risk.

The problem was operational: make the system maintainable without breaking the implementation surface.

THE STRATEGY

Separate the working library from the presentation layer.

Source pages remain accurate. Specimen pages show how the system is intended to be used.

SOURCE SYSTEM

Foundations
Components
Patterns

Preserve source structure, variants, properties, and live component relationships.

**PRESENTATION SYSTEM**

Specimens
Read Me
Interview narrative

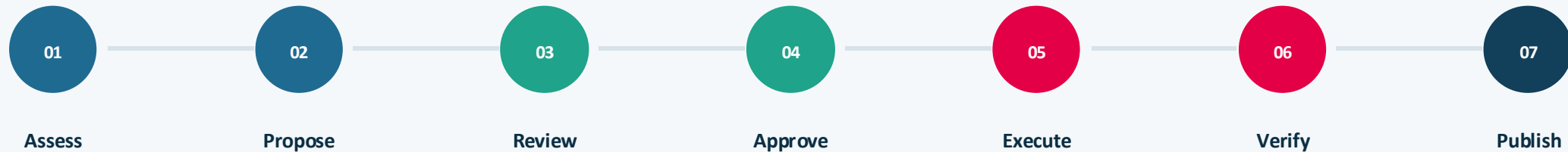
Use live instances, readable layouts, and clear documentation to explain intended use.

This distinction made the library safer to evolve and easier to demonstrate.

THE GOVERNED DELIVERY MODEL

AI accelerated execution; human judgment controlled the decisions.

Every live mutation was scoped, reviewed, and verified.

**Human responsibility**

Set standards, approve mappings, decide exceptions, and own publishing.

**AI responsibility**

Inventory, propose, execute approved scope, and report verification.

ONE SPECIMEN PATTERN PROVED THE MODEL BEFORE IT SCALED.

Buttons became the controlled test.

Instead of forcing spacing into a component-set boundary, the system used a separate specimen page with live instances and true auto layout.



1. Preserve the source

The 45 Button variants remained in the master component set. No variants were deleted or recreated.



2. Build a specimen

Live instances were organized by size, type, and state inside padded, auto-layout documentation sections.



3. Reuse the pattern

The same documentation-card model scaled to navigation, forms, feedback, and data.

The right fix was structural: source masters for implementation, specimens for explanation.

TOKEN BINDING REQUIRED A CONTROLLED PASS, NOT BLIND CLEANUP.

An audit separated clear mappings from intentional exceptions.

The result was a stronger foundation without visually distorting components.

94

COLOR BINDINGS

191

TYPOGRAPHY BINDINGS

303

SPACING BINDINGS

72

RADIUS BINDINGS



Pilot before scale

A low-risk Cover-page pilot exposed a corner-radius API quirk before it could affect the broader system.



Exceptions stay visible

Values without a sensible nearby token were retained and documented rather than force-mapped.

Platform exception: Figma page canvases matched neutral/700 visually; page backgrounds cannot be live-bound to variables.

VERIFICATION PROTECTED THE THINGS USERS OF THE SYSTEM DEPEND ON.

Each completed pass had structural and visual checks.

The point was not merely a cleaner file; it was continued trust in the library.



Source integrity

Components page remained structurally intact: same 40 top-level nodes and 83 components.



Live relationships

All 120 specimen instances remained linked to their main components. Nothing was detached.



State safety

Button focus and semantic strokes were preserved; an obsolete purple root stroke was safely removed.

Verification turned AI output into a reviewable system change, not a leap of faith.

THE SYSTEM NOW HAS A USABLE OPERATING SURFACE AND A CLEAR STORY.

The deliverables support both day-to-day design work and an interview walkthrough.



Foundations

Tokens for color, typography, spacing, radius, and elevation.



Source components

Preserved masters, properties, variants, and implementation relationships.



Specimen pages

Readable live-instance references for Buttons, Navigation, Forms, Feedback, and Data.



Read Me

Usage, governance, maintenance, and engineering-handoff context.

The Figma file is now both a working system and a credible demonstration artifact.

WHAT THIS DEMONSTRATES

Design-system leadership is more than a Figma skill.

It is the ability to set standards, create a practical operating model, and make cross-functional work easier.

**Governance**

Changes have owners, guardrails, review gates, and a publish decision.

**Architecture**

Foundations, source components, patterns, specimens, and documentation each have a job.

**Engineering readiness**

Consistent variables and naming support JSON, CSS variables, and React handoff workflows.

**Responsible AI use**

AI accelerates inventory and controlled implementation while humans retain decision authority.

KEY TAKEAWAYS

A modern design-system process is controlled, evidence-based, and human-led.

Start with evidence

Audit the product or source library before standardizing it.

Protect implementation surfaces

Preserve source components; use specimens to explain them.

Use AI responsibly

Pilot, scope, verify, and document exceptions.

Show the operating model

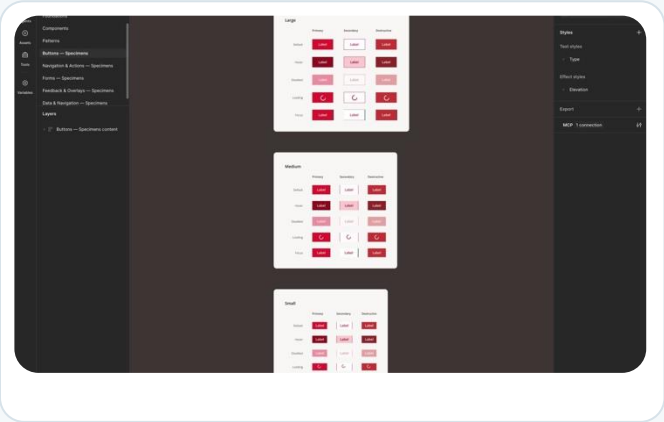
The strongest portfolio proof is the judgment behind the system.

Interview walkthrough: open the Read Me, Foundations, Components, and one or two specimen pages. Explain one tradeoff, one safeguard, and how the system would be owned after launch.

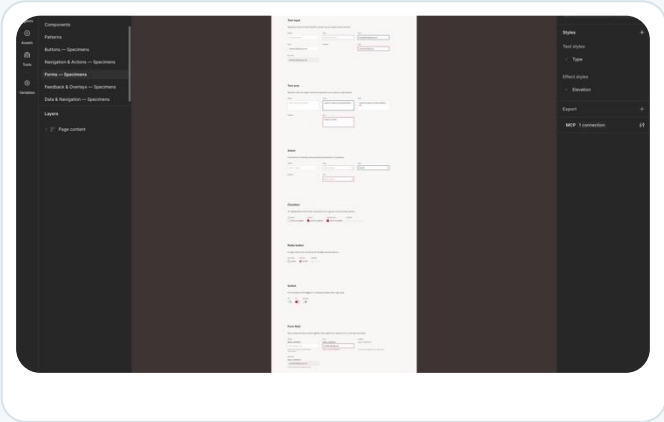
THE FINISHED SYSTEM IS READY TO WALK THROUGH.

Use the live file to make the architecture tangible in an interview.

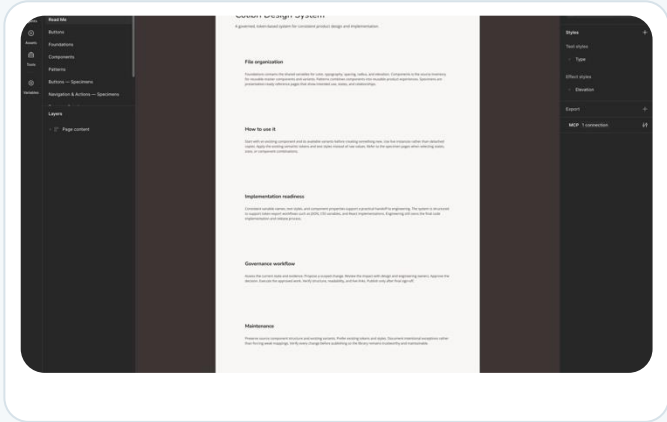
These are the actual Colibri system pages: live specimen references and a usage guide, not detached mockups.



Buttons — Specimens



Forms — Specimens



Read Me

The story is strongest when the strategy, system, and working artifact can all be shown together.