

Executive Summary

73%

have significant drift

847

avg hardcoded colors

2.4x

more drift after 3 years

23%

token adoption rate

68%

less drift with automation

Key Findings

1 Design Drift Is Universal

Only 8% of codebases have minimal drift

Even teams with dedicated design systems, Storybook documentation, and Figma libraries show significant drift when we scan the actual code.

2 The 847 Problem

Average: 847 hardcoded colors | Top 10%: Nearly 3,000

In repos with hardcoded colors, we found an average of 47 unique variations of the primary brand color.

3 Drift Compounds Over Time

Repo Age	0-1 yr	1-2 yr	2-3 yr	3-4 yr	4+ yr
Avg Drift Score	312	489	634	758	847

4 Token Adoption Is Low

67% hardcoded | 23% CSS variables | 8% theme objects

Tailwind teams show highest adoption (41%) when using custom theme colors—but arbitrary values bypass everything.

5 Enforcement Changes Everything

Enforcement	None	Code Review	Linting	Blocking CI	Auto PR Scan
Avg Drift	891	672	423	287	201

Benchmarks: How Do You Compare?

Metric	Poor	Average	Good	Excellent
Hardcoded colors	>500	200-500	50-200	<50
Token usage	<15%	15-30%	30-50%	>50%
Arbitrary values	>100	50-100	10-50	<10
Color variations	>30	15-30	5-15	<5

Recommendations

1

Automate Enforcement

Don't rely on code review. Use automated scanning in CI/CD. Impact: 68% less drift.

2

Use Semantic Tokens

Flat palettes encourage hardcoding. Semantic tokens encourage adoption. Impact: 34% higher usage.

3

Address Framework Defaults

Customize the entire palette. Remove unused defaults. Impact: 43% fewer mixed colors.

4

Measure Continuously

What gets measured gets managed. Track drift over time. Prevents compounding.

Get Your Drift Score

Buoy scans your repository and shows exactly how you compare to industry benchmarks.

Scan Free at buoy.design →