



 **ezoic** education  
Maximizing Site Speed **With Ezoic**

# WHO ARE YOU?



@TylerBishop 

Award-winning marketer and the CMO of Ezoic. Founded Google's Pubtelligence, a global event for publishers hosted at Google offices. Served as a digital & SEO expert for start-up competitions and also hosts *The Publisher Lab* podcast. Tyler is also a Brazilian Jiu Jitsu black belt, semi-retired magician, and a "dog person".

## Ezoic education series of courses....

Designed to help you use Ezoic, grow your site, connect with experts and other publishers

**Tuesday:** Evaluating Content and Writer ROI To Accelerate Traffic

**Wednesday:** *Guest:* Doug Cunnington on Secrets For Growing Niche Sites

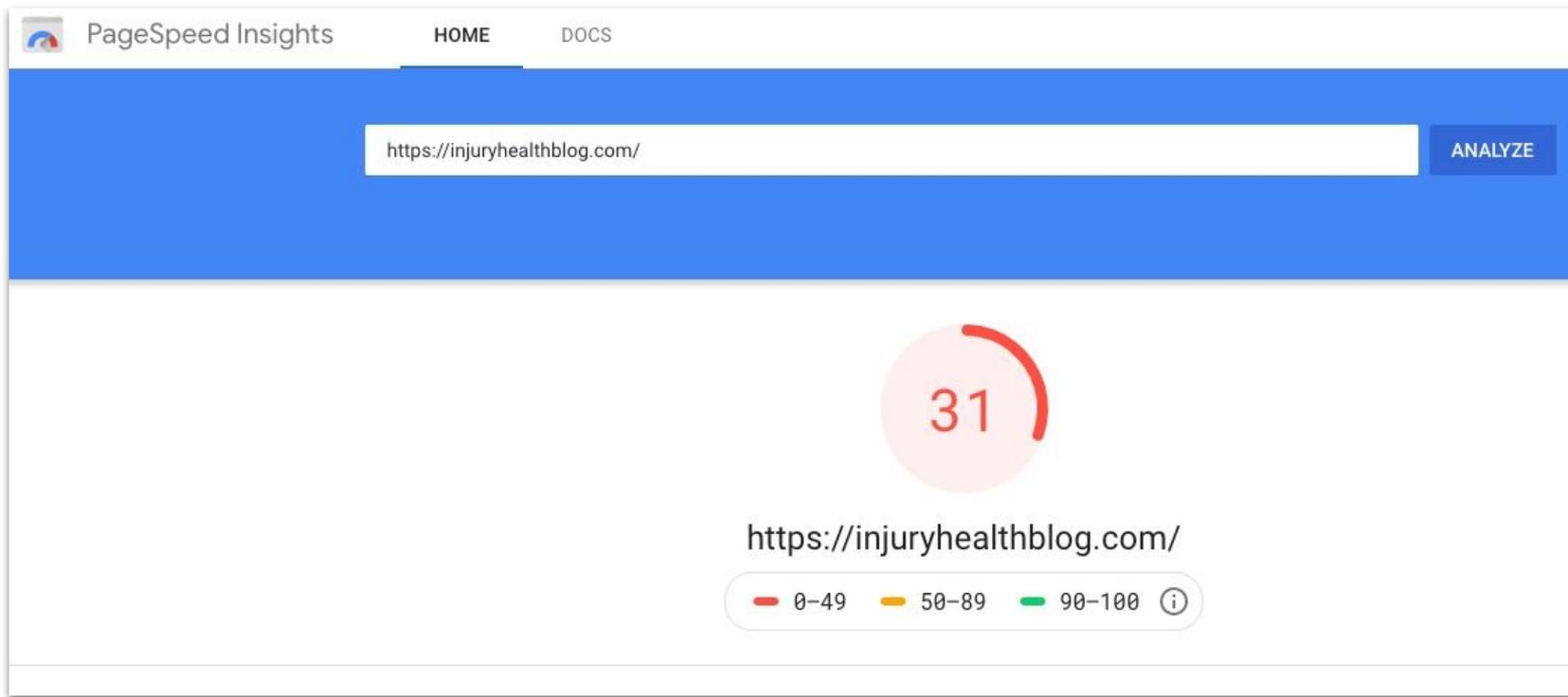
**Thursday:** Google Search Console Tips For Higher Rankings and Revenue

**Friday:** Uncovering Pages With Hidden Revenue On Your Site

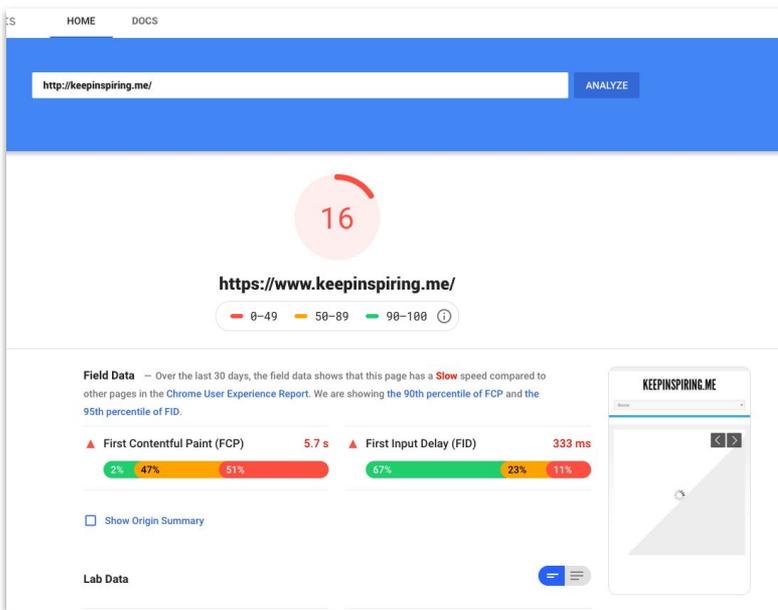


1. **Sent to anyone signed up** automatically
2. Available on our **YouTube channel in it's own playlist**
3. Available at **[Ezoic.com/ezoic-education-courses/](https://Ezoic.com/ezoic-education-courses/)**

# InjuryHealthblog.com



# The general approach - Tools

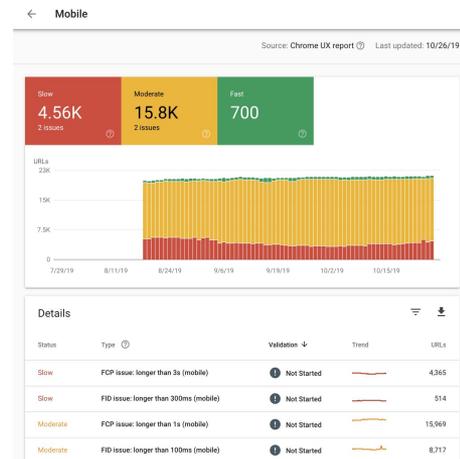


### Chrome UX Report

Field Editing in

EDIT CONNECTION

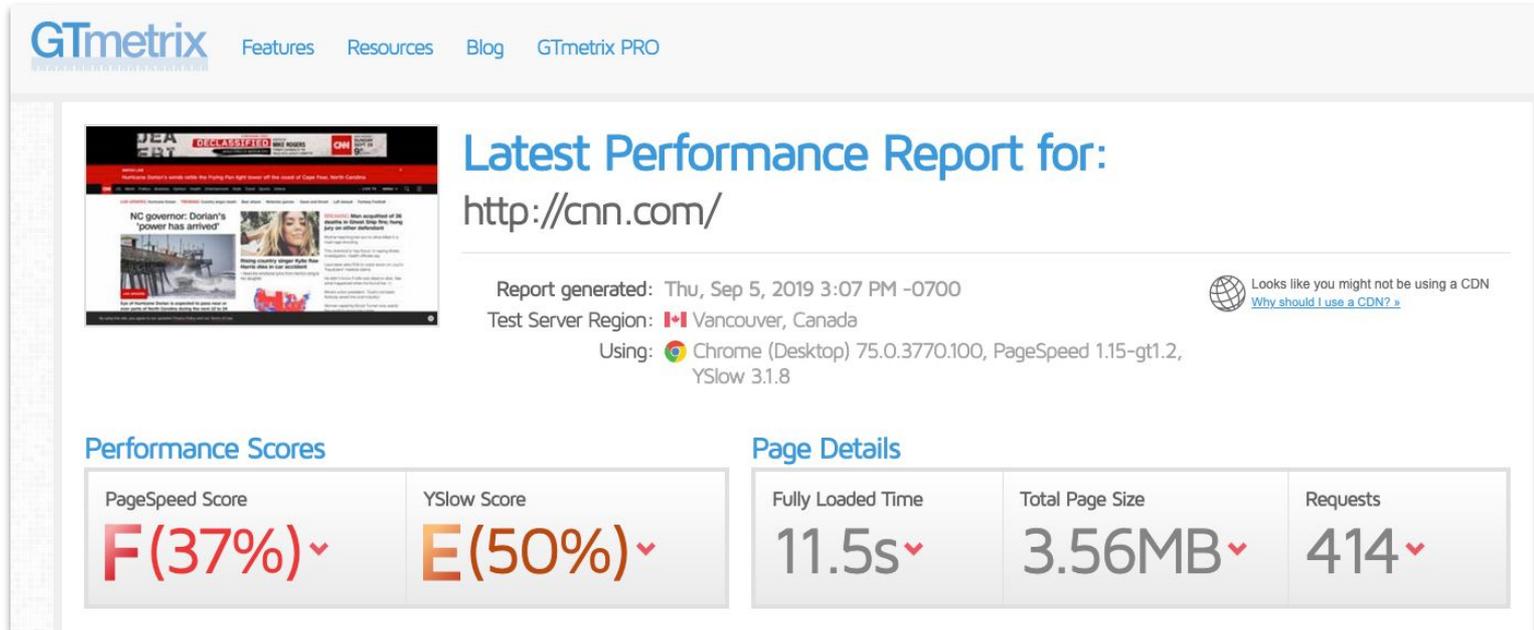
Index	Field	Type	Agg
1	Offline	123 Percent	▼
2	2G	123 Percent	▼
3	Slow 2G	123 Percent	▼
4	Phone	123 Percent	▼
5	Tablet	123 Percent	▼
6	origin	RBC Text	▼
7	3G	123 Percent	▼
8	Fast	123 Percent	▼
9	yyyyymmdd	Date (YYYYMMDD)	▼
10	Average	123 Percent	▼
11	4G	123 Percent	▼
12	Desktop	123 Percent	▼
13	Release	Year Month (YYYYMM)	▼
14	Slow	123 Percent	▼



Pagespeed Insights is popular but has not been working correctly for a while: [which has been broken since late 2018 and has yet to be fixed by Google's team](#)

# Tools Lack Details & Insight

They grab everything. The recommendations are broadly focused  
Some break a site. Some actually makes it slower.



The screenshot shows the GTmetrix website interface. At the top, there's a navigation bar with 'GTmetrix' logo and links for 'Features', 'Resources', 'Blog', and 'GTmetrix PRO'. The main content area displays a 'Latest Performance Report for: http://cnn.com/'. Below this, it specifies the report was generated on 'Thu, Sep 5, 2019 3:07 PM -0700' from a 'Test Server Region: Vancouver, Canada'. It also lists the tools used: 'Chrome (Desktop) 75.0.3770.100, PageSpeed 1.15-gt1.2, YSlow 3.1.8'. A note indicates 'Looks like you might not be using a CDN' with a link to 'Why should I use a CDN?'. The report is divided into two sections: 'Performance Scores' and 'Page Details'. The 'Performance Scores' section shows a 'PageSpeed Score' of 'F (37%)' and a 'YSlow Score' of 'E (50%)'. The 'Page Details' section shows a 'Fully Loaded Time' of '11.5s', a 'Total Page Size' of '3.56MB', and '414' requests.

GTmetrix Features Resources Blog GTmetrix PRO

Latest Performance Report for:  
http://cnn.com/

Report generated: Thu, Sep 5, 2019 3:07 PM -0700  
Test Server Region:  Vancouver, Canada  
Using:  Chrome (Desktop) 75.0.3770.100, PageSpeed 1.15-gt1.2, YSlow 3.1.8

 Looks like you might not be using a CDN  
[Why should I use a CDN? >](#)

**Performance Scores**

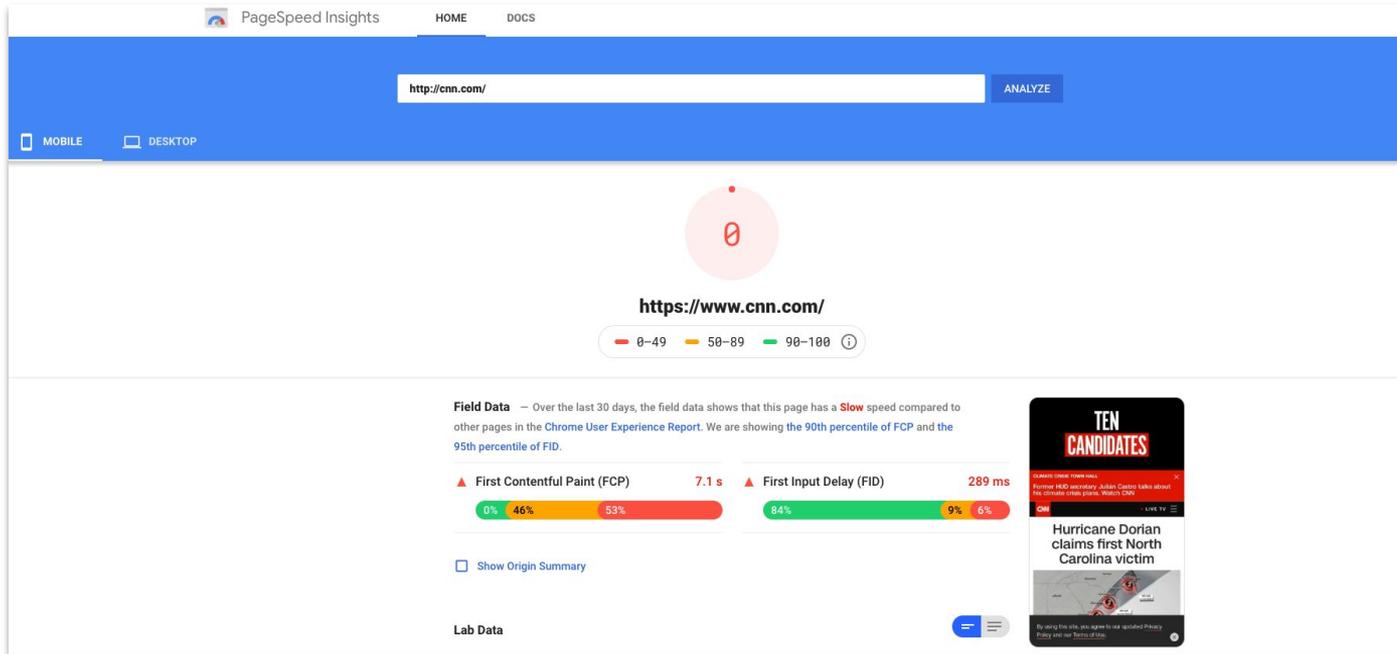
PageSpeed Score	YSlow Score
<b>F (37%)</b> ▾	<b>E (50%)</b> ▾

**Page Details**

Fully Loaded Time	Total Page Size	Requests
<b>11.5s</b> ▾	<b>3.56MB</b> ▾	<b>414</b> ▾

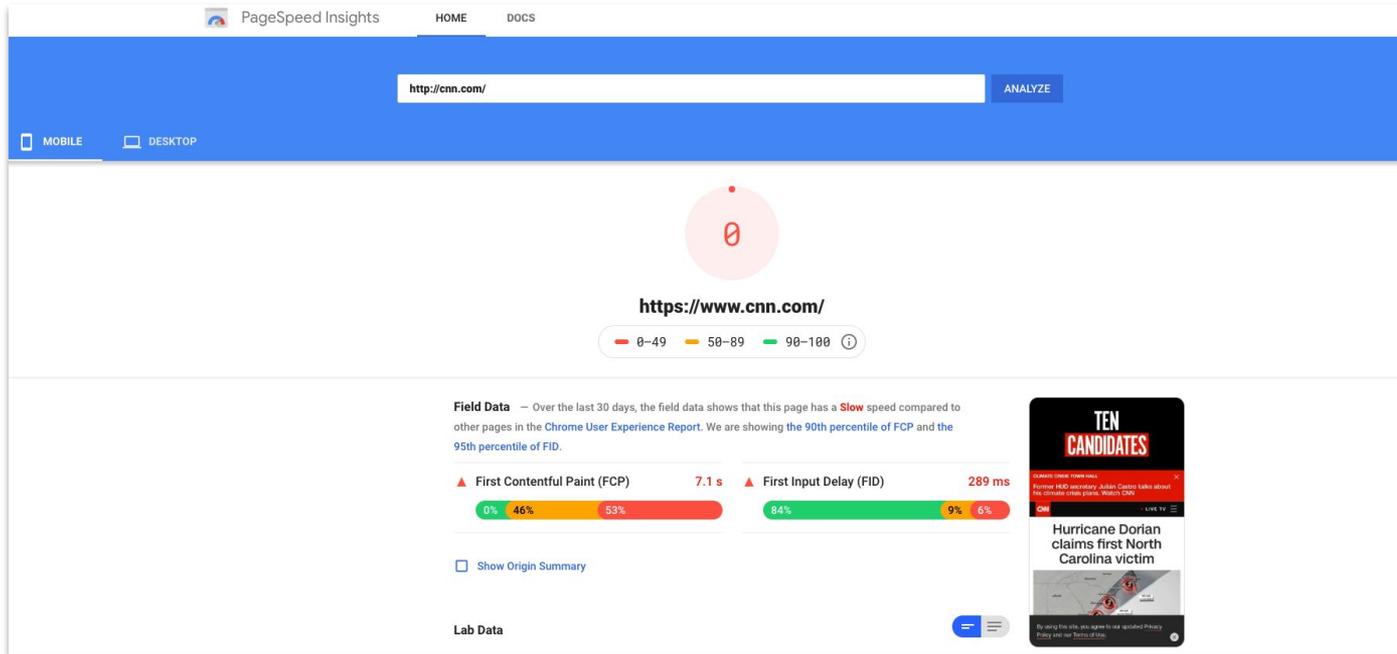
# Tools aren't the best way to measure UX or speed

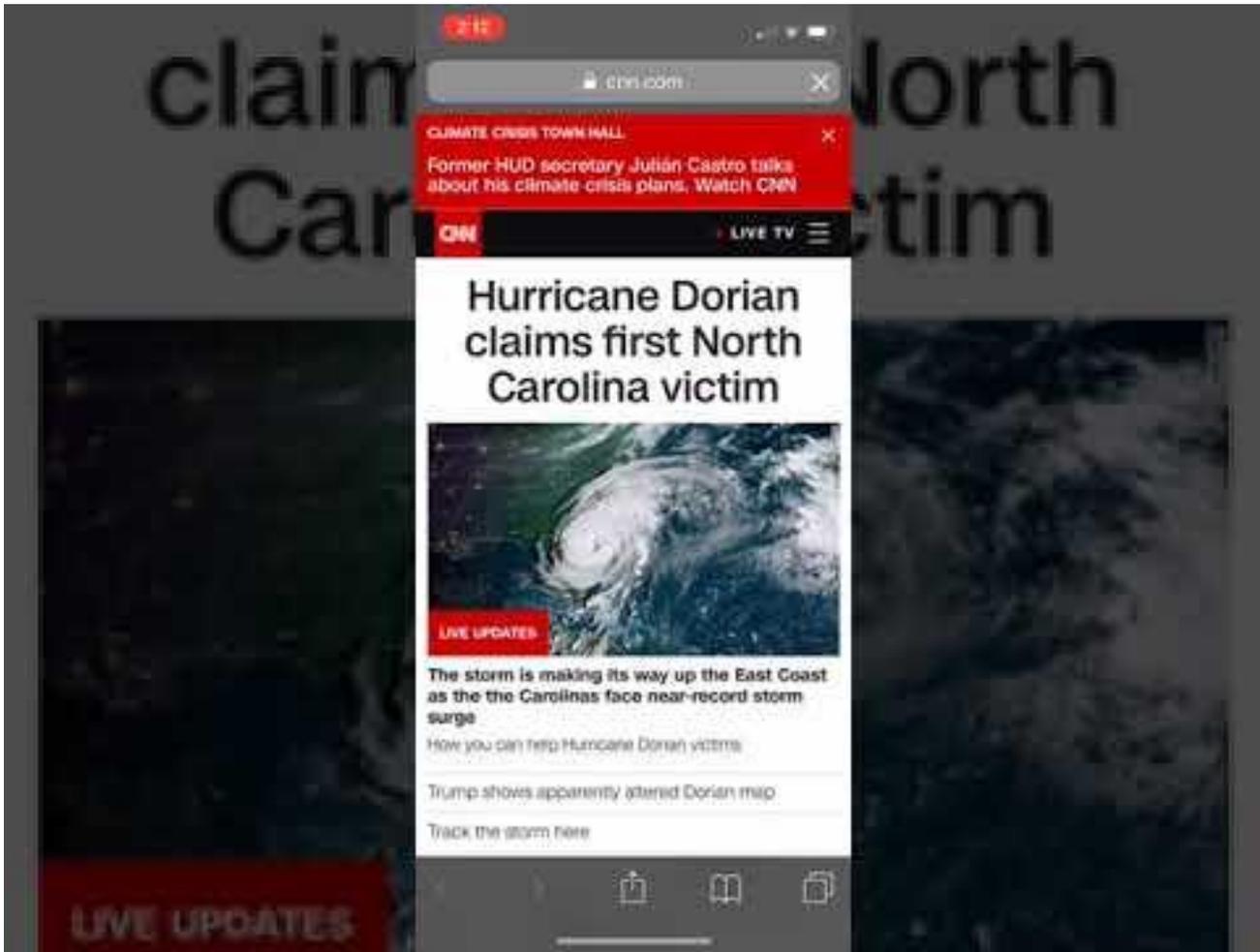
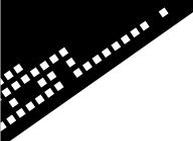
CNN.com is actually very fast



# CNN.com is fast for users

...but doesn't care about Google Pagespeed Insights







# What do these metrics mean?

**“Avg Page Load Time”** : The average amount of time (in seconds) it takes that page to load, from initiation of the pageview (e.g., click on a page link) to load completion in the browser.

16,059 of pageviews sent page load sample

Avg. Page Load Time (sec)

5.21



Avg. Redirection Time (sec)

0.15



Avg. Domain Lookup Time (sec)

0.17



Avg. Server Connection Time (sec)

0.09



Avg. Server Response Time (sec)

0.44



Avg. Page Download Time (sec)

0.31



# Google's recommendations...

Lab Data			
 First Contentful Paint	1.0 s	 Time to Interactive	10.3 s
 Speed Index	6.2 s	 Total Blocking Time	1,250 ms
 Largest Contentful Paint 	7.4 s	 Cumulative Layout Shift 	0.003

# The advice Google gives my site for speed

- Defer offscreen images
- Resize and compress images
- Eliminate or “asynch” non-critical JS and CSS
- Preconnect to origins
- Lazy load video thumbnails and iframes
- Lazy load ads down the page
- Optimize for the visitor viewport

Lab Data			
● First Contentful			10.3 s
▲ Speed Index	6.2 s	▲ Total Blocking Time	1,250 ms
▲ Largest Contentful Paint	7.4 s	● Cumulative Layout Shift	0.003

# Recommendations increase total page load time

- Defer offscreen images
- Resize and compress images
- Eliminate or “asynch” non-critical JS and CSS
- Preconnect to origins
- Lazy load video thumbnails and iframes
- Lazy load ads down the page
- Optimize for the visitor viewport

Lab Data			
● First Contentful		10.3 s	
▲ Speed Index	6.2 s	▲ Total Blocking Time	1,250 ms
▲ Largest Contentful Paint	7.4 s	● Cumulative Layout Shift	0.003

All of this adds to “avg. page load time” — in fact, it will make it much longer in most cases

# Site speed and display ads

## Ad code 'slows down' browsing speeds

15 February 2019



Ads are responsible for making webpages slow to a crawl, suggests analysis of the most popular one million websites.

The research by developer Patrick Hulse looked at which chunks of code take longest to load.

### We champion identity.

So customers stay connected. Securely.

Identity security for the global enterprise.

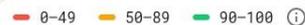


LEARN HOW

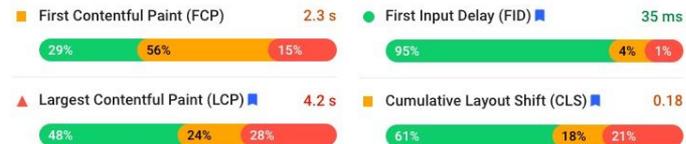
ADVERTISEMENT

15

https://www.bbc.com/



Field Data — Over the last 30 days, field data shows that this page **does not pass** the **Core Web Vitals** assessment.



# There's always a trade

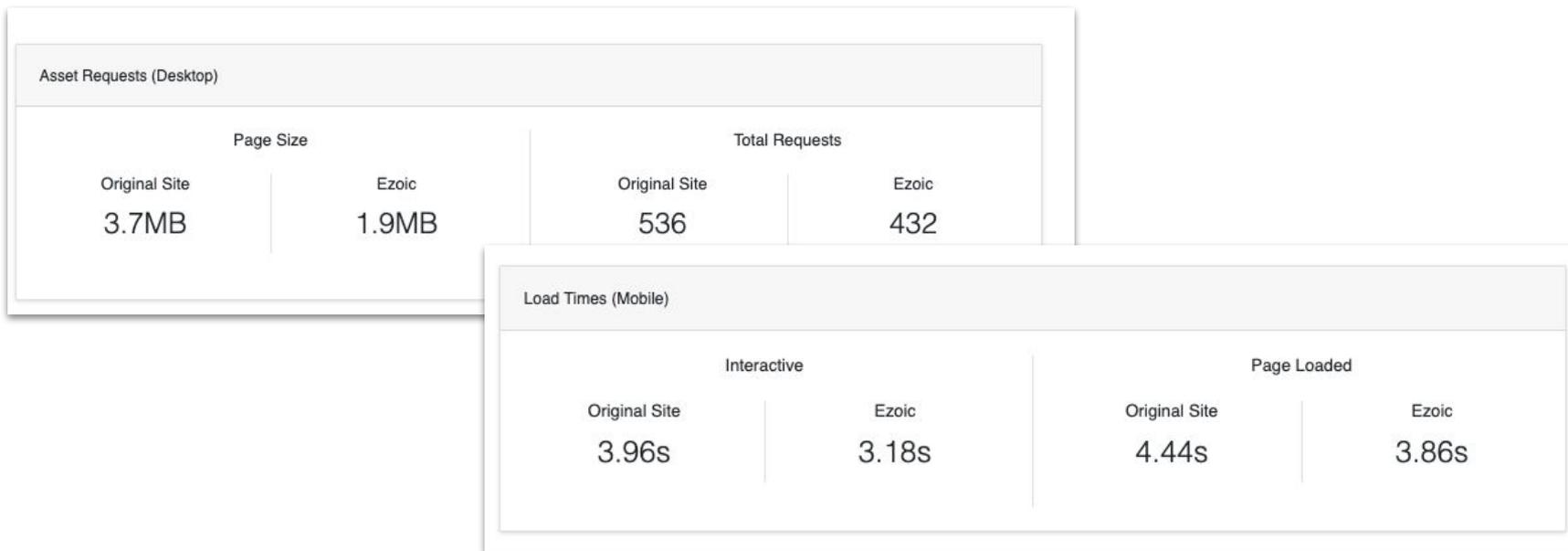
Anything placing display ads on your site will make it slower...



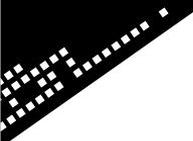
Combined with header bidding is what all sophisticated setups will include. It will requires more requests and slower timings

# Ezoic designed to make ads displaying ads, faster

In most cases, when setup correctly, a site will be faster w/ Ezoic when displaying ads vs. previous



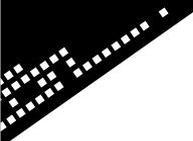
*Caching makes it hard to look at apples to apples with outside tools*



Setting up Ezoic to be fast!

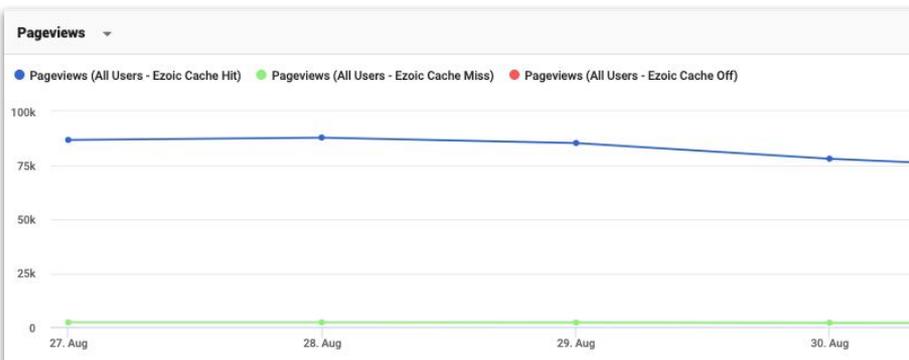
# Setting up Ezoic to be fast!

- Nameserver or Cloudflare integration
  - Dashboard > Settings > Integration Method > Select Nameserver or Cloudflare
    - (Can Create Free Cloudflare account if you don't have one)
- Go To Speed Tab and Enable Caching
  - Dashboard > Speed > Caching App > Enable Ezoic CDN
- Ensure Caching is working properly and free of conflicts
  - [Big Data Analytics > Speed > Caching > Ezoic Caching](#)
    - Cache should be mostly Ezoic Cache Hit
- Troubleshooting
  - Override cache control headers (change from false to true)
  - Disable caching features in popular plugins



Making site's faster in general...

# Is caching working?

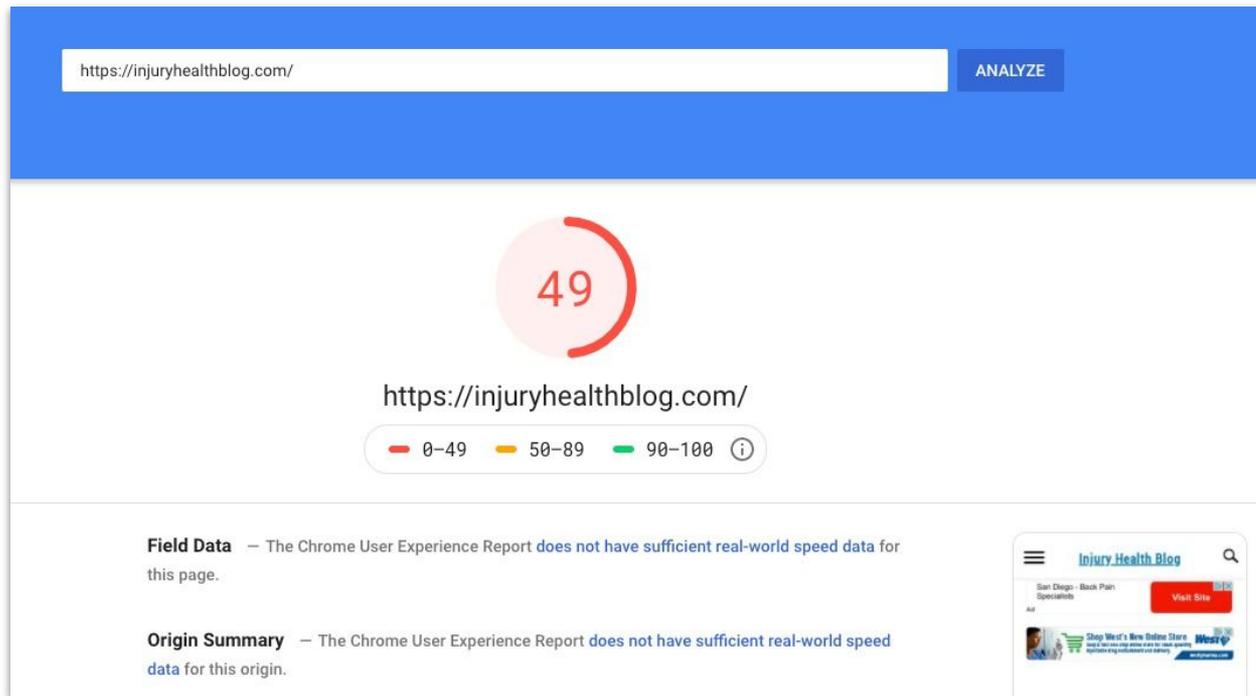


Ezoic Cache Level	Pageviews
	<b>675,744</b> % of Total: 100.00% (675,744)
Cache Hit	<b>659,219 (97.55%)</b>
Cache Miss	<b>16,525 (2.45%)</b>
Cache Off	<b>0 (0.00%)</b>

Columns: ADD FILTERS

Ezoic Cache Level	Pageviews	Average Page Engaged Time	Page Engagement Rate	Average Time To First Byte	Average Time To Interactive	Bounce Rate	% Exit	Page RPM
	<b>675,744</b> % of Total: 100.00% (675,744)	<b>00:58</b> Avg for View: 00:58 (0.00%)	<b>58.46%</b> Avg for View: 58.46% (0.00%)	<b>2,489.16 ms</b> Avg for View: 2,489.16 ms (0.00%)	<b>8,159.21 ms</b> Avg for View: 8,159.21 ms (0.00%)	<b>26.07%</b> Avg for View: 26.07% (0.00%)	<b>88.18%</b> Avg for View: 88.18% (0.00%)	<b>\$3.17</b> Avg for View: \$3.17 (0.00%)
Cache Hit	<b>659,219 (97.55%)</b>	<b>00:58</b>	<b>58.45%</b>	<b>2,463.47 ms</b>	<b>8,142.93 ms</b>	<b>26.15%</b>	<b>88.25%</b>	<b>\$3.14</b>
Cache Miss	<b>16,525 (2.45%)</b>	<b>01:04</b>	<b>58.91%</b>	<b>3,516.13 ms</b>	<b>8,809.84 ms</b>	<b>22.83%</b>	<b>85.32%</b>	<b>\$4.64</b>
Cache Off	<b>0 (0.00%)</b>	<b>00:00</b>	<b>0.00%</b>	<b>0.00 ms</b>	<b>0.00 ms</b>	<b>0.00%</b>	<b>0.00%</b>	<b>\$0.00</b>

# InjuryHealthblog.com



Why not????



# Can fix, but this is where they need to know something too

Update Cache Setting Values

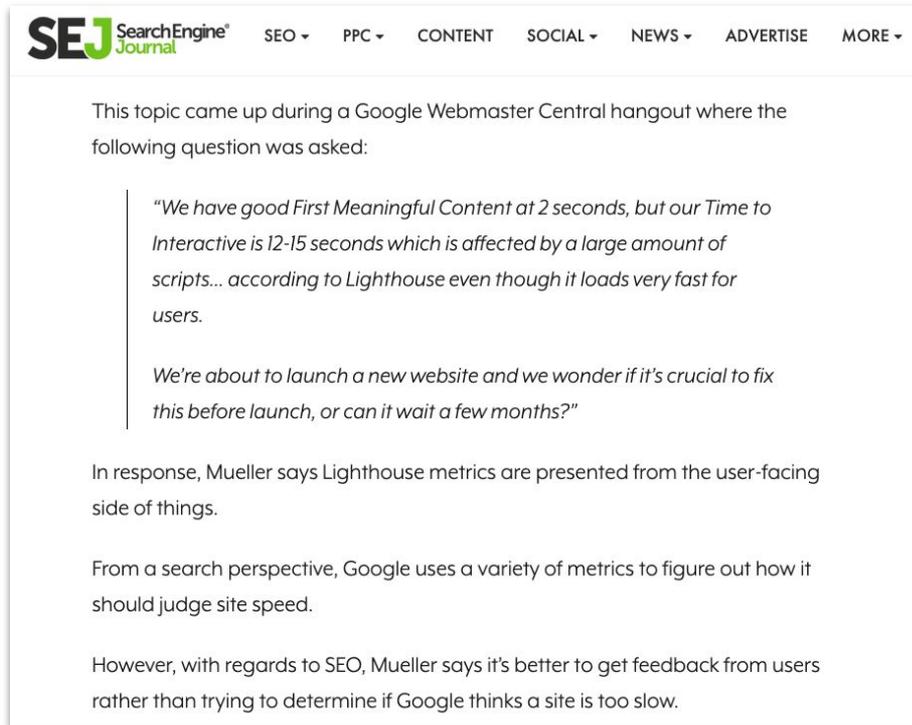
Setting	Value	Accepted Values
Enable Caching For Cookies	<input type="text" value="true"/>	True or False
Default Cache Age (s)	<input type="text" value="86400"/>	Minimum 3600 seconds (1 hour)
Maximum Cache Age (s)	<input type="text"/>	Minimum 3600 seconds (1 hour)
Minimum Cache Age Threshold (s)	<input type="text" value="300"/>	Minimum 300 seconds (5 minutes)
Minimum Cache Age (s)	<input type="text"/>	No restrictions
Override Cache Control Headers	<input type="text" value="true"/>	True or False
Force Caching by Device Type	<input type="text" value="true"/>	True or False
Vary Headers to be removed from origin	<input type="text"/>	Type out headers to remove, one on each line.
Ignore Cache-Control: no-cache	<input type="text" value="true"/>	True or False
Grace Period	<input type="text" value="0"/>	Minimum 0 seconds

# Can fix, but this is where they need to know something too

Update Cache Setting Values

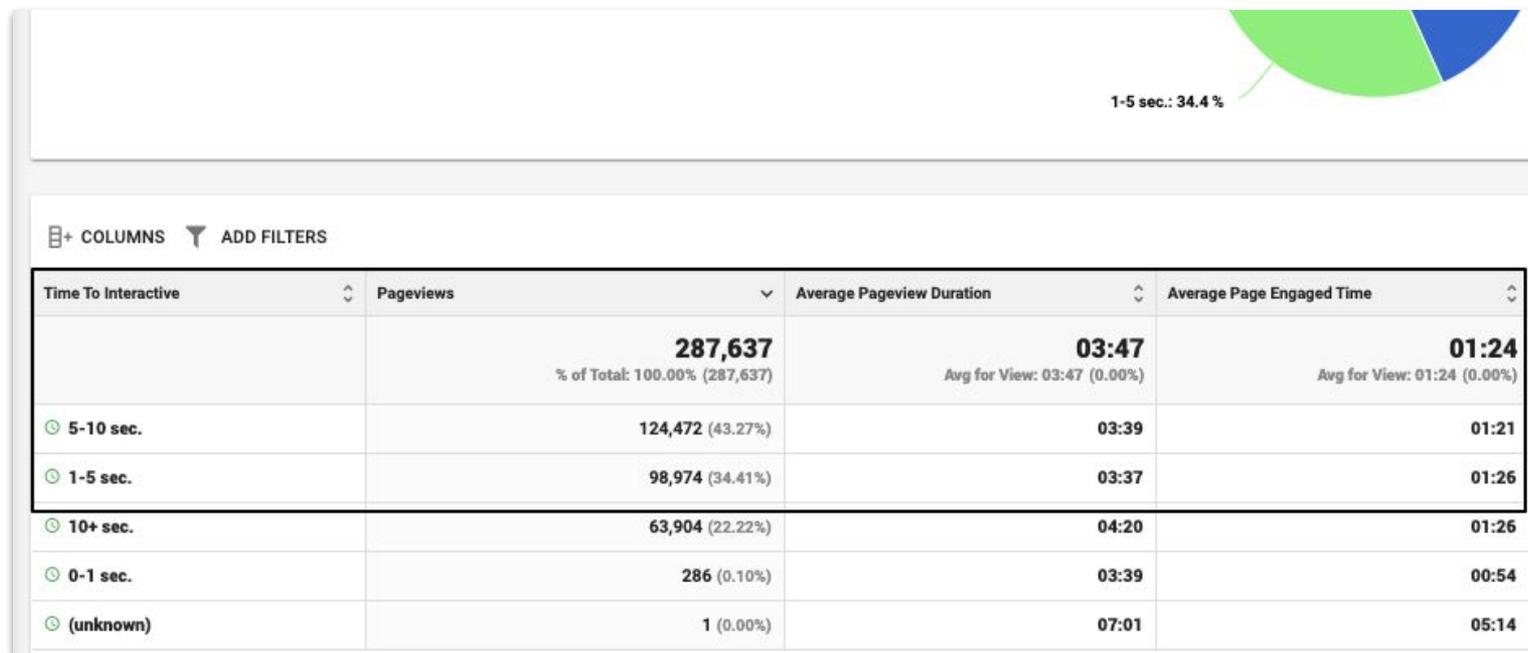
Setting	Value	Accepted Values
Enable Caching For Cookies	<input type="text" value="true"/>	True or False
Default Cache Age (s)	<input type="text" value="86400"/>	Minimum 3600 seconds (1 hour)
Maximum Cache Age (s)	<input type="text"/>	Minimum 3600 seconds (1 hour)
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# How does Google measure speed then?



The image is a screenshot of a webpage from Search Engine Journal. At the top left is the logo 'SEJ Search Engine Journal'. To the right of the logo is a navigation menu with the following items: 'SEO', 'PPC', 'CONTENT', 'SOCIAL', 'NEWS', 'ADVERTISE', and 'MORE'. Below the navigation menu, the main content area begins with the text: 'This topic came up during a Google Webmaster Central hangout where the following question was asked:'. This is followed by a quote in italics: '“We have good First Meaningful Content at 2 seconds, but our Time to Interactive is 12-15 seconds which is affected by a large amount of scripts... according to Lighthouse even though it loads very fast for users.’'. Below the quote is another line of text: 'We’re about to launch a new website and we wonder if it’s crucial to fix this before launch, or can it wait a few months?’. The main content continues with three paragraphs: 'In response, Mueller says Lighthouse metrics are presented from the user-facing side of things.', 'From a search perspective, Google uses a variety of metrics to figure out how it should judge site speed.', and 'However, with regards to SEO, Mueller says it’s better to get feedback from users rather than trying to determine if Google thinks a site is too slow.'

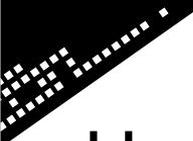
# How are users affected then?



# How are users affected then?

Columns ADD FILTERS (1)

Connection Effective Type	Visits	Average Engaged Time / Visit	Bounce Rate	Pageviews
	<b>248,376</b> % of Total: 100.00% (248,376)	<b>01:32</b> Avg for View: 01:32 (0.00%)	<b>8.87%</b> Avg for View: 8.87% (0.00%)	<b>269,950</b> % of Total: 100.00% (269,950)
4g	<b>185,589</b> (74.72%)	<b>01:33</b>	<b>10.26%</b>	<b>202,668</b> (75.08%)
3g	<b>58,203</b> (23.43%)	<b>01:25</b>	<b>5.04%</b>	<b>62,595</b> (23.19%)
2g	<b>2,762</b> (1.11%)	<b>01:32</b>	<b>1.52%</b>	<b>2,825</b> (1.05%)
slow-2g	<b>1,822</b> (0.73%)	<b>01:57</b>	<b>0.71%</b>	<b>1,862</b> (0.69%)



# How are users affected then?

1. 84% of visitors are mobile
2. 74% of those visitors are on a fast 4G (or better) connection.  
That equals 63%
3. 63% of mobile visitors and the remaining 16% of desktop users all have a fast connection. That means 79% of your website visitors have a fast version of your website.

# How are users affected then?

The image illustrates the user experience and performance of the Keepinspiring.me website. On the left, a mobile phone displays the website's home page, which includes a search bar, navigation arrows, and a loading spinner. The main content area features the article "8 Essential Books All Graduate Students Must Read" with a WorldRemit advertisement. On the right, two screenshots from Chrome DevTools show the Performance and Lighthouse audit results. Both reports indicate a perfect score of 100, highlighting metrics such as First Contentful Paint (0.7 s), Speed Index (1.3 s), Time to Interactive (2.0 s), and First CPU Idle (0.9 s).

Metric	Value
First Contentful Paint	0.7 s
Speed Index	1.3 s
Time to Interactive	2.0 s
First CPU Idle	0.9 s
Max Potential First Input Delay	110 ms

# How are users affected then?

The image shows a browser window with two panes. The left pane displays a mobile view of the website 'KEEPINSPIRING.ME' with a search bar and navigation arrows. The right pane shows the Chrome DevTools Performance tab for the URL 'https://www.keepinspiring.me/?ez\_orig=1'. A red box highlights the address bar, and a red arrow points from it to the 'NON-EZOIC VERSION!!!!!' text. The performance score is 48, and a table of metrics is shown below.

Metric	Value
First Contentful Paint	2.1 s
Speed Index	5.2 s
Time to Interactive	10.5 s
First Meaningful Paint	4.2 s
First CPU Idle	10.5 s
Max Potential First Input Delay	490 ms

# Known WP Plugin Conflicts

Google's AMP Plugin	Mobile pages and ad serving
Wordfence	Automatically blocks Ezoic IPs;
Swift Performance Cache	Caching, content loading, Site Speed Accelerator and can disrupt placeholder process
LiteSpeed Caching	Caching, content loading, Site Speed Accelerator and can disrupt placeholder process
WP Fastest Cache	Caching, content loading, Site Speed Accelerator and can disrupt placeholder process
AutoOptimise	Caching, content loading, Site Speed Accelerator and can disrupt placeholder process
AutOptimise cache	Caching, content loading, Site Speed Accelerator and can disrupt placeholder process
WP-Optimize	Caching, content loading, Site Speed Accelerator and can disrupt placeholder process
SG Optimizer	Caching, content loading, Site Speed Accelerator and can disrupt placeholder process

# Compatible WP Plugins w/ Similar Functionality

Plugin	Specifcs to know when WordPress integrated	If using the Site Speed Accelerator
W3 Total Cache	To avoid direct conflicts, Ezoic will disable HTML caching which can impact speed if the sites are WordPress Integrated. It is recommended that sites use nameservers integration if any caching plugins are to remian active using Ezoic	The Site Speed Accelerator may require that these plugins be turned off or that all minification, caching, or "speed" optimizations are disabled to prevent the SSA from conflicting. The Site Speed Accelerator more optimally replaces the functionality of these plugins as it relates to site speed.
WP Super Cache	To avoid direct conflicts, Ezoic will disable HTML caching which can impact speed if the sites are WordPress Integrated. It is recommended that sites use nameservers integration if any caching plugins are to remian active using Ezoic	The Site Speed Accelerator may require that these plugins be turned off or that all minification, caching, or "speed" optimizations are disabled to prevent the SSA from conflicting. The Site Speed Accelerator more optimally replaces the functionality of these plugins as it relates to site speed.
WP Rocket Cache	To avoid direct conflicts, Ezoic will disable HTML caching which can impact speed if the sites are WordPress Integrated. It is recommended that sites use nameservers integration if any caching plugins are to remian active using Ezoic	The Site Speed Accelerator may require that these plugins be turned off or that all minification, caching, or "speed" optimizations are disabled to prevent the SSA from conflicting. The Site Speed Accelerator more optimally replaces the functionality of these plugins as it relates to site speed.

# Site Speed Accelerator

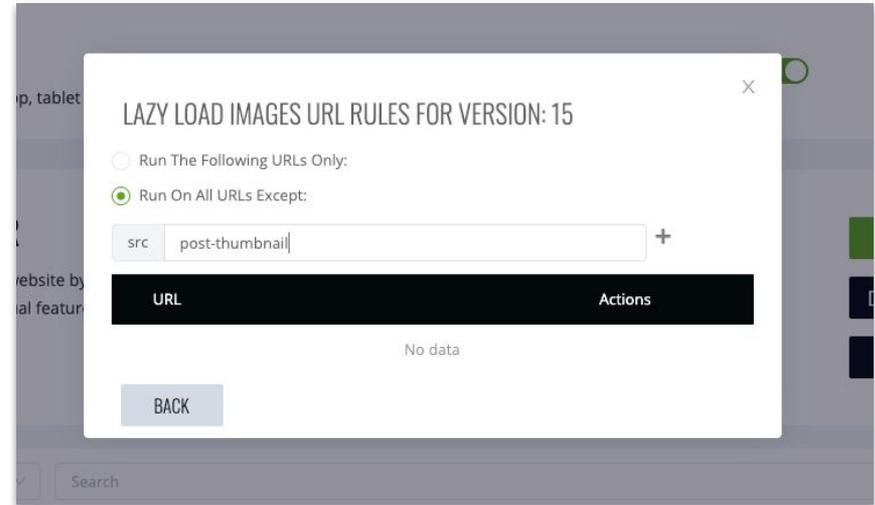
# Setting up...

1. Turn on...
2. Create a *Version*...
  - a. *Recommended* is best to start, and then troubleshoot from there...
3. Next, make sure to *Preview* and use the URL in...
  - a. Chrome Incognito mode if you're logged into WordPress
  - b. Test the speed in PageSpeed Insights once the preview is ready
    - i. *Can take 15-20 minutes in some extreme cases*
4. Double check *Preview* to ensure ads are showing and images and content look normal. Then, set the version to "**Activate**"

# Troubleshooting common issues

Thumbnails in Wordpress on the home screen...

- a.) Exclude "*post-thumbnail*" under script delay and images
- b.) Turn off lazy-loading plugins or features on plugins
  - i.) WP-Rocket
  - ii.) W3 Cache (other caching plugins)



# Known fixes to image issues in P24

Turn off these plugins (can disable simply for troubleshooting)

- a.) Caching plugins (WP Rocket, Fastest Cache, w3, etc.)
- b.) Short Pixel Image Optimizer
- c.) Image Resizer
- d.) Any plugins that may be caching, re-saving, or hosting image files
  - i.) Anything that is “caching or optimization related)

# Troubleshooting common issues

That one page....

a.) Exclude page

**SITE SPEED ACCELERATOR EXCLUDED PAGES**

Rule Target - Whether to apply the rule to a specific page or all pages within a directory:

Single Page  Directory  Regex

URL Path - The path of the page or directory that will be excluded from SSA platform:

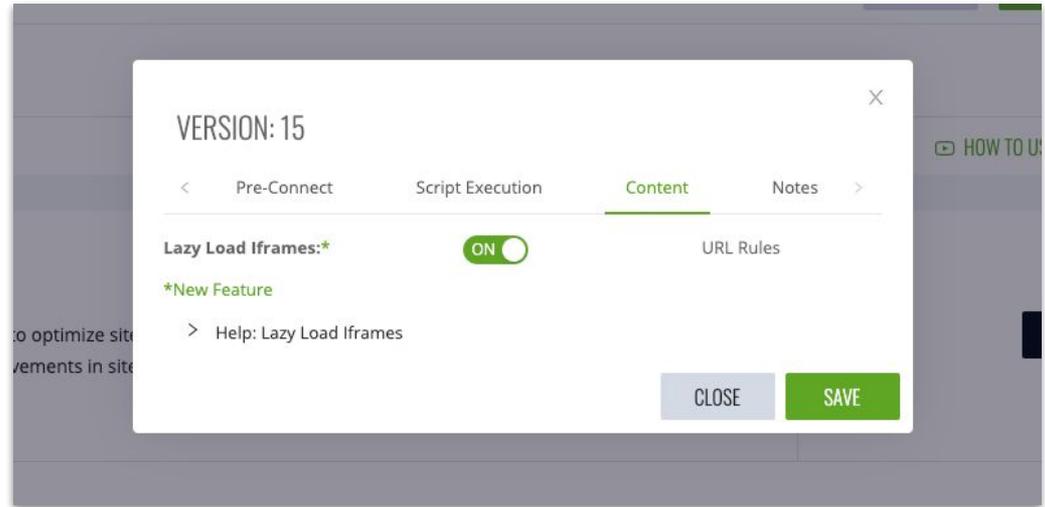
For example, to exclude the page located at `http://example.com/store`, you would add `/store/`. You do not need to include your domain name.

Excluded Pages

# Troubleshooting common issues

Forms or iframe not loading....

- a.) Turn off lazy-loading iframes by URL or page
- b.) Exclude pages with embedded forms



# Revenue?

**With some sites, speed can be a tradeoff with revenue. Here's where to start if you want to find balance....**

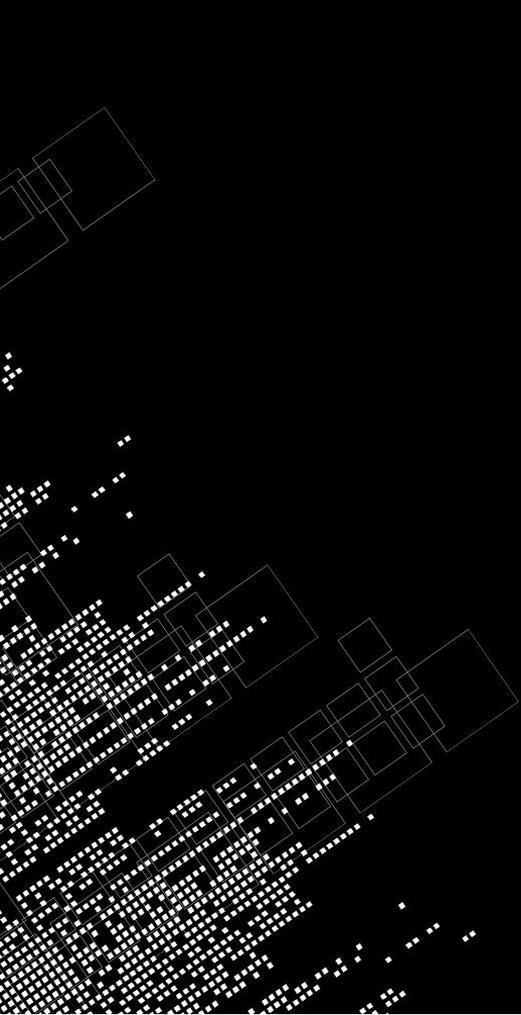
(we are working on a slider for this now)

- 1.) Turn off ad delay (first)
- 2.) Turn off script delay (second option)
- 3.) Turn off pre-connect (last option)

# More advanced...

- 1.) Attend or watch recordings of upcoming courses
- 2.) The courses on finding hidden revenue and uncovering data using Big Data Analytics are key
- 3.) Try checking out these resources ->
  - a.) [YouTube Channel](#)
    - i.) Ezoic Explains
    - ii.) Ezoic Academy
    - iii.) Publisher Spotlight
  - b.) [Publisher Lab Podcast](#)
  - c.) [Ezoic Blog](#)
- 4.) Recording, slides, and other resources mentioned [ezoic.com/ezoic-education-courses/](https://ezoic.com/ezoic-education-courses/)

The image shows a screenshot of the Ezoic YouTube channel page. At the top, the channel name 'Ezoic' is displayed with a green logo and '1.62K subscribers'. Below this are navigation tabs for 'HOME', 'VIDEOS', and 'PLAYLISTS'. A row of video thumbnails is shown, including 'Ezoic Explains' (44 videos), 'Ezoic Spotlight' (5 videos), 'The Publisher Lab Podcast' (12 videos), and 'Ezoic Academy' (25 videos). Below the videos, there are three article snippets from the Ezoic blog. The first article is titled 'HOW TO OPTIMIZE CORE WEB VITALS IN GOOGLE SEARCH CONSOLE' by Allen Longstreet, dated Jun 2, 2020. The second article is 'CPM, CPC, AND CPA: WHAT ARE THEY AND HOW ARE THEY DIFFERENT?' by Allen Longstreet, dated May 26, 2020. The third article is 'HOW TO CHANGE ADSENSE ACCOUNTS WHEN BUYING OR SELLING WEBSITES' by Allen Longstreet, dated May 14, 2020. Each article snippet includes a brief introduction and a 'read more' link.



Hit me with some questions....