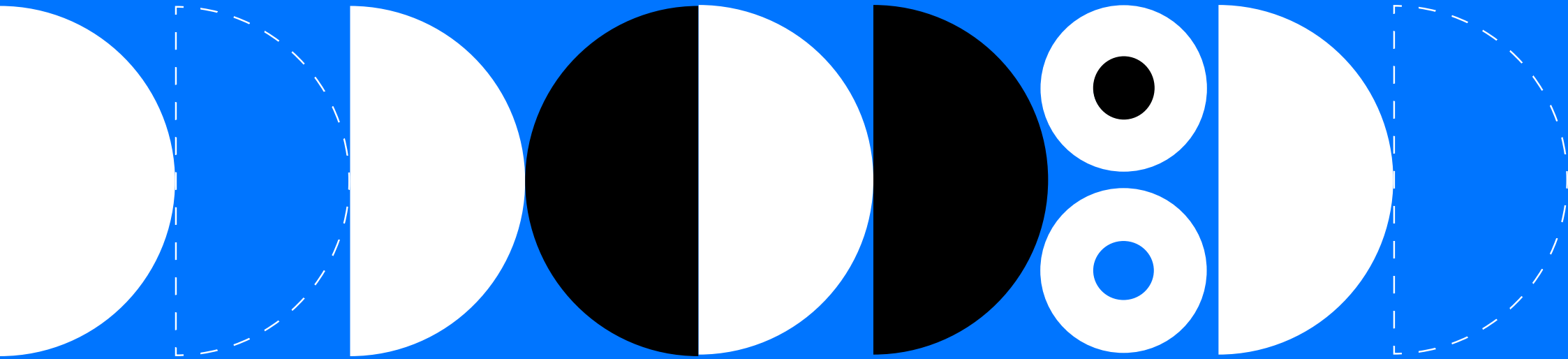


The State of Customer Experience in Ecommerce 2021

Top 5,000 online retailers in review



Customer experience in online retail in 2021:

The elephant in the room or a new competitive edge?

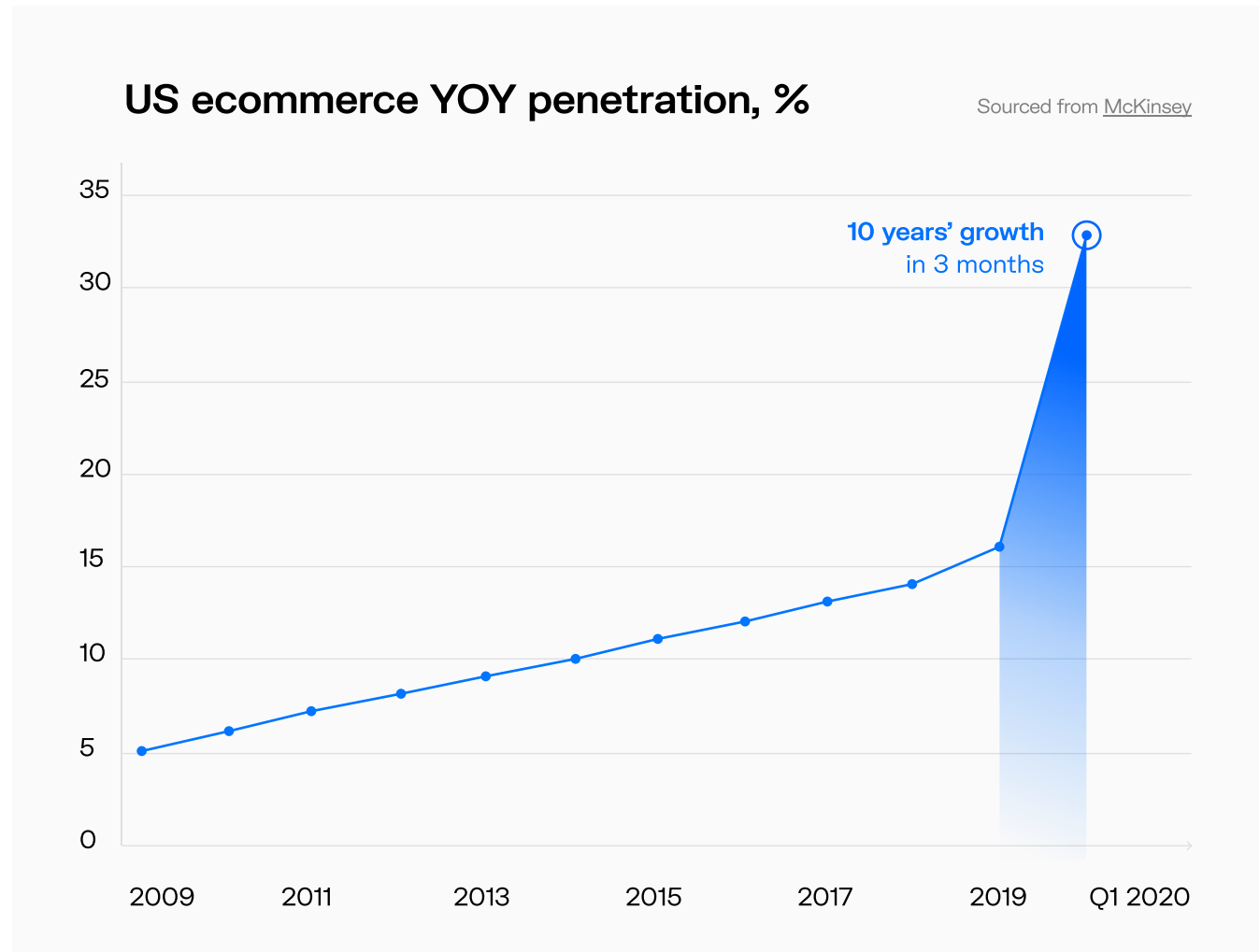
2

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In 2020, ecommerce made a mind-blowing leap thanks to the pandemic: 10 years of growth happened in just a few months. 2021 doesn't show signs of winding down: since much of the spending has shifted online, the competition and customer acquisition costs are off the charts.

We're also facing a massive change in consumer demands. According to the trends spotted by Shopify,¹ **intuitiveness, ease of use, and high speed have become the new normal.**

So, the challenge is not only to win the shopper's attention, but also keep it with a smooth omnichannel customer experience.



¹ [The Future of Ecommerce, Report by Shopify](#)

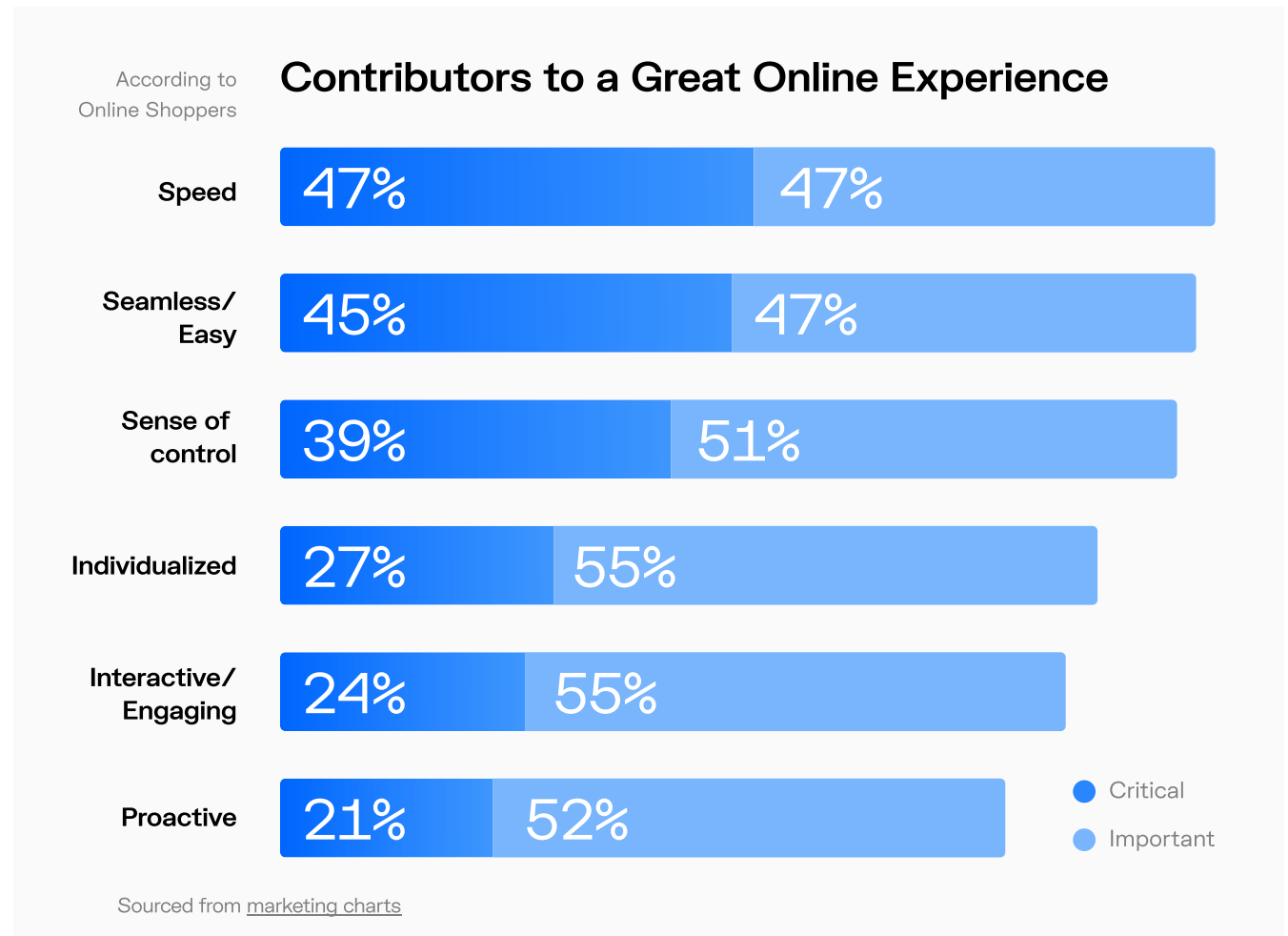
We reviewed the top 5,000 online retailers to see whether they meet the new shopper expectations

Online consumers point at **speed** as the most important element of a great customer experience.¹

Speed can mean a lot of things: from same-day delivery to one-click buying. But the whole shopping experience won't even happen if a consumer leaves, frustrated by slow page load speed or visual lags.

That's why we decided to focus on page load speed and all the related performance metrics that show the quality of online experiences.

¹ [Experience is everything, Report by PwC](#)



The results are unsettling: More than 95% of the platforms are in the red zone

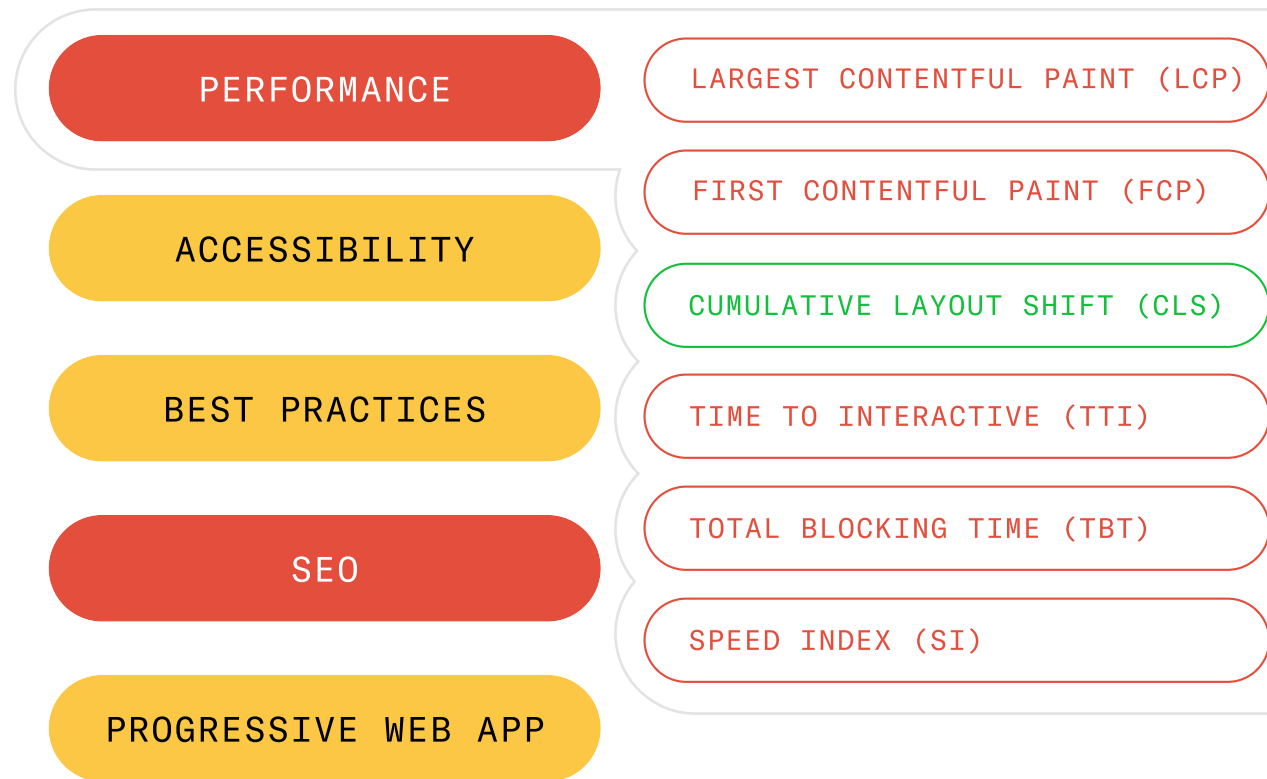
4

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⚠ **Important:** Web performance is volatile and can quickly change. Our data sample was collected in January 2021 and captures the big picture at the beginning of the year.

Audit results: **Most ecommerce websites failed the Performance audit** and needed to make improvements on the rest of the audits too.

When it came to performance metrics, **the worst results were obtained in Largest Contentful Paint and Speed Index**, which is alarming, considering Google's plans to make speed its main ranking factor.



Top performers

Examples of online retailers with remarkable results in LightHouse scores:

Performance	HOBBYLINC.COM 97	EBAY.BE 90
Accessibility	DECATHLON.DE 99	GROUPON.CA 98
	MARKET.YANDEX.RU 91	
Best Practices	DUOMAI.COM 100	WILDBERRIES.RU 100
	CASTORAMA.PL 93	WILDBERRIES.BY 93
	LAZADA.COM 93	
SEO	OLX.COM 100	AMAZON.COM.TR 99
	AMAZON.COM.BR 93	AVITO.RU 98
PWA	WALMART.COM 100	EBAY.CA 98
	SONY.COM.AU 100	LOCANTO.COM.AU 98
	GROUPON.PL 98	

Platforms with performance metrics in the green zone:

LCP	TAMIYA.COM	BEST-PRICE.COM	MUJI.COM
FCP	MANDARAKE.CO.JP	POINTS.COM	E-KATALOG.RU
SI	KASSIR.RU	TIENDEO.MX	MERCADOLIBRE.COM.EC
TTI	IHERB.COM	EVENTTICKETSCENTER.COM	MERCADONA.ES
TBT	MERCADOLIBRE.COM	PEPPER.COM	BAZOS.CZ
CLS	FNAC.ES	LOWABOOTS.COM	FORBIDDENPLANET.COM

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Methodology



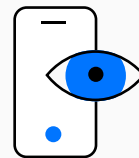
Data sample

To see how the industry is doing, it's always worth looking at its top representatives. That's why we reviewed **5,000 ecommerce platforms according to the Top Websites Ranking by SimilarWeb**.

This ranking features the most visited websites based on traffic, conversions and engagement worldwide.



5,000 top ecommerce websites according to traffic, conversions and engagement



Mobile performance data, gathered and processed programmatically at the end of January 2021

[Download the sample](#)

Data sample

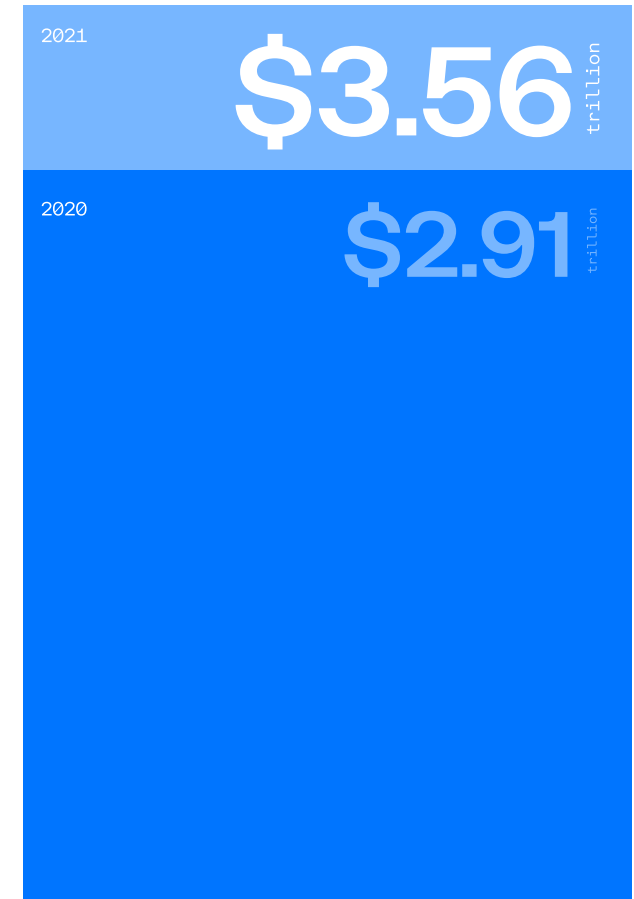
We focused on their mobile efficiency for **3 main reasons**:

- 1 — Global m-commerce sales are projected to reach **\$3.56 trillion in 2021**, which is **22.3%** more than the **\$2.91 trillion recorded in 2020**, growing its total share from **70.4% to 72.9%**.¹ That's where the growth actually happens!
- 2 — Google is planning to make mobile page experience signals a part of their ranking algorithm in May 2021.²
- 3 — Bounce rates are traditionally higher on mobiles than on desktops.³

¹ [Mobile E-commerce is Up and Poised for Further Growth, Statista](#)

² [Timing for Bringing Page Experience to Google Search, Google](#)

³ [Bounce Rate Benchmarks, CXL](#)



Metrics and tools

There are 4 pass-or-fail audits (**Accessibility, Best Practices, SEO, Progressive Web App**) and one audit based on performance metrics. Each audit has a score from 0 to 100 and a color code.

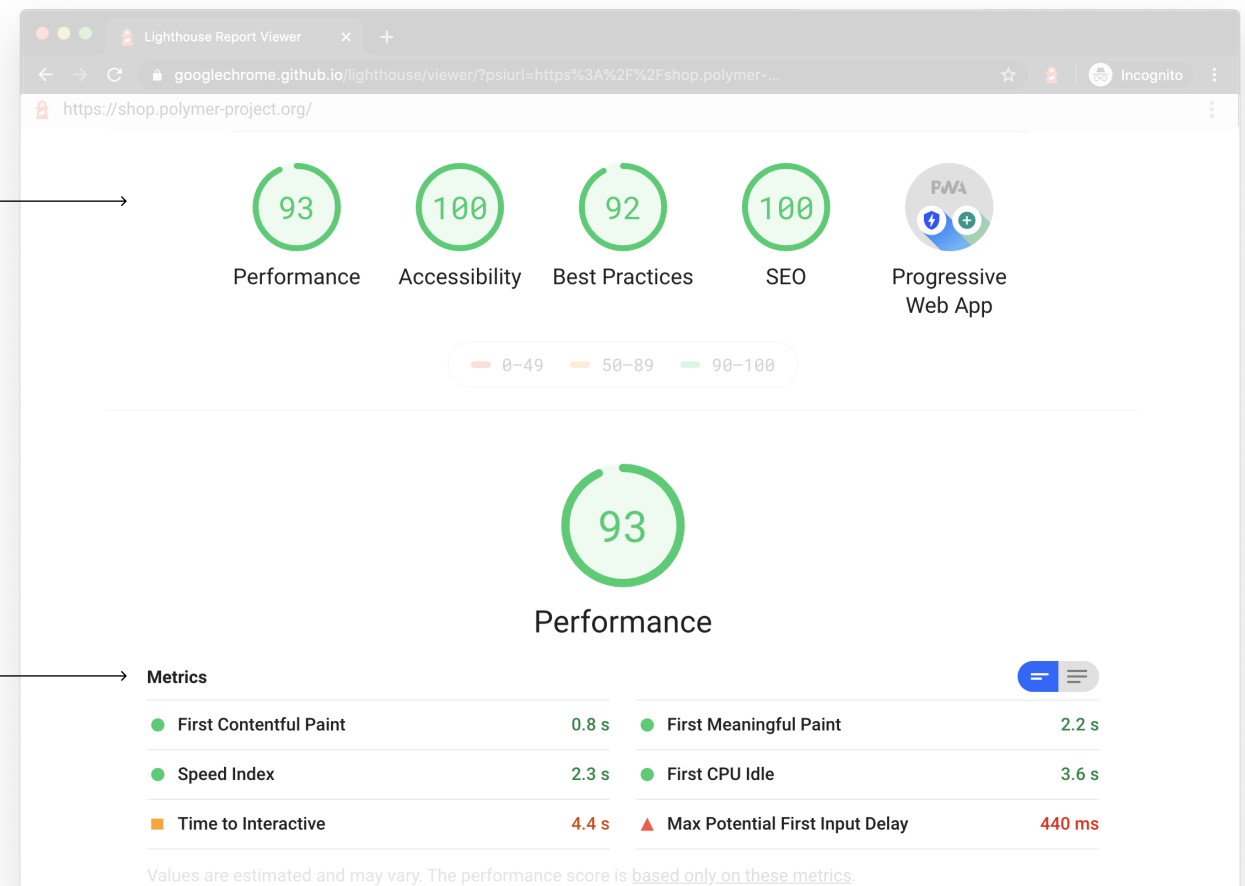
Performance metrics describe perceived website efficiency: load speed, load and runtime responsiveness, visual stability and smoothness. Most of them are measured in milliseconds and get scored from 0 to 100. The scoring is based on a comparison with real-world website data taken from HTTP Archive.

For our research, we used [Google Lighthouse](#), an automated open-source tool which is accessible to any developer and relies on user-centric metrics that have the strongest impact on user experience.

We ran 5 audits and measured 6 performance metrics for each website. To automate the process, we used an [open-source tool](#) and ran multiple Lighthouse audits on multiple URLs.

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Performance Audit

Do users perceive the website as fast and efficient?

- Largest Contentful Paint
- First Contentful Paint
- Time to Interactive
- Total Blocking Time
- Speed Index
- Cumulative Layout Shift
- Performance Score



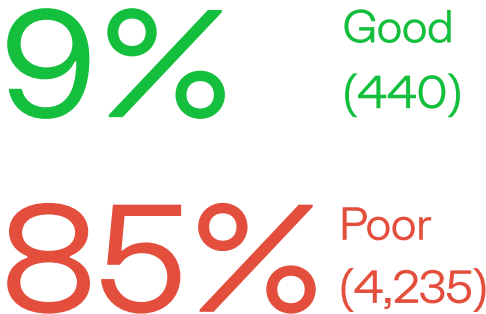
Largest Contentful Paint (LCP)



Audit Results: **POOR**

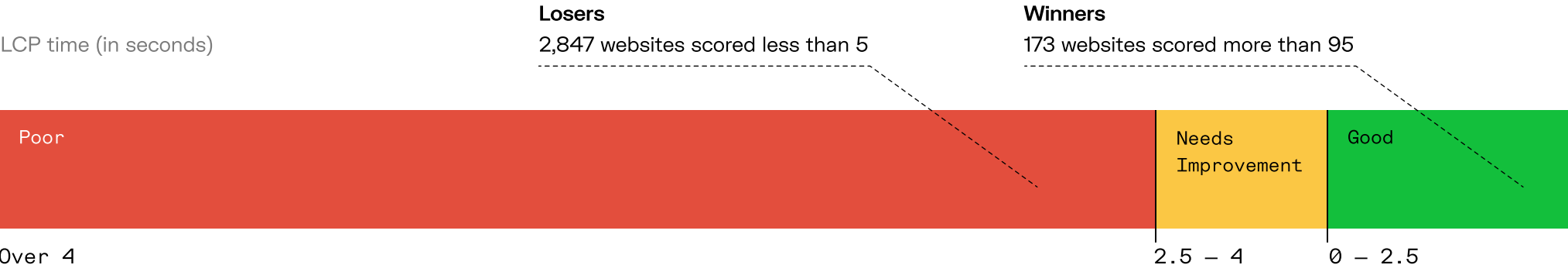
Largest Contentful Paint marks the time from when the page starts loading to when the primary or “largest” part of the page’s content becomes visible.

You should render LCP in 2.5 seconds or less to provide the best online experience. In this case, the user sees the most valuable part of the page right away and can already decide whether it matches their request.

LCP is a part of Google’s Core Web Vitals, the subset of web vitals that will soon be a part of their ranking algorithm. This means that it won’t only affect the CX and consequent conversion and bounce rates, but will also have an impact on your SEO.



-  [LCP optimization advice from Google](#)
-  [LCP optimization guide from Uploadcare](#)



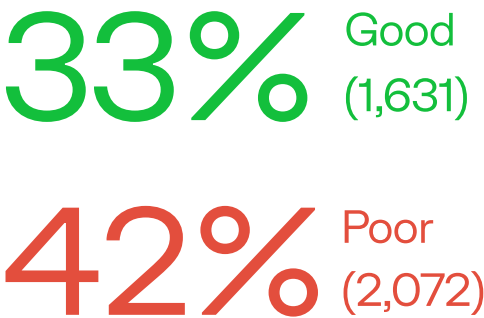
First Contentful Paint (FCP)


Audit Results: **POOR**

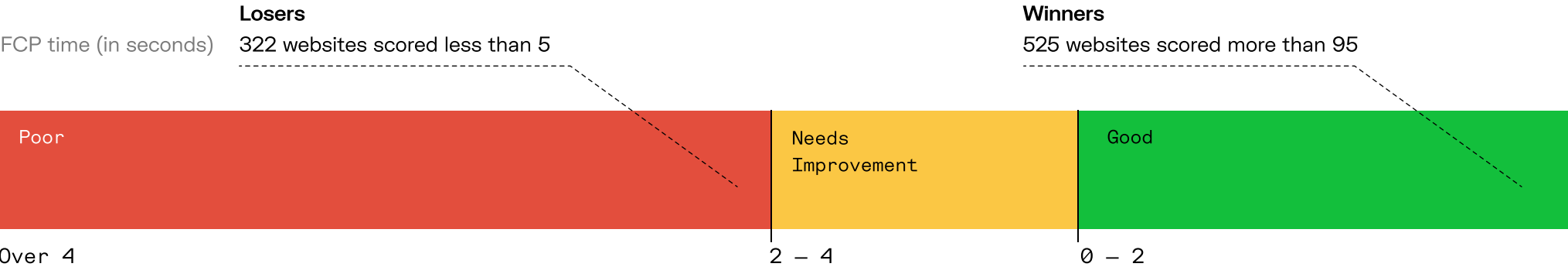
First Contentful Paint shows the time from when the page starts loading to when any part of the page's content (text, image, SVG element) becomes visible.

This metric is important because it gives the user the sense that everything is working. And though the most important content (LCP) has not rendered yet, it's coming soon.

Most of the time FCP happens when the text is rendered, so Google recommends to pay attention to font load time and make sure the text is visible during webfont load.



 [FCP optimization guide from Uploadcare](#)



Time to Interactive (TTI)

14

Audit Results: **POOR**

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Time to Interactive marks the time from when the content starts rendering to the moment it becomes fully functional. A fast TTI indicates that your page is usable, and the user can start doing what they came for.

A page is considered interactive if:

- The FCP has been registered and there is some content displayed.
- Events are registered.
- The page responds within 50 milliseconds.

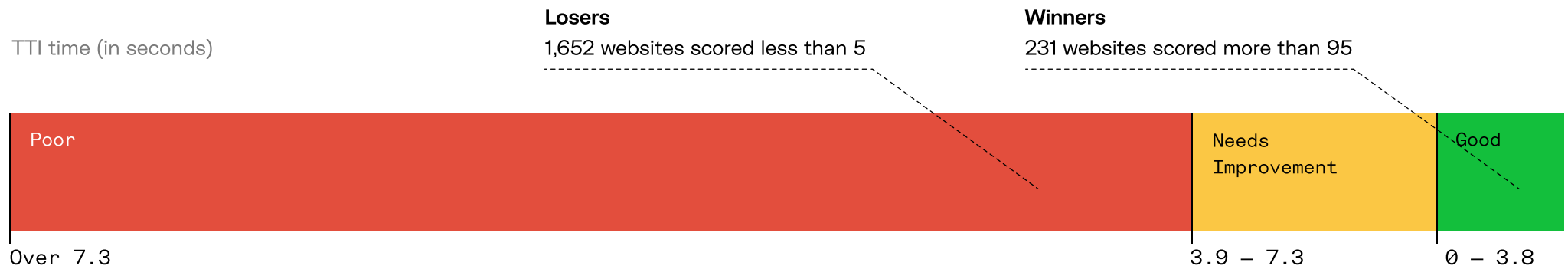
Google's benchmark for a good TTI is less than 3.8 seconds.

7% Good
(364)

78% Poor
(3,923)



[TTI optimization guide from Uploadcare](#)



Total Blocking Time (TBT)

15

Audit Results:

POOR

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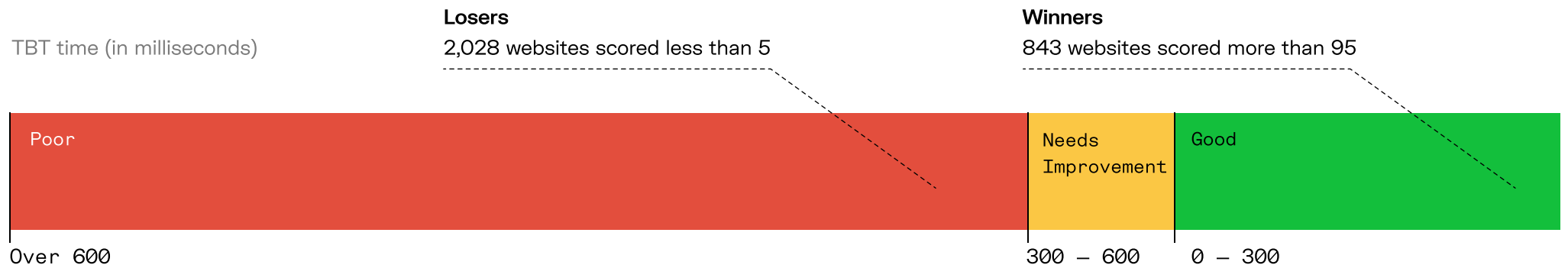
Total Blocking Time shows the total amount of time a page was blocked against clicks, taps or presses. Technically, it is the sum of all the delays between the First Contentful Paint and Time to Interactive.

All the lags longer than 50 milliseconds are taken into account. For instance, if some script blocks the main thread for 70 milliseconds, the TBT will be augmented by 20.

When the loading is blocked for more than 50 milliseconds, the user usually notices a delay and perceives a website as overloaded or janky.

26% Good (1,312)

65% Poor (3,271)



Speed Index (SI)

Audit Results:

POOR

This metric calculates visual progression, or the time between a blank screen and a visually complete state. Simply put, it shows how fast the user sees the complete layout.

If your page elements display quickly (in less than 4.3 seconds), the user will perceive the website as fast, though it might not even be fully functional due to some scripts still loading in the background.

A user's perception is subjective, and visual signals play the largest part in affecting it, so the lower your Speed Index, the better.

7% Good (373)

84% Poor (4,194)



[SI optimization guide from Uploadcare](#)

SI time (in seconds)

Losers

1,986 websites scored less than 5

Winners

110 websites scored more than 95



Cumulative Layout Shift (CLS)

Audit Results: GOOD

Together with LCP, this metric is a part of Google’s Core Web Vitals, and there is a good reason for that.

If Speed Index reflects visual promptness, CLS is all about visual stability.

If elements on a page are loaded asynchronously, they can displace each other, causing layout jumps and hiccups. CLS registers unexpected layout shifts and measures how often they occur.

49% Good
(2,429)

41% Poor
(2,043)

 [CLS optimization guide from Google](#)



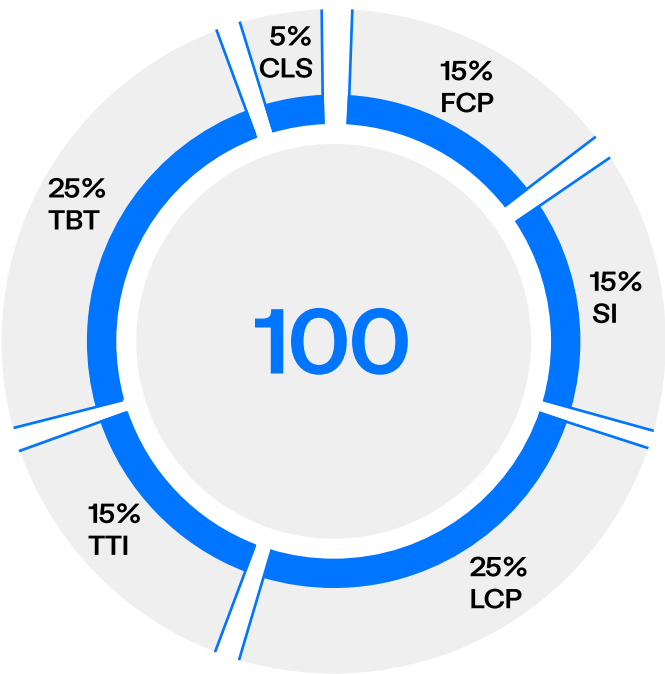
Performance Score

Audit Results: **POOR**

Performance Score is a combined metric that shows the website's overall efficiency.

In fact, it is a weighted average of the 6 performance metrics, rated according to their impact on user-perceived performance.

To see how the Performance Score is generated, use the [scoring calculator](#).



3% Good (172)

78% Poor (3,917)

Performance Score

Losers
325 websites scored less than 5

Winners
108 websites scored more than 95



Accessibility Audit

Can any person, regardless of their physical abilities, use the website effectively?



Accessibility Score

20

Audit Results:

NEEDS IMPROVEMENT

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Accessibility Score is a weighted average of numerous pass-or-fail audits that check whether your website is easy to use for people with different physical abilities.

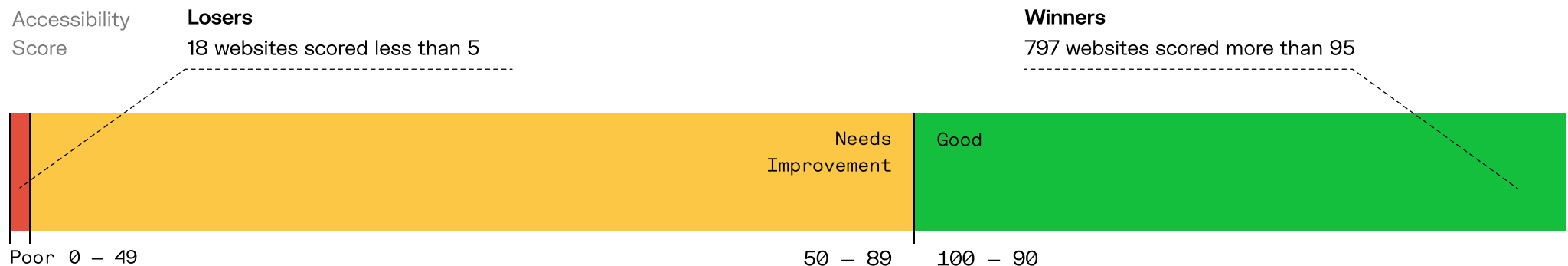
Here are some examples of the audit checks:

- Buttons do not have accessible names
- Image elements do not have alt attributes
- Links do not have a discernible name
- Background and foreground colors do not have a sufficient contrast ratio

To pass this audit, you need to make sure that you comply with all of them, but especially with those that are more heavily weighted.

42% Good (2,093)

0.5% Poor (26)



Best Practices Audit

How healthy and secure is the code?



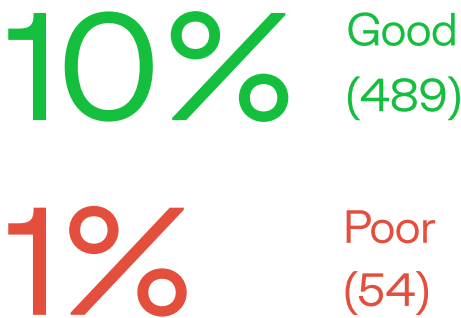
Best Practices Score

Audit Results: **NEEDS IMPROVEMENT**

Best Practices Score is also a sum of pass-or-fail audits that describe your overall code health according to common best practices.

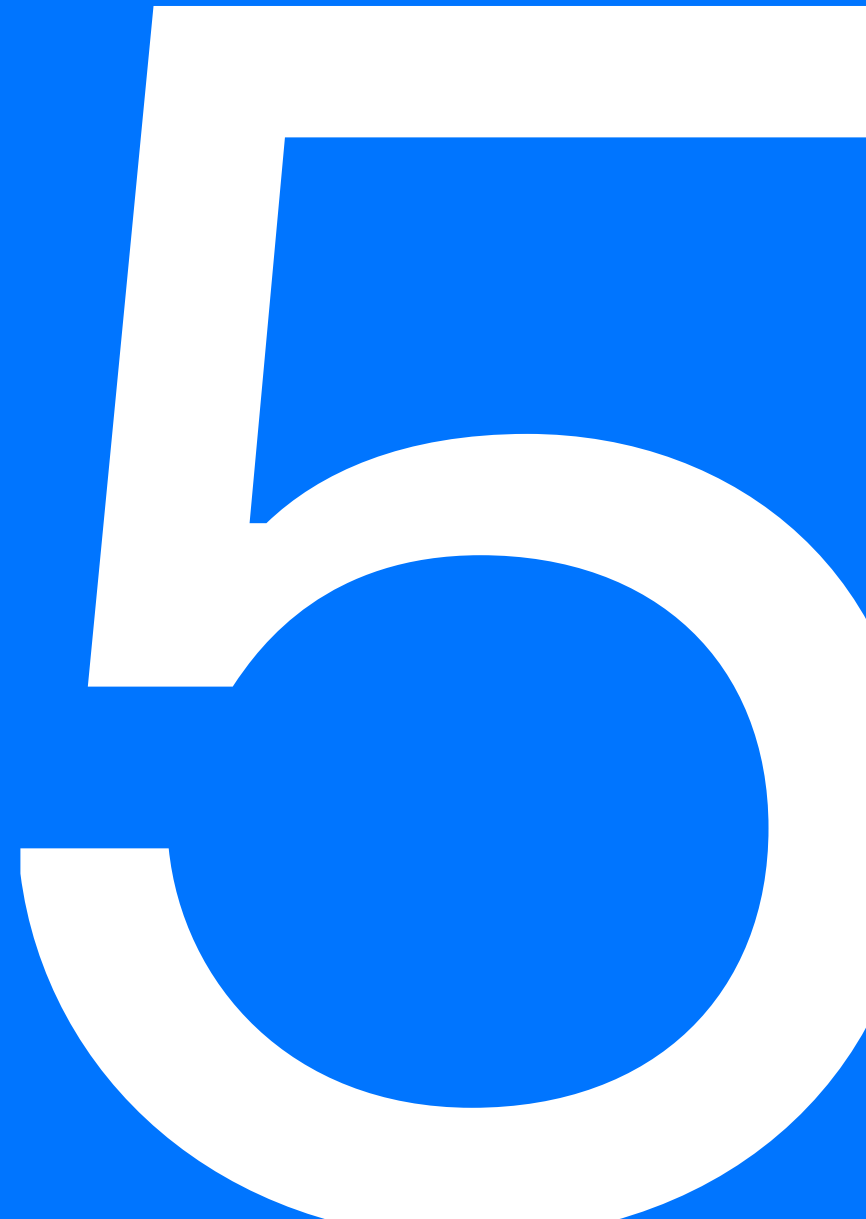
These best practices embrace such aspects of your code as using HTTPS, safe links, and images with correct aspect ratio.

There are around 15 types of audits that test your code in terms of its influence on page speed, security, and user experience.



SEO Audit

Does the website comply with the
minimum search engine requirements?



SEO Audit

Audit Results:

POOR

The SEO audit checks your website for what matters to search engines. It shows how well your content is optimized and suggests improvements.

Important: This score does not influence your rankings (only Performance Score does), nor does it contain the specific requirements of each search engine. But it's still important and can be considered as the bare minimum for SEO optimization.

Among the pass-or-fail audits are such basic checks as whether a page has a <title> element, meta description, and robots.txt.

0.5% Good (23)

71% Poor (3.529)



[SEO optimization guidelines from Google](#)



[SEO optimization guidelines from Bing](#)



Progressive Web App Score

Does your app meet all the PWA requirements and provide a native app-like experience?



Progressive Web App Score

26

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Audit Results:

NEEDS IMPROVEMENT

This audit is focused exclusively on progressive web apps and checks whether their features are built according to the best practices.

PWAs are supposed to look and feel like native apps, so they should be capable, reliable, and installable.

Audit checks include such points as:

- Can your app load in offline or poor network conditions?
- Is it fast?
- Is content sized correctly?
- Does it meet accessibility requirements?
- Does it work in any browser?
- Is it responsive to any screen size?

18% Good (891)

8% Poor (374)



[PWA guide from Google](#)

PWA Score

Losers

111 websites scored less than 5

Winners

477 websites scored more than 95



How do I reach the green zone?

A word of advice from Google
and some automation options



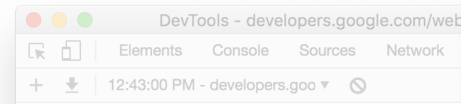
Seize the opportunities spotted by Google

28

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If you need to improve your Performance Score, here is the flow recommended by Google:

- 1 Run a Lighthouse audit and get the baseline metrics and scores.
- 2 Check out the [performance score calculator](#) to see which metrics you should prioritize to improve the Performance Score.
- 3 Click on the chosen scores or metrics in the Lighthouse report and look at the Opportunities section.
- 4 Implement some of the recommendations.
- 5 Repeat the cycle.



If you click on a metric's score in Lighthouse, you'll find some improvement opportunities with estimated savings.

Opportunities	
These are opportunities to speed up your application by optimizing the following resources.	
Resource to optimize	Estimated Savings
1 Defer offscreen images	3.16 s
2 Properly size images	1.8 s
3 Eliminate render-blocking resources	0.93 s
4 Avoid multiple, costly round trips to any origin	0.3 s
5 Defer unused CSS	0.15 s

Opportunities

These are opportunities to speed up your application by optimizing the following resources.

Resource to optimize		Estimated Savings	
1	Defer offscreen images	3.16 s	
Consider lazy-loading offscreen and hidden images after all critical resources have finished loading to lower time to interactive. Learn more.			
URL		Original	Potential Savings
...panels/console.png (developers.google.com)		132 KB	132 KB
...panels/elements.png (developers.google.com)		80 KB	80 KB
...panels/network.png (developers.google.com)		67 KB	67 KB
...panels/memory.png (developers.google.com)		60 KB	60 KB

You can go deeper and click on the opportunity. Lighthouse will recommend some specific steps and point to the elements that require attention.

Seize the opportunities spotted by Google

Speed and efficiency have a lot to do with page weight, and most of the page weight comes from visual content. This is especially true for ecommerce websites with lots of product pictures and videos, catalogues and look books.



500KB

Google's benchmark for the total size of a mobile web page

*25% of pages could save more than 250KB

*10% of pages could save more than 1MB

That's why Lighthouse features a range of image optimization opportunities that may improve the situation in almost all the audits:

- Display images with correct aspect ratio
- Serve images with appropriate resolution
- Defer offscreen images
- Serve images in next-gen formats
- Efficiently encode images
- Properly size images
- Use video formats for animated content

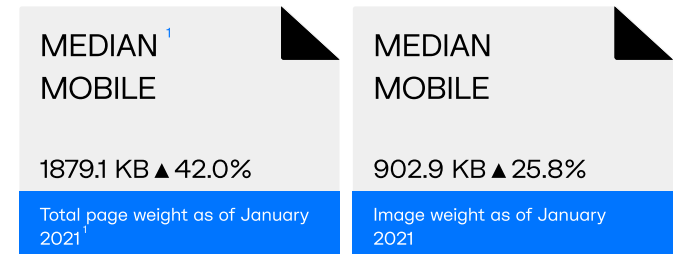
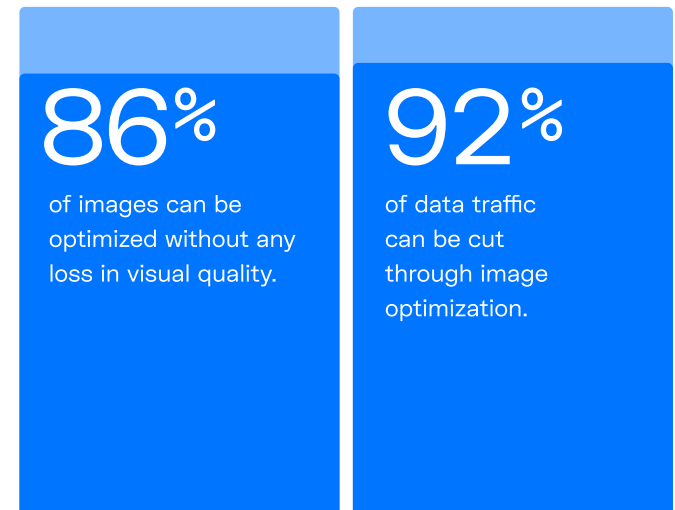


Image compression is a low-hanging fruit of web optimization:

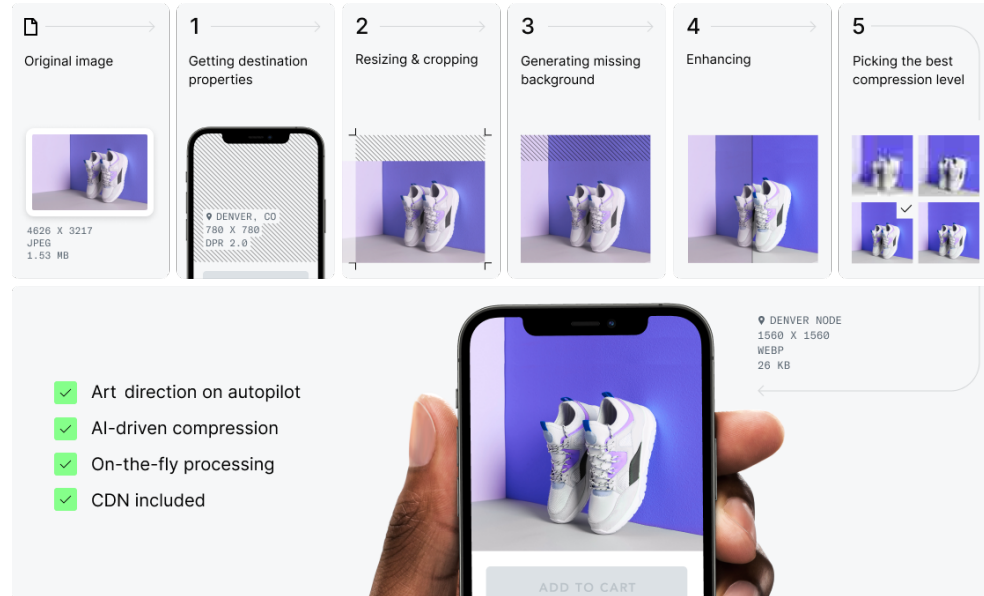


¹ [Page Weight Report, HTTP Archive](#)

Take a shortcut with automated solutions

Image optimization is a huge part of ecommerce content management. Whether an online retailer is using an ecommerce platform or has an in-house CMS, it can be tough to handle such a large number of files manually.

Fortunately, there are serverless automated solutions that take on the entire image optimization burden and help quickly improve the scores.



Ready-to-integrate file handling infrastructures like Uploadcare streamline your media pipeline and make your website compliant by default. Quick implementation allows you to improve web performance in no time.

- ✓ Display images with correct aspect ratio
- ✓ Serve images with appropriate resolution
- ✓ Defer offscreen images
- ✓ Serve images in next-gen formats
- ✓ Efficiently encode images
- ✓ Properly size images
- ✓ Use video formats for animated content

Uploadcare automatically detects destination properties and serves media tailored and optimized.

As a result, your web pages load as quick as a wink, providing the best customer experience possible!

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