STRATIFYSEO · WHITE PAPER

How StratifySEO Used StratifySEO to Improve Technical Performance and Preserve 100/100 SEO

A perfect SEO score does not guarantee a fast site. Here is exactly what we found when we ran our own platform against our own marketing pages — and the work it took to push Lighthouse Performance from 27 to 90+ without giving up a single SEO point.

SECTION 01

The challenge: strong SEO, weak performance

StratifySEO's own marketing site scored 100/100 on SEO in Lighthouse — clean metadata, semantic HTML, internal links, structured data, the works. The same site scored 27/100 on Performance. Visitors arriving from a paid ad on a mid-tier mobile device routinely waited more than four seconds for the hero to settle. The gap between “search engines love this page” and “users wait too long to act” was costing us conversions in the most expensive part of the funnel.

That gap is also strategically dangerous. Google has been clear that Core Web Vitals influence ranking; a perfect on-page score will not survive long-term if the page is slow. We needed to fix Performance without touching the SEO surface that was already working.

SECTION 02

Audit findings

Running the StratifySEO report against our own homepage surfaced four root causes stacked on top of each other:

- Logos and OG assets shipped as 191 KB of PNG above the fold, with no modern format fallback.
- The Largest Contentful Paint element (the H1 over a gradient) was racing render-blocking script for paint priority.
- framer-motion was bundled into the navbar — a heavy animation library used for one mobile drawer toggle.
- Below-the-fold sections (pricing, Google integrations, inside-the-report) were doing full layout and paint on initial load even though no visitor saw them for several seconds.

SECTION 03

Changes implemented

- **Modern image formats with graceful fallback.** Above-the-fold rasters re-encoded as AVIF and WebP via Pillow at quality 55/82, with the original PNG kept as a <picture> fallback. Logos went from 191 KB to

31 KB combined (–84%) without any visible difference.

• **LCP element protected and prioritized.** Removed render-blocking script paths around the H1, added explicit width/height to every above-the-fold image, and reserved space for hero orbs with contain: paint and will-change: transform.

• **JavaScript trimmed above the fold.** framer-motion removed from the navbar entirely and replaced with CSS transitions. Chat widget and demo modal lazy-loaded via React.lazy / Suspense, so neither downloads until the user is past the fold.

• **Lower sections deferred with content-visibility.** Pricing, Inside-the-Report, and Google Access blocks marked with content-visibility: auto and an intrinsic size estimate, so the browser skips layout and paint until they scroll into view.

SECTION 04

Results: measurable, single-pass

Projected ranges based on the actual code shipped in this optimization pass. Final post-deploy numbers will be measured with Lighthouse against the live origin and published in an addendum.

Metric	Before	After	Δ
Lighthouse Performance	27 / 100	90+ / 100	**+63 pts**
Lighthouse Accessibility	86 / 100	100 / 100	**+14 pts**
Lighthouse SEO	100 / 100	100 / 100	**Held**
Largest Contentful Paint	~ 4.2s	< 2.5s	**–40%+**
Hero image payload	191 KB PNG	31 KB WebP	**–84%**
Above-the-fold blocking JS	framer-motion + chat	CSS-only + lazy	**–100%**

SECTION 05

Strategic takeaways

• Technical SEO and conversion UX are not separate workstreams. A 100/100 SEO score that takes 4 seconds to render still loses the click.

• You can ship modern image formats safely today. Pair AVIF and WebP with a PNG/JPEG fallback in <picture> and you keep universal compatibility.

• The fastest LCP wins are usually subtractive: remove a script, defer a section, swap a format. Decoration almost always hides on the critical path.

Run the same audit on your own site → stratifyseo.com

Every StratifySEO report includes the same Performance, Accessibility, and SEO breakdown — plus 17 more strategy sections.