10 Silent killers that affect your website speed

Time is the most valuable asset. Nothing is more frustrating than slow page loading. A slow website kills conversions and impacts search rankings. Google stated that it is important to consider website speed when determining search rankings.

Here are some interesting website load statistics:

- An Akamai study showed that 47% of customers expect websites to load in a few seconds or less.
- One second delay on Amazon could cost $1.6 billion on sales every year.
- According to Pingdom, 78% of the top 100 retail websites take under three seconds to load.
- One second delay on your page load results in a seven percent reduction in conversions.
- The average load time on the desktop is 1.286 and 2.594 seconds on mobile.

Optimizing your website's speed is not a necessity, but a must-have, especially if you want to beat out the slower competition. Once you notice that your site is loading more than three seconds, it's time to figure out things that can slow down your website speed and improve the overall performance.

Let's discover lesser-known causes of website slowdown and find the best solutions to deal with each one.

1. Caching issues

Browser caching is very important for repeat visitors. Every time users come to your website for the first time, their browser stores all the files like images, CSS, and Java files

for a specified period. The next time the visitors come back to the web page, browser caching allows these stored files to be served quickly upon the user's next visit.

Reducing the number of round-trips results in faster page load times and improve user experience. Caching can definitely help you speed your website, but it's not without its issues. If you don't set up caching properly, it can hurt user interaction. It's essential to develop a solid caching strategy to maintain strong user experiences.

If you don't use WordPress, you can add the Cache-Control and Entity tags (ETags) headers to HTTP response headers. ETags are used to validate whether the client has the recent version of a record. While Cache-control is used to define browser caching policies in client and server responses. As a result, these headers help you reduce the need for visitors to download the same files from the server twice and reduce the number of HPPT requests.

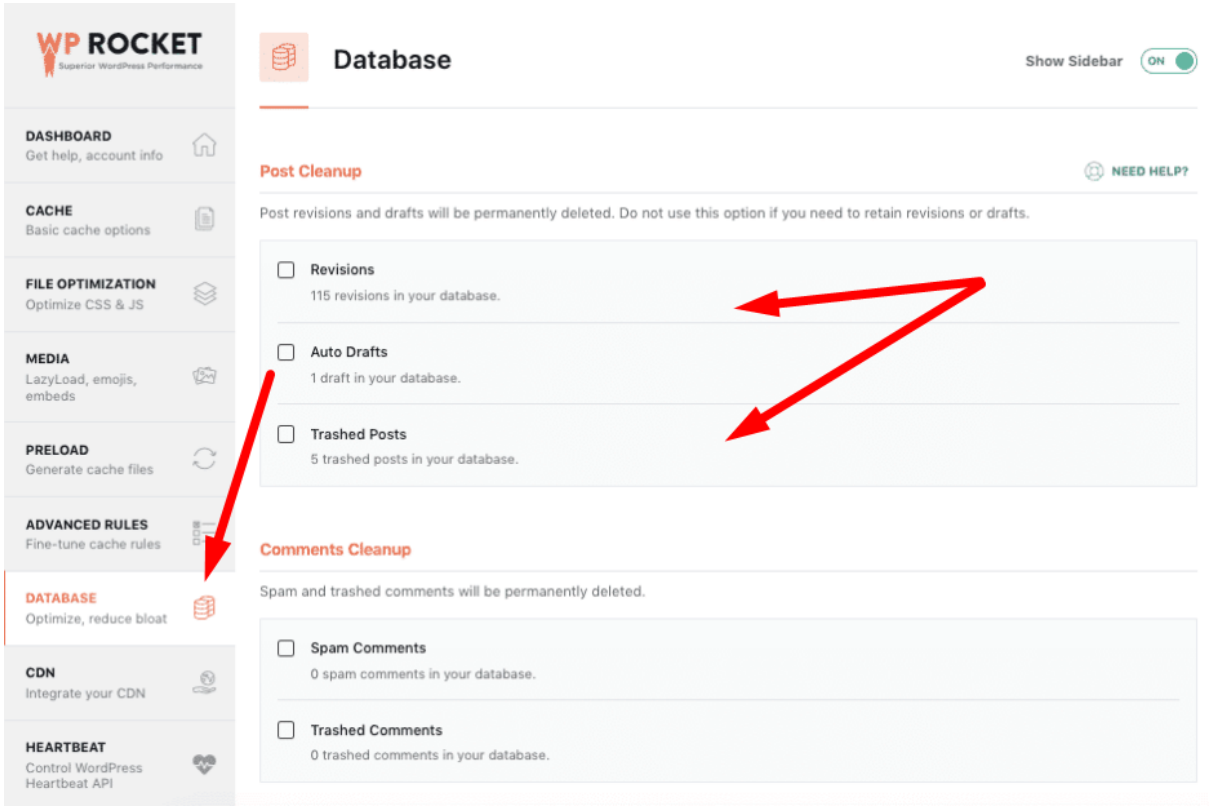
If your website is running on WordPress, you can use cache plugins for better performance. WP Rocket is a great premium cache plugin that includes a lot of extra features like lazy loading, database cleanup, CDN integrations, and many more. You don't have any technical skills to set it up to have faster websites.

2. Overloaded database

An overloaded database can be a silent killer when it comes to website performance. One of the pitfalls with WordPress websites is that your database is overloaded with multiple post revisions, deactivated plugins, saved drafts, and others. Trackbacks and pingbacks don't have any practical use in WordPress. Ensure to disable both of them because they clog up your database and increase the number of requests.

Make sure to delete other garbage files like spam and trash

folders, transients, and database tables that can also slow down your website. As I mentioned above, WP Rocket is one of the easiest ways to schedule and clean up these files every week. You can optimize your database using the ‘Database’ tab.



Source: *Screenshot made by the author*

Using WP Rocket, you can also schedule an automatic database cleanup.

3. Outdated CMS

Running an outdated version of your CMS can slow down your website and cause different security vulnerabilities. Most CMS like WordPress, Joomla, or Drupal let you know once any update is available. Having the latest versions of plugins and any software will result in faster load times.

In case you haven’t still updated your CMS or don’t get any notice, run a regular page speed test on different pages of your website to find out whether the latest updates or

versions of the software are compatible with your web hosting or available fixes that can improve the overall performance of your website by making them faster to load.

4. Excessive usage of social media scripts

Social media has become a crucial part of every website. No matter how large your website is, you still need to connect social media to your site and make it easier for users to share your posts. The excessive usage of social media scripts and plugins can kill your site’s performance.

Limit the number of social media plugins and scripts that you don’t use at all and find alternate ways to schedule and automate your social media tasks. Zapier is a great website service that can help you automate these tasks and reduce the burden on server resources and your website.

When it comes to sharing options at the end of each post, it’s a great way to easily share your publications, but these options can add a lot of load to your website. Try not to use them at every single page of your website and include only the essentials.

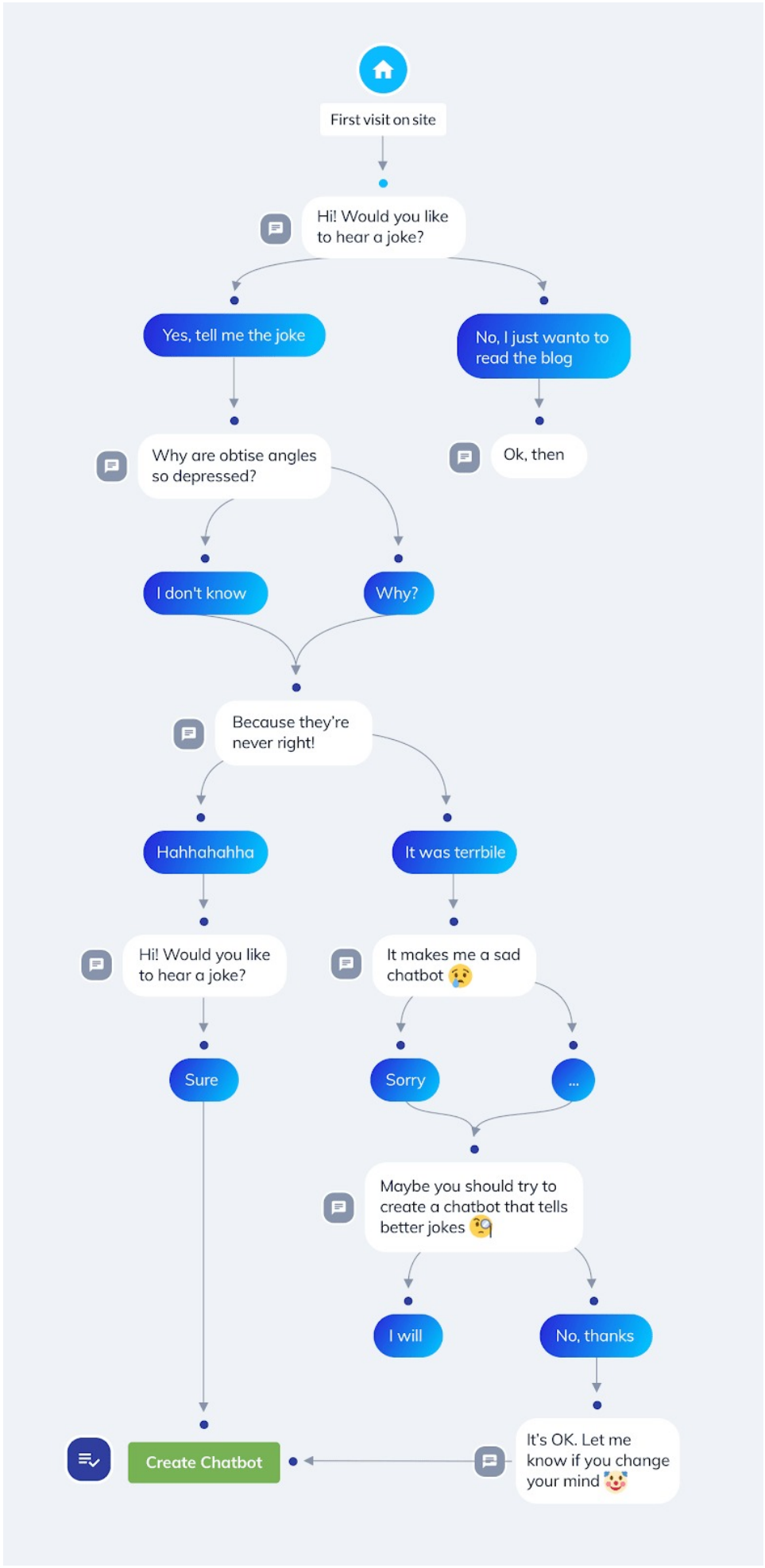
5. The use of chatbots

Chatbots are great for handling customer inquiries. According to Salesforce, 69% of customers want to use chatbots to speed up their communication with a brand. But there are two sides to the coin. Chatbots can hurt your website speed in case the script isn’t implemented properly and can take your website longer to load.

It’s important to ensure that your chatbot is loading asynchronously. I mean when your chatbot performs any action on your website like initiating a conversation with a customer

or sending pings, this action should be routed by external servers. So, make sure to use the right code that enables this action. Check whether there is any problem with a chatbot script using Google’s PageSpeed Tools.

For easier set-up and simple communication, you can use an out-of-the-box solution like Tidio that doesn’t require any coding skills and takes only a moment to create a chatbot. The best thing is the ability to communicate with customers in one simple dashboard. The tool also integrates with different third-party apps to provide better customer service.

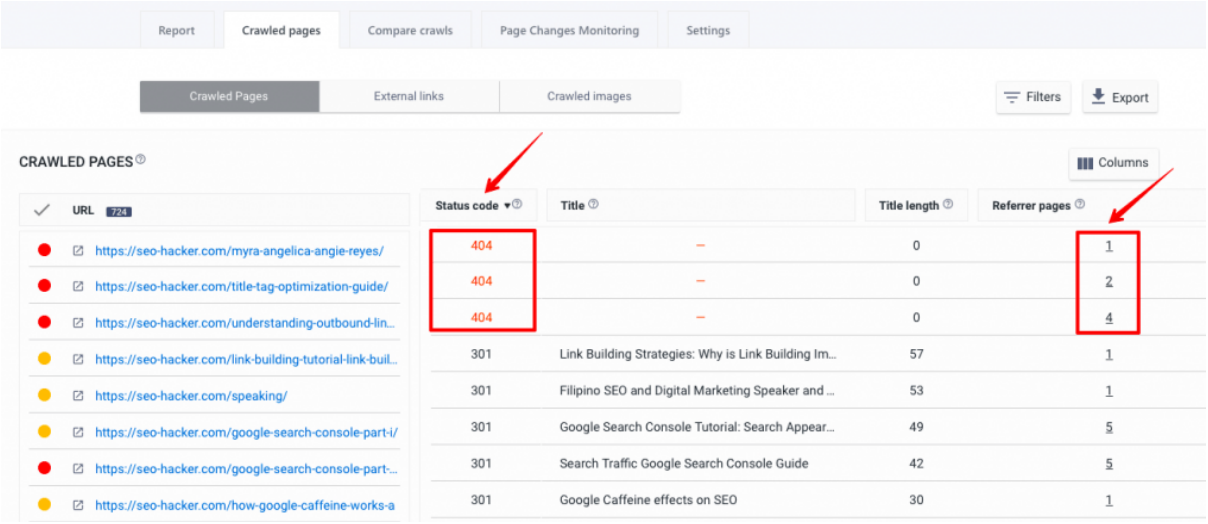

First visit on site
Hi! Would you like to hear a joke?
Yes, tell me the joke
No, I just wanto to read the blog
Why are obtise angles so depressed?
Ok, then
I don't know
Why?
Because they're never right!
Hahhahahha
It was terrbile
Hi! Would you like to hear a joke?
It makes me a sad chatbot 😢
Sure
Sorry
...
Maybe you should try to create a chatbot that tells better jokes 🧐
I will
No, thanks
Create Chatbot
It's OK. Let me know if you change your mind 🤡

Source: Screenshot by Tidio

6. Broken links

Broken links are not only a pain for website visitors but a real drain on bandwidth. I've recently made a detailed analysis of one of my clients and have detected a lot of 404 errors in Google Webmaster Tools. Once I've fixed them, the average load time per user boosted from seven seconds to two seconds, and there was a huge decrease in bounce rate.

So, if you have many broken links on your website, you are just wasting resources. Moreover, they can hurt user behavior metrics and negatively affect your rankings. To detect broken links, I would recommend getting audit reports with the SE Ranking Website Audit. The tool sorts all your web pages by status code to view which ones are 404.



Source: Screenshot by SE Ranking

One of its major benefits is the ability to go deeper than others and find out crawl errors that other tools don't. Once you get these broken links, you can fix or remove them for good.

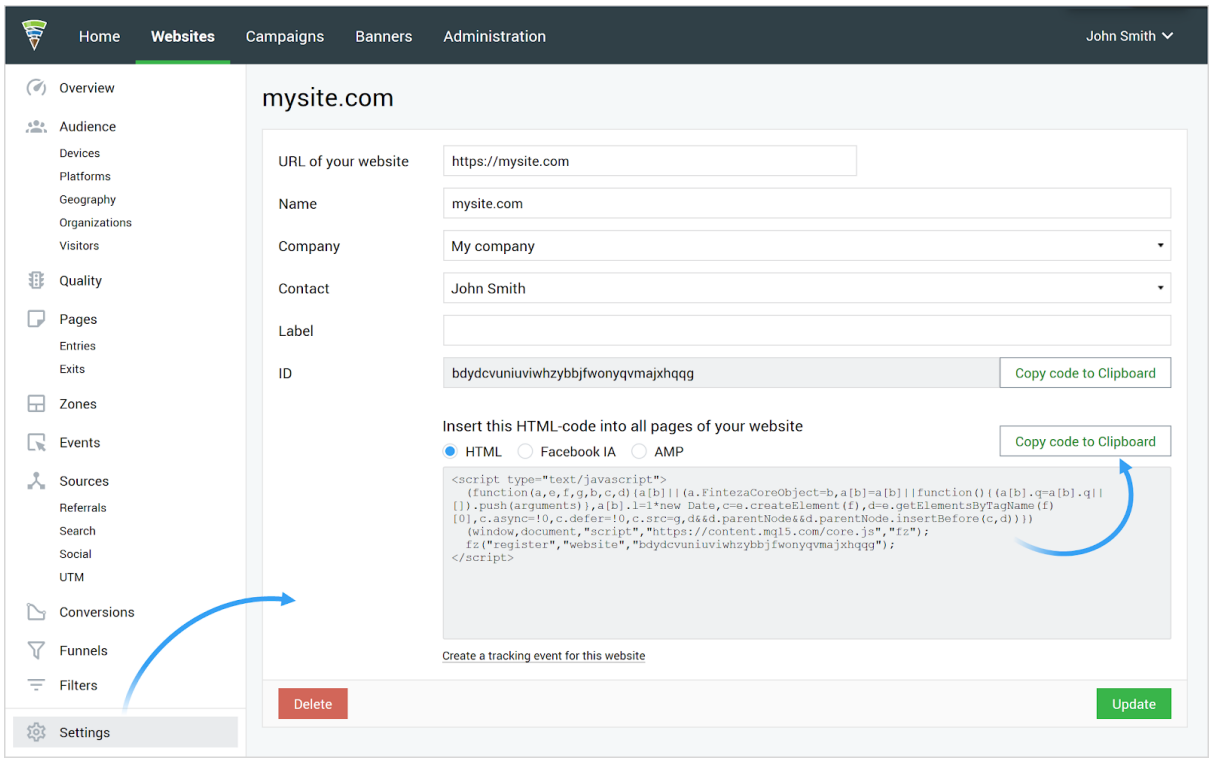
7. Render-blocking JavaScript

Every time your website loads in the browser, it sends out calls to every script in a queue. That queue of these scripts should be empty before the website appears in the browser. If this queue is very long, it can slow down your web pages without allowing visitors to fully view the site. These kinds of script queues are called the render-blocking JavaScript and CSS files.

To make your web pages load faster, Google recommends eliminating render-blocking scripts. Before removing them, identify which scripts cause problems using Google's PageSpeed Insights.



Most website owners use different traffic and conversion analytics platforms to analyze and measure any type of traffic and conversions with one click. Most of them are installed by using JavaScript code that can slow down your website. The best way to track different events is to use Finteza whose main tracking script (downloaded from the Finteza server) doesn't impact website performance and can be embedded into the page asynchronously.



Source: Screenshot by Finteza

8. Accelerated mobile pages (AMP)

Everyone knows that Accelerated Mobile Pages (AMP) is a Google project created to speed up web pages on mobile devices by adding an “AMP” stamp next to your mobile snippets. While the idea of having a fast mobile website with content sounds like a great idea, there are some challenges when it comes to AMP.

While creating AMP improves website performance, it removes all of the dynamic features that slow down websites. In other words, it changes the design of your website and provides less functionality for your visitors that can result in reducing conversions. According to this case study, Kinsta saw their mobile leads drop by 59% after adding AMP, so they disabled it.

So, use AMP carefully as it can lower your mobile conversions. If you still want to use them, do it properly (more instructions here). Make sure to validate AMP for Google Search and fix any possible issues.

9. Gravatars

While Gravatars offer convenience and easy customization to your user base, there is one drawback, speed. This is not really visible on smaller websites, but if you have a large website with a lot of blog comments, you will notice much of a slowdown. You have some options to fix that:

- Disable Gravatars in WordPress
- Remove comments that don’t have value
- Use caching Gravatars like Harrys or Optimum Gravatar Cache
- Reduce your Gravatar image sizes
- Paginate comments in WP Disable

10. Invalid HTML and CSS

If you stop using invalid HTML and CSS codes, that will increase the rendering time of web pages and the overall site performance. Make sure to create HTML and CSS that aligns with the W3C standards if you want browsers to interpret your site more consistently.

Check your HTML through the W3C HTML Validator and CSS through the W3C CSS validator. One of the options is to validate HTML with the Grunt HTML validation package and Stylelint.

Bottom line

A slow-loading website is something that will turn your customers away before they can visit your website. To keep your site running well and loading fast, you need to focus on these web performance killers and do the best to prevent these issues and make your site more efficient.

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More about:

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