



What Is Site-Speed and Why Should I Care?

A Primer from Harry Roberts

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What Is Site-Speed?

Site-speed, also known as web-performance or page-speed, is a broad term that deals with **how fast your customers think your website is**.

Although it encompasses many technical considerations—from servers and infrastructure to network speeds and user devices—the ultimate goal is to make sure that your website provides a fast and reliable experience for everyone, regardless of their situation.

Generally speaking, the faster a user's experience is, the happier they will be. This is crucial on the web where people are fickle and exhibit short attention spans. Site-speed could be the difference between making and missing a sale.

Why Fast Matters

There are many, many reasons to care about site-speed. The most important ones start with the customer: users prefer faster experiences. It's as simple as that. Their appreciation manifests itself in different ways—they spend more money, they're far more engaged, and they're generally happier and more impressed by your website.

Beyond thinking about your customer, faster websites are cheaper to run. A key way to improve the customer experience is to reduce the size of your web pages; smaller web pages will reduce your hosting bills. Everyone's a winner!

Both of these combined spell good news for your business. Happier customers who are spending more money on your site that is cheaper to run. What's not to love?

How Does It Affect Me?

No matter what kind of site you run or the industry you operate in, site-speed impacts you in one way or another.

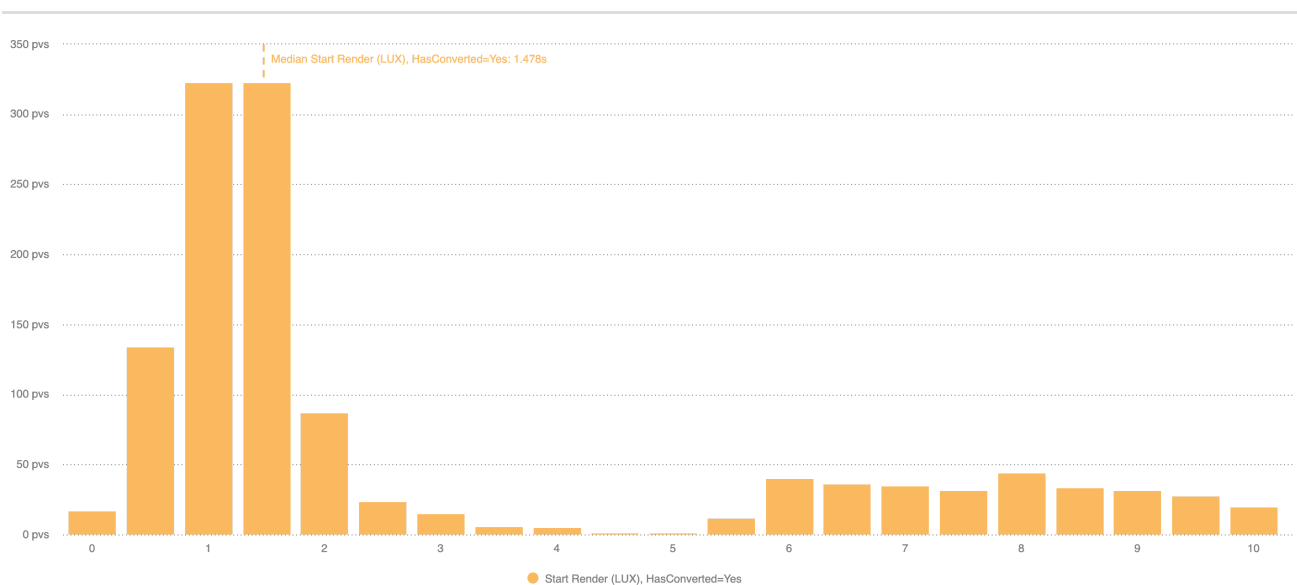


Fig. 1: Most sales happen when pages are faster.

Site-speed plays a huge role in **search engine optimisation**. With **Google's 2020 announcement** that they intend to take page speed into account when ranking your pages, your site needs to be fast.

For ecommerce, faster websites yield **higher conversions, higher average-order-value, and higher revenues**. Online shoppers have access to you and all of your competitors at the click of a finger—speed soon becomes a competitive advantage.

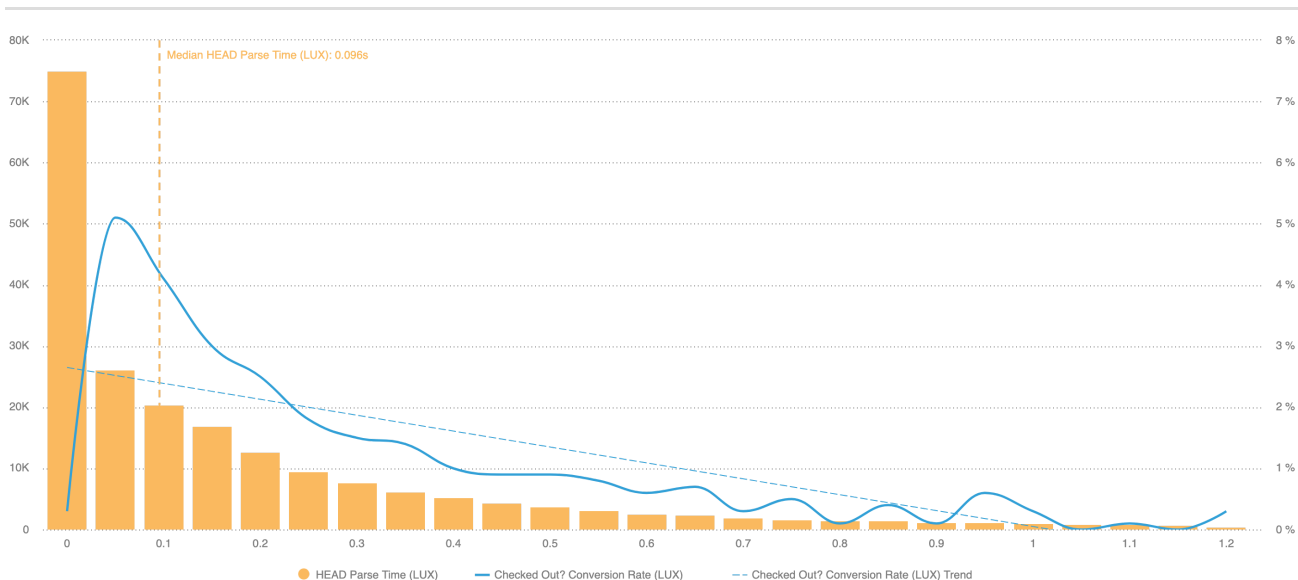


Fig. 2: Conversion rates drop as pages get slower.

For entertainment platforms, **site-speed means greater consumption**: if a viewer can find and stream content faster, they'll watch more of it.

Site-speed **is accessibility**. Users in regions of poor connectivity, visitors with capped data plans, or customers on lower-end devices are often shut out by slower websites. Accommodating to more people broadens your audience—it's that simple.

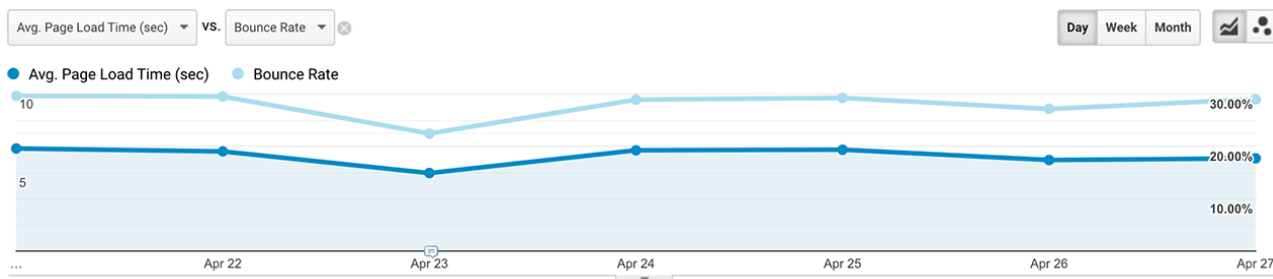


Fig. 3: Site-speed and bounce rate are closely correlated.

For publishers, site-speed means **higher engagement**. More time on site means more ad impressions; more ad impressions means more money.

For everyone, **site-speed means lower running costs**. Smaller, lighter web pages take up less storage and bandwidth for both the site owner and the visitor. Fewer resources means fewer liabilities.

For **the environment**, lighter websites consumer fewer resources—fewer resources means a greener web.

It's **the right thing to do**. Nobody wants a slow website—the user of the site, the owner of the site, Google, nobody. Being faster is just better.

Why Is It Such a Big Problem?

'It's easy to make a fast website, but it's hard to make a website fast.'

The web is fast by default, and simple pages perform well without intervention. As we add more features to our websites, our pages begin to grow heavier. As our pages grow heavier, they get slower. Without a deliberate focus on site-speed from the outset, it's all too easy to slip into dangerous territory. Nobody built a slow website on purpose, which is exactly why it goes unnoticed. It's usually a symptom and a side-effect.

Building site-speed into your process—building a *performance culture*—ensures your entire organisation is aware of what is at stake. Do your designers know what a bloated image does to average order value? Does your marketing team know what impact tracking scripts have on engagement levels? Do your C-level staff know what a one-second slowdown does to revenues?

They should.

The goal isn't to preoccupy your staff with site-speed considerations, but to make them aware of the cost and impact of their work. Do they have the tools to make informed decisions? Do they have the confidence to design and release new features without having a negative impact on your KPIs?

They should.

A Silent Killer

Website slowdowns are often more harmful to revenues than outages. While this may seem shocking at first, once you stop and consider the problem, it becomes quite clear: outages are short, concentrated bursts of negative impact, whereas website slowdowns often go undetected for weeks, months, or maybe even years at a time.

Because outages are far more acute, they're solved with utmost urgency—you get the site back online **right now**. They're also far more noticeable—I mean, the site is down! It's hard to miss.

On the other hand, poor site-speed is a much more subversive assailant. It doesn't manifest itself in the same way at all, and its impact is usually much harder to detect as it's spread over time. In fact, if your site has always been running slowly, you might never be able to detect it at all—after all, you don't have a fast version to compare it to!

Whereas an outage might take 50% off of a day's revenues, slowdowns might take 1% off of a year's revenues. And while outages appear more severe, they're usually over as soon as they came.

Core Web Vitals

One of the biggest recent shakeups in the site-speed industry was Google's introduction of *Core Web Vitals*. CWV is a three-pronged approach to quantify site-speed and page experience, and is now taken into account when ranking your web pages. The three Core Web Vitals are:

- **Largest Contentful Paint (LCP):** How soon does a user see something?
- **Interaction to Next Paint (INP):** How responsive are interactions on the page?
- **Cumulative Layout Shift (CLS):** How stable is the page as it loads—do elements move and jump around?

By passing each of these three Core Web Vitals, your pages will get a slight ranking boost compared to the pages of your competitors. And while failing these CWVs will not decrease your rankings, if your competitors pass and you do not, they will start to move ahead of you.

Core Web Vitals are especially important for companies who rely on search traffic, or who operate in a particularly competitive space.

How Can I Measure It?

There are many different tools, methods, and metrics to follow. Some are better than others, and some are more appropriate for different styles of website—which ones should you measure?

My recommendation as a site-speed consultant is to begin with Google's **Chrome User eXperience report**, or CrUX. The CrUX report contains real-user data about how your website behaves in the wild, so you can get a broadly representative overview of your site's performance very quickly and very easily. CrUX contains Core Web Vitals data, so you can see how you fare with LCP, INP, and CLS in the real world!

Another common option is Google's **Lighthouse** tool—a diagnostic test that aims to highlight potential issues your site might contain. I find there is less value in a Lighthouse score as it fails to capture any users' lived experiences, and instead is a laboratory-like snapshot of your site in isolation.

Still, let's take a look at both...

Chrome User eXperience Report

The simplest way to view real-user data held in the CrUX report is to use Google's PageSpeed Insights tool at pagespeed.web.dev. Head over there now and drop a URL into the input at the top of the page...

How did you do?

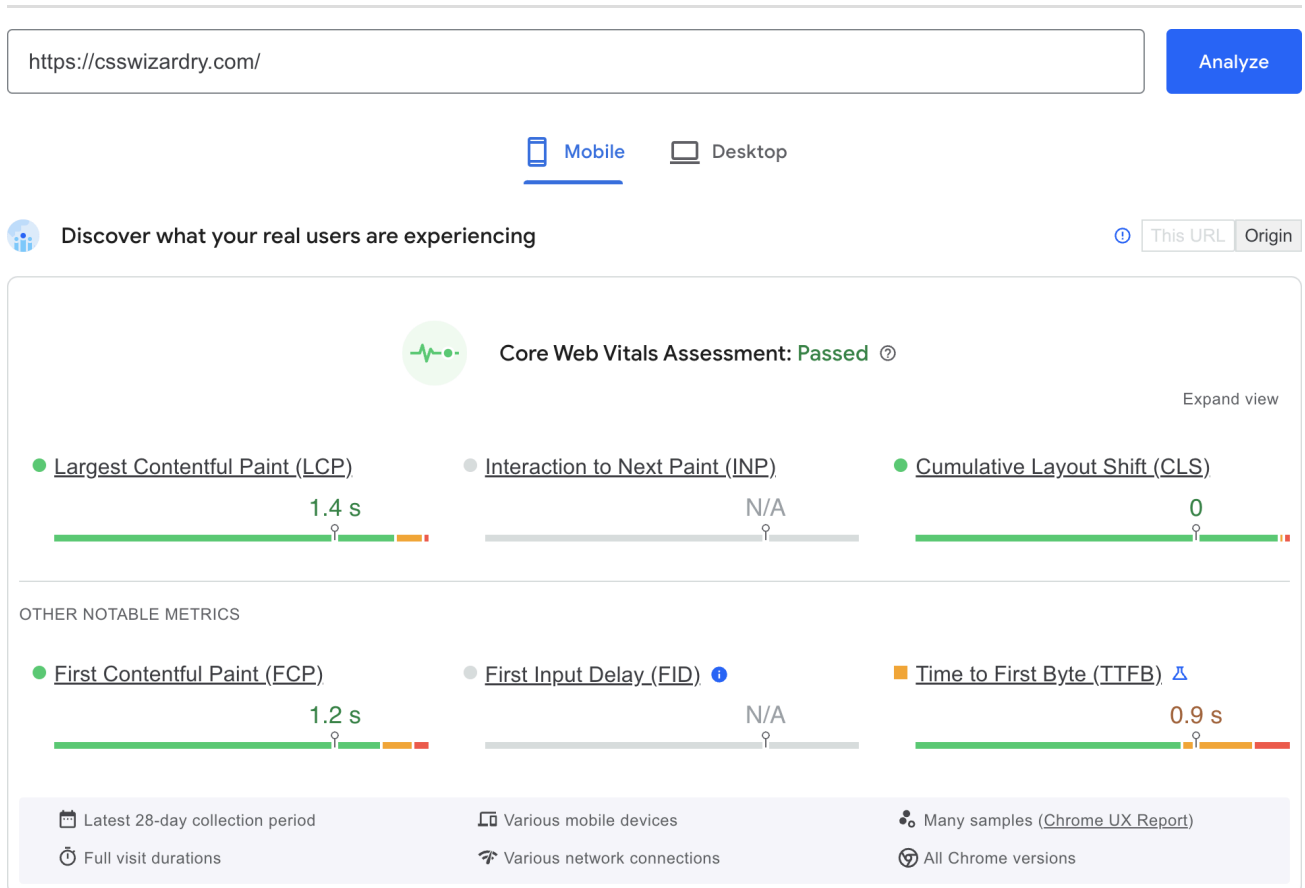


Fig. 4: The Core Web Vitals assessment for my own website. Note that although there isn't enough data to provide a score for INP, I still pass the Core Web Vitals assessment.

Lighthouse

Also available in PageSpeed Insights is a diagnostic Lighthouse report with an associated score:

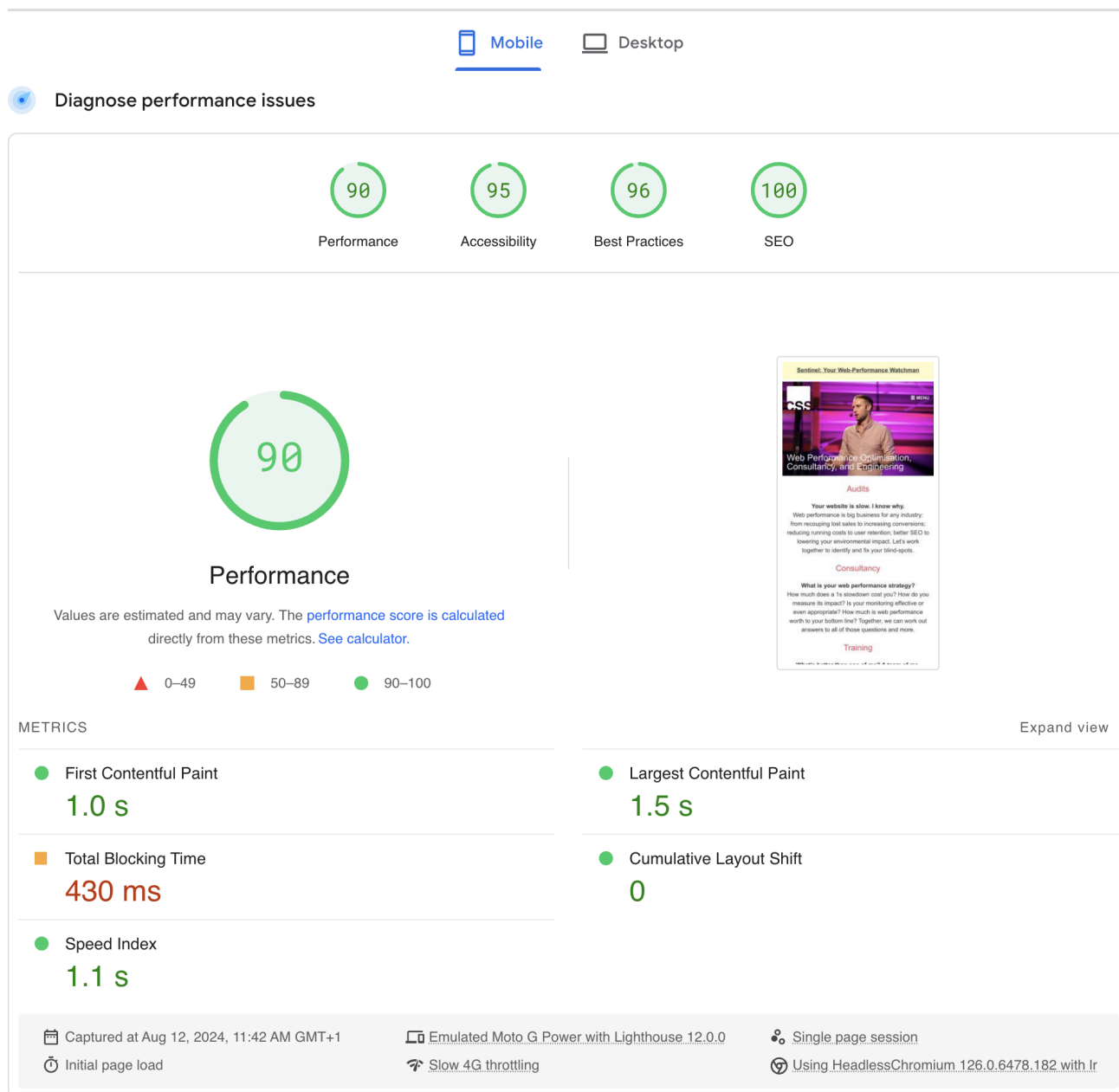


Fig. 5: Lighthouse scores don't always reflect the real world, so try not to get too distracted by them.

I would strongly recommend that you don't put much focus on your Lighthouse scores. While they can be a useful litmus test, they aren't always a strong predictor of real-world success. You're very likely to find that, even if you have seemingly poor Lighthouse scores, your CrUX data might paint a much more optimistic story! Focus on real visitors over synthetic scores, always.

Going Beyond Core Web Vitals

While I do genuinely believe that Core Web Vitals is the best suite of site-speed metrics we've ever had, they are a very one-size-fits-all solution. Every site is unique, and the metrics that your customers are most receptive to may be something completely different.

Imagine a banking website, for example. A customer is likely to be far more interested in how quickly they can see their account balance and far less concerned with whatever happens to be the largest piece of content on the page.

Furthermore, Core Web Vitals alone won't help you to understand how sensitive your audience is to site-speed. Do you sell more products when your Largest Contentful Paint score is 2.5s? At 2s? Maybe at 1.5s? What is *your* sweet spot?

With a dedicated site-speed project, setting up and tracking these custom metrics becomes far easier.

How Fast Is Fast Enough?

Good question! All this talk of site-speed and we haven't yet looked at what we should be aiming for.

Core Web Vitals, as well as outlining metric definitions, gives us some targets. In order to provide what is accepted as a good user experience, we should be aiming for the following scores in each respective metric:

- Largest Contentful Paint: **2.5s or better**
- Interaction to Next Paint: **200ms or faster**
- Cumulative Layout Shift: **0.1 or lower**

Achieving these goals should ensure a good experience, but, as before, every site is different. Maybe for you, an LCP score of 1.9s is when you sell most units. Maybe engagement is best when CLS is 0.04. This is something, ideally, you should know.

Custom monitoring and custom metrics are the best way of ensuring we don't just have the fastest site, but that we have the most optimum site for us.

Shouldn't We Be Doing This Already?

Yes. Probably. But it's not too late to start.

The best time to solve these problems was a year ago; the second best time is right now. While it is harder to make an existing website fast, it's certainly not impossible. I've built a career on it!

If you think site-speed may have been overlooked at your organisation, keep reading. I have a few pointers.

Want to act fast? **Contact me** to get started.

What Can I Do About It?

1. **Start off by running a few tests** against yourself and your competitors. What are your scores? Are they better or worse than theirs?
2. **Speak to your engineering team** about what efforts they've undertaken so far. Don't be surprised or disappointed by inaction—they've had a lot of other things to focus on as well as site-speed.
3. **Hire an expert** if your engineering team is overstretched. Someone who lives and breathes site-speed optimisation will be able to find and fix your problems in no time.
4. **Design a plan** to address the findings of the audit in a tactical and measurable way. Make sure progress is monitored and tracked so you know what works for you and what doesn't.
5. **Build a performance culture** to make sure site-speed is baked right into your process. It's much easier to stay fast if you try.

The Fast-Track to Fast

If you want to get fast *fast*, **drop me a line**. My area of expertise is high-returns, tactical improvements designed to cover a lot of ground quickly.

From audits to training, implementation to consultancy, I work closely with clients to find, fix, and improve site-speed issues. Together, we can address everything you've read in this ebook, and more. Then we'll foster and grow a performance culture that will leave you immune to these problems in future.

You'll be surprised just how quickly we can get it done.

About the Author



Fig. 6: Harry has spoken at over 100 conferences on five continents.

Harry Roberts is an independent site-speed consultant from Leeds, UK. He helps organisations of all shapes and sizes to better understand and solve their site-speed issues. He's available for hire, and he'd love to work with you.

He is a respected web-performance expert who has worked with some of the largest and most recognised organisations on the planet. He writes and speaks extensively on the technical aspects of site-speed optimisations, and is an invited *Google Developer Expert*. He knows a thing or two about making websites fast.

You can find him at csswizardry.com, or email him directly at harry@csswizardry.com.

A stylized, handwritten signature in black ink, appearing to read 'Harry'.