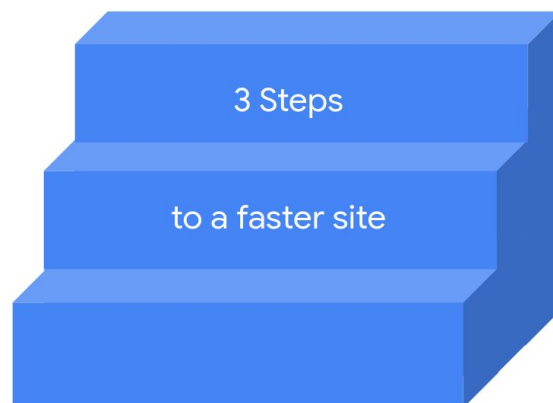


Time is money: 3 steps to a faster site



Introduction

Faster sites provide a better experience for their users which ultimately creates better business returns. This guide for product owners takes you through 3 steps to set up your teams and partner agency for success when working on site speed.



Following these 3 steps ensures your site gets faster and stays faster.

Step 1: Build the Investment case

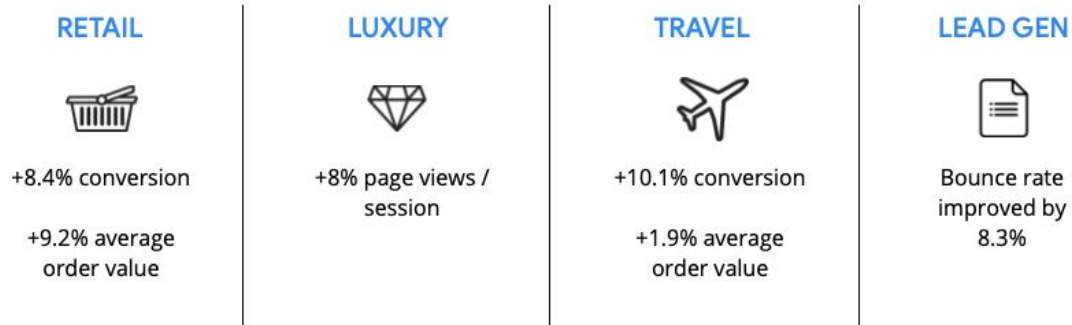
Like any other development project, improving site speed requires investment. Use the following section to help build an investment case for site performance.

Correlate site speed and success

Use industry research relevant to your business to find benchmarks on the impact of site speed.

A one second delay in load time can [impact conversion rate by up to 20%](#). Speed is also a [page ranking factor for Google search](#). Advertising and speed go hand in hand, with faster landing pages delivering better ROI. Even the best ads struggle to deliver results if they're sending people to slow landing pages. The recently published "Milliseconds make Millions" study shows that increasing speed metrics across your site by a mere 0.1 second can have an impact on your revenue metrics.¹

¹ Source: [Milliseconds make millions#](#) Google/55/Deloitte, Speed Impact study, EMEA and US, Oct-Nov 2019, n=37 brand sites analysed hourly over a 30 day period totalling 30.5m sessions.



The impact of 0.1 second on sites²

BCG and Ryte found in their study [The Real cost of Poor Website Quality](#) that “assuming 1 million potential visitors, the decline in future visits when load speed falls is precipitous; every additional second costs, on average, between \$3,000 (for food and grocery sites) and \$9,000 (for business and industrial). In terms of marketing spend, this translates into a 10% reduction in effectiveness. Every additional megabyte in page size amounts to average losses of between \$4,000 (food and grocery) and \$14,000 (business and industrial) per month, or the equivalent of a 7.5% reduction in digital marketing spend effectiveness.

Examples from brands to reference

You may find some examples from research and published case studies useful to reuse. Do look up some of the examples from [WPO stats](#) that demonstrate the impact of web performance optimization.

	70% speed increase
	• 31% improvement in search to click conversion • 33% improvement in click to lead conversion Case study
	20% reduction in load time
	• 9% decrease in bounce rate • 10% improvement in click to lead conversion • 12% growth in mobile revenue Case study

² Google/55/Deloitte, [Milliseconds make Millions](#) study, EMEA and US, Oct-Nov 2019, n=37 brand sites analysed hourly over a 30 day period totalling 30.5m sessions.

	2.5s key page load improvement • 11% improvement in search click through rate • 22% reduction in cost per click • 15% reduction in cost per conversion Case study
	4x faster site load time • 50% growth in mobile users • 400% improvement in click conversion • 49% more search engine referrals Case study
	100ms improvement in load time • 0.5% increase in Add to Card count Case study and details of implementation
	80% reduction in load time • Time on site increased from 5.9 mins to 7.8 mins • 108% increase in ad interaction rate • Unique visitors increased from 5.9 to 7.8 million Case study

[Test My Site](#) will give you basic speed metrics and help you calculate the additional revenue you could achieve if you make site speed improvements.

Get into the habit of showing your site to senior stakeholders on mobile (which now represents over 50% of global web traffic) rather than just desktop. Consider deliberately slowing the connection speed so stakeholders can experience what slow feels like to many of your customers instead of always demonstrating mobile on a fast wifi connection.

You might also find it useful to do side by side video comparisons against competitors as well as those who are best in class in other industries. Use <https://www.webpagetest.org/> (under the advanced settings) to capture videos of pages loading. You can include this in presentations to stakeholders. Seeing the experience of your site loading slowly compared to that of a competitor can drive action. The [YouTube video 'Make sense on mobile'](#) which shows how poor experiences, like slow sites, make no sense to consumers can help to set the scene.

Align to your organization's objectives

Relate site speed to your organization's objectives. If you are able to show an improvement to a key metric by improving your website performance it is much easier to make the case for investment.

Liaise with stakeholders in your organization to ensure you understand the objectives that matter to them. You might want to talk to your senior marketing, analytics and development stakeholders to validate these objectives or find other measures that will gain support in the organization.

Common metrics that are directly influenced by site speed are listed below - work with your analytics team to find the supporting evidence in your own data:

1. Conversion rate - are people completing the user journey you are hoping for when arriving at your site? Where on the journey do they leave and does this correlate to site speed?
2. Exit page - are people leaving your site after arriving at a particularly slow page? Can you correlate the page from which people leave your site to site speed?
3. Bounce rate - how many people are arriving at your site from elsewhere and then immediately leaving after no further activity? Are they frustrated by the speed of your site?

Find more about using [Google Analytics for site speed](#).

Step 2. Agree how to measure site speed

Get agreement on which metrics to use to measure the speed of your site. These metrics also allow you to benchmark your current performance against other sites in your sector and correlate the impact speed has on your organization.

When talking about performance, it's important to refer to performance with objective criteria that can be quantitatively measured. Although the performance metric from <https://web.dev/measure/> (also known as Lighthouse) is a good starting point for measurement it is worth taking a more nuanced view that is tailored to your organization's needs.

Measure

See how well your website performs. Then, get tips to improve your user experience.
Sign in to track your progress over time.



Performance 0

Accessibility 0

Best Practices 0

SEO 0

Score scale: 0-49 50-89 90-100

Lighthouse <https://web.dev/measure/>

<https://web.dev/metrics/> gives an excellent introduction to speed metrics. It will clarify the advantages of lab versus user based metrics and suggest a range of metrics you could select. There is also the [Chrome UX report](#) which you can use to understand the experience that users have across different geographies and devices.

Do review [Web Vitals](#) which gives unified guidance for quality signals that help deliver a great user experience on the web. It focuses on core web vitals, Largest Contentful Paint, First Input Delay and Cumulative Layout Shift. You can check how sites are doing and it is integrated into [several developer tools](#) to measure this. Google announced [a planned change to search ranking](#) that incorporates these metrics. These metrics are going to continue to evolve over time.

Share your objectives with your development and analytics teams and ask them to recommend which are the most appropriate to track and which should be your focus goals. Ensure you have an owner in place responsible for measurement and look at how you can build the measures into relevant dashboards for your key stakeholders.

Benchmarking yourself

Once you understand what you are measuring, create effective, challenging goals. These goals may not be immediately realisable but you can make incremental progress against them over time.

To choose an appropriate goal, you can compare your site speed metrics to those of similar sites in your industry or 'best in class' sites from other industries. You can benchmark your speed metrics against your competitors' in detail by using [PageSpeed Insights](#).

Remember that your users' experience of speed is not just defined by your industry, it is taken from other sectors and also their experience of native apps so be careful about setting goals related just to your industry. [Test my Site](#) is an excellent tool to use here for competitor analysis.

You should review these results with your development team as there may be specific reasons why your site performs the way it does. In addition, they may give you insight as to why a competitor performs differently. It is important to consider this context when making recommendations so that you are able to set realistic goals.

Your development team at this stage may already be working on ideas to speed up the site. They should review the content on <https://web.dev/fast/> for areas to optimize and consider the role of service workers to pre-load resources such as fonts to make navigation faster. Backlogs for development teams are often congested, so make sure that time is secured to investigate and implement improvements.

You are now able to take this back to your stakeholders to get sign off for resources. This might be for:

- a small trial where you demonstrate the impact [by improving a particular landing page speed and A/B testing the results](#). With the proven impact on your business this will unlock further investment.
- detailed development team investigation and project estimation which can precede a full implementation project
- initial 'quick wins' investment for lower effort higher impact improvements
- site-wide changes

Whichever path you take, the ultimate objective should be site wide change.

Step 3: Make change last: performance budgets and milestone reviews

An internal Google study has found that 40% of brands regress on web performance after 6 months³. Improving website performance should not be treated as a one-off project. Instead, look at it more like a cultural shift. It is more of a journey than a destination. Many decisions your web developers and marketing team make can negatively impact site speed. A way of addressing this risk is by creating a performance budget.

A performance budget ensures that the development team, data and analytics team, marketing team and any other relevant stakeholders are committed to stop speed regressing. You put the systems in place so you can immediately see if a change you make

³ Internal Google data

slows the site down. If it does you need to find a way to make it back to your performance budget even though that may mean you need to make trade offs.

For example marketing may agree not to use high resolution, heavy images on the site and [remove unnecessary tags](#) as they know this will impact site speed. On the other hand they may regard the page weight as essential in which case they can negotiate with other stakeholders on how to meet the agreed performance budget.

You can use the [Test my Site](#) to model how each additional feature which slows site performance can negatively affect your revenue. You can then make a calibrated decision on whether to implement it or not. As you track your site and performance budget, incorporate speed into the dashboards your marketing, analytics and developer teams use. You can find out more about setting [performance budgets on web.dev](#).

Make sure there is an owner in place to schedule regular milestone reviews with the key stakeholders. This will ensure you:

- are still on track for your performance budget
- are reviewing the measurement data and challenging your company to deliver a great experience to users
- understand the opportunities to make your site faster and prioritise investment in them
- are effective at reporting the impact of your speed investments on the metrics that matter to your leadership team
- and review and update your speed goals

Ultimately this will drive continuous improvement and best possible performance for your site.

Additional considerations when outsourcing speed related projects

You can outsource many elements of the delivery of a speed strategy to an agency including:

- Measurement consulting such as speed audits, creation of a speed dashboard as well as setting and maintaining a performance budget. There are also several third party tools that can support your measurement strategy.
- Setting up A/B tests for speed to prove its value
- Improving the perception of speed by the user even when absolute speed is not increased.
- Implementing faster sites for example by

- ensuring the systems are in place to always deliver images in the right format
- adopting AMP (a web component library to create fast sites). See <https://amp.dev/> for details.
- Moving to headless technologies which in turn can make it easier to implement front end changes that improve speed
- Using Progressive Web Apps to prefetch and cache. Progressive Web Apps deliver native-like capabilities, reliability, and installability while reaching anyone, anywhere, on any device with a single codebase. Find out more on web.dev
- Analysis of a wide range of other speed best practices which you can find on <https://web.dev/fast/>.

This can be a great option if you are struggling with team bandwidth or want to draw on external expertise.

In some sites, there are performance factors that you cannot influence, for example an external script used to look up flight availability or a particular backend you have to use. In these scenarios, it may be beyond the scope of your team to fix these. It is important that all stakeholders understand these limitations when you brief the agency.

If you are outsourcing improving speed to a partner do share the budget you have available. This will help your agency to propose solutions within your price range. Be as open as possible on your organization drivers and access to your teams to drive a successful implementation.

Conclusion

Site performance is important for everyone. Take the 3 key steps to delivering a faster site;

- ❑ Build the investment case for improving the speed of your website
- ❑ Ensure you take the right approach to measurement and tracking
- ❑ Set a performance budget and relevant goals to continually improve your site so your site does not regress