

# Site Speed & Performance:

The Key Conversion Tactic Marketers Are Missing

**40%**  
of visitors  
abandon site



**7%**  
higher  
conversions



## Performance: The Key Conversion Tactic Marketers are Missing

Traditionally, web performance has been IT's game. Site content, landing page optimization, SEO: these are the marketer's domain. But what is becoming clearer with time is that the two worlds can no longer exist separately.

Site speed has a direct, measurable impact on conversion rate, revenue, and user engagement.

But what exactly does the data show? And how have two seemingly unrelated segments come together in such a big way?

This eBook dives into how web performance optimization has evolved to include engagement, how marketing metrics are affected by site speed, and what the future of performance means for meeting user expectations (and improving conversion rates, time on site, and revenue).

# *Bonus!*

We've included a handy list of the  
10 key user engagement metrics  
to measure and improve, and how  
performance impacts each.

[ keep reading...you'll find them ]

## A Conversion Marketer's Checklist

As marketers, we've learned that experimenting is for more than just scientists. Marketers are great at experimenting to find the best combination for conversions, but many don't yet consider speed a priority in this equation. Or, if they do, it's at the bottom of their list.



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Traditional areas for marketing experimentation are based mainly on content; is this the right positioning? What content is the visitor looking for? Which button is bigger, brighter, and better? What are the optimal form fields? These have all been proven as valid areas of consideration, experimentation, and improvement.

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But a well-performing site is also crucial to improving marketing metrics across the board, including long-standing players like bounce rate, time on site, and conversion rate. Plus, improving performance saves conversion marketers some of the time it takes to research and test what will resonate with users most; all site visitors are looking for an appropriately fast site that meets their expectations.

*The proof is in the numbers.*

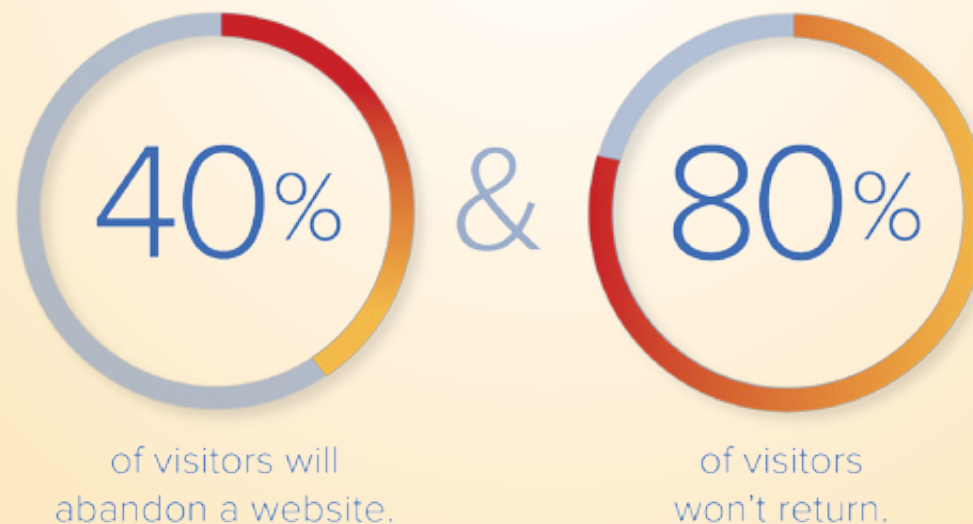
## The Impact of Site Speed on Marketing Metrics



## Site Speed Impact: Traffic

Marketers want more traffic. Always have, always will. But with a slow, un-engaging site it doesn't matter how much traffic you get; if you can't keep visitors on-site initially, they most likely won't return. **For a website that takes more than three seconds to load, 40% of visitors will abandon a website and 80% of those visitors won't return.** In addition to this, 74% of mobile visitors will abandon a mobile site that takes longer than five seconds to load. Improving site speed is one of the best ways to maximize organic and paid traffic.

For a website that takes more than 3 seconds to load...



## Site Speed Impact: Conversions

**Every additional second added on to your load time results in a 7% loss in conversions.** For example, making Barack Obama's campaign website 60% faster increased donation conversions 14%. Of course, the opposite example is also true: the new healthcare.gov website was such a performance disaster that it prevented users from completing simple tasks, dropping conversion rate metrics.

Similarly, shaving two seconds off of Mozilla's landing pages resulted in a 15.4% increase in conversions, which meant 60 million more downloads per year. That's just a two-second difference, so any impact you can make has the potential to improve your business.

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At Yottaa, we've seen huge results come from web performance and user engagement optimization; in fact, Yottaa customers see an average 17% increase in conversion rate after implementing an automated solution to speed up delivery of the right content to the right user at the right time.

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mozilla

Firefox®

**15.4%** = **60 million**  
increase in conversions      more downloads per year

## Site Speed Impact: Engagement

Keeping a user engaged on your site has a direct impact on conversion rate and revenue, amongst other marketing metrics. A one-second delay in response time can result in 11% fewer page views and a 16% loss in customer satisfaction.

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Plus, 40% of online shoppers feel that the most influential factor for the to re-visit a site is whether the website will load quickly. At Yottaa, we've seen that an optimized site can lower bounce rate 5-10%, increase Time on Site by 30%, and as a result increase conversions by 30%.

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Is your e-Commerce site suffering from *poor optimizationitis*?

## Know the symptoms!

**79%**  
of unhappy shoppers  
will not buy from site again

**46%**  
abandonment rate due  
to slow site speed

**7%**  
loss in conversion



**\$3B**  
lost annually by  
not optimizing sites

**1.8%**  
per-user revenue lost  
with 1-second load delay

**4.3%**  
per-user revenue lost  
with 2-second load delay

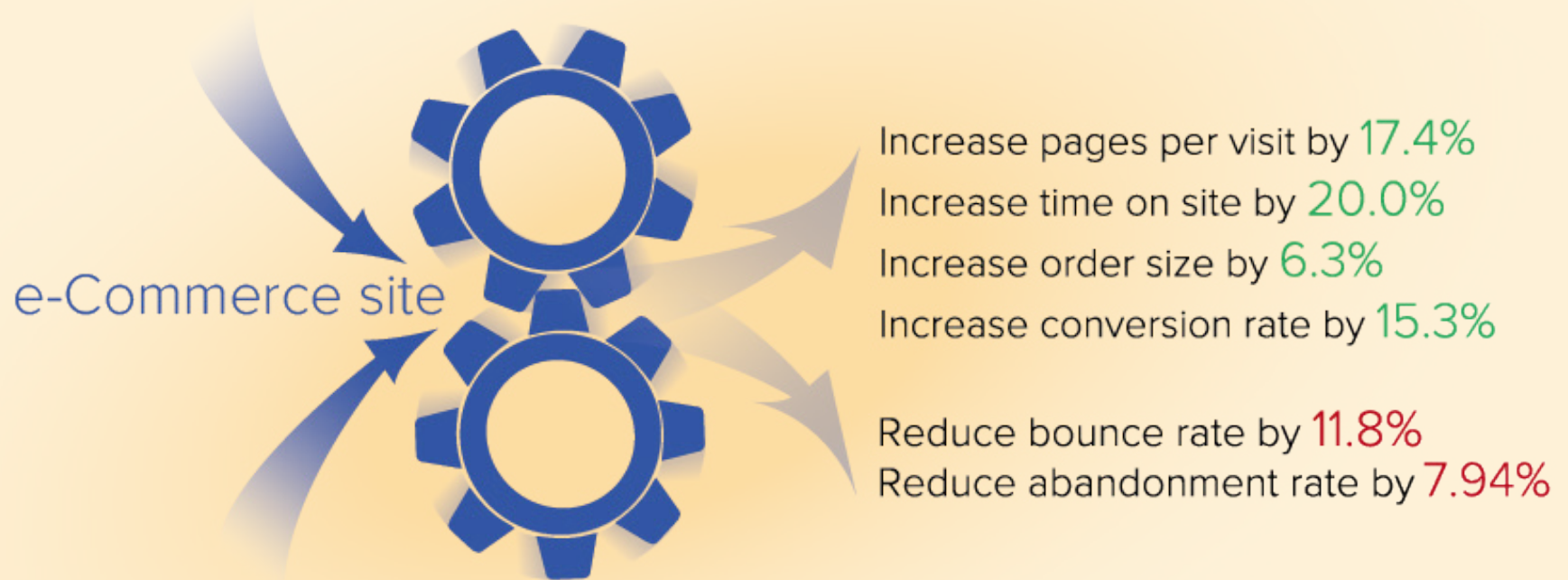
**1 sec.**  
delay loses revenue

## Site Speed Impact: Revenue

### **Here's the real kicker: your online revenue is suffering if you're not optimizing:**

- A 7% loss in conversion (per second) means that for a site with an annual revenue of \$2 million per year, a one second delay could cost \$140,000 in revenue
- 46% of people who abandon their shopping cart cite slow website speed as the reason
- \$3 billion is lost annually from cart abandonment due solely to slow website pages
- An extra second of page load time reduces per-user revenue 1.8%; two seconds reduces it by 4.3%
- 79% of shoppers who are dissatisfied with website performance are less likely to buy from the same site again

On Yottaa, eCommerce sites on average improve revenue by 17.5% compared to the industry average, just by implementing an automated solution. Web performance and user engagement optimization makes a noticeable difference, and using optimization tools provided by companies like Yottaa or by manually implementing optimization techniques), businesses can see improvements quickly:



# CHAPTER 3

## Why You Care as a Marketer



There's a clear relationship between site speed and user experience, meaning that crucial metrics like bounce rate, time on site, conversion rate, abandonment rate and more are directly impacted by poor performance.

Web performance should be one aspect of a holistic approach to marketing, and is complementary to your other programs.



**But there are more considerations when it comes to performance.** When it comes to organic search rankings, website speed and resulting user experience **play a factor in determining rankings.** Whether it's Google's PageRank algorithm or similar approaches by other search engines, the order in which they present links depends on the overall user experience.

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The dominant factor is always how relevant the content is. But other factors, including site speed and the resulting user satisfaction in using the site – come into play.

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It's not uncommon that for long-tail search terms, factors beyond just content relevancy play an increasingly important role. And a slow-loading mobile site will turn away 2 out of 3 of visitors and lose immediate purchases and repeat visits.

Similarly, the exact order of paid ads is impacted not just by how much a company bids for that ad, but also other factors, including click-through rates (as a proxy for how relevant the ad is), and site speed once somebody clicks through (to ensure that they're having a good experience on the site). All these factors are taken into consideration in Google's Quality Score, and similar calculations within the other search engines.

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Page abandonment is a huge factor with PPC ads, as many visitors click on an ad and then abandon your page before it loads because of slow load time or page availability issues. In this case, you're paying for visitors who never see your pages. It not only wastes money, but also means that there aren't even brand awareness benefits, given that the user had a negative experience.

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We spend hours upon hours optimizing landing pages for conversions, so if users don't stay on those pages because of poor performance, that time has been wasted. By not optimizing for load speed, you're leaving money on the table.



## The Marketing Techniques Secretly Impeding Site Performance

A/B testing has become an integral part of marketing experimentation -- what better way to determine what works than with hard data? But the recent boom in A/B testing, along with implementing code for more and more analytics tools, can affect site speed, and work as a deterrent to visitors who don't know why your site is slow, only that it is.

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Added code elements, like tracking tokens and analytics tags, increase the number of requests on the page, requiring more trips back-and-forth to the server in order to render the page. This can be even more frustrating because of the nature of the assets; they're essentially invisible to the user, so there is no indication that the slow rendering will result in visible content or not.

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Another issue is the additional weight. When testing two or more variables for an important page, like a landing page, marketers often add content in the

form of images, text, JavaScript, or tracking elements. This additional weight, even if it does effectively convince a user to convert, can slow a page to the point where conversion rate actually suffers. It's entirely likely that the content on the page has the capability to convert more users, but the performance turns them off first. This was discovered as far back as 2008, when [Google ran an A/B test](#) that improved search engine results on a page, but caused a decrease in conversions. Further examination found that it was a result of slowed performance.



## Minor Improvements Can Mean Major Successes



Your primary goal is to get your site to load within 3 seconds. After that, improvements to site speed will provide incremental improvements to conversion rate and ROI. But overall, what we've seen is that a decrease of even 1-2 seconds in page load time translates into big results. By implementing FEO techniques or using an automated solution, you can easily accomplish this, and improve conversion rate, time on site, and even revenue with just a one-second difference.

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The balance of “how much work is too much” to achieve site load speeds of less than three seconds depends on the work you've already done. Are there easy fixes left to do? Then do them! Are the remaining fixes costly to do in terms of engineering effort? Then table them.

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If you're using an automated optimization solution like Yottaa, it's likely that the small amount of effort needed to further tune your site performance is worth it for your potential conversion and ROI gains. If you're using a manual solution (hand-engineering), you may reach an event horizon where the cost/effort of implementing further performance improvements would outweigh the benefit of the increased performance (especially if you have lots of work on your plate and limited resources, as we all do).



## 5 “First Steps” to Start Improving Performance

The two main objectives in approaching performance optimization are to reduce the number of asset requests on a site and reduce the weight of the site. In doing so, your site will have fewer requests sent to the server for retrieving, and they won't weigh down the site while loading. Requesting assets means back-and-forth trips to the server to render each individual asset, slowing performance significantly.

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Think of it this way: your mailman doesn't bring one piece of mail from his truck to your mailbox at a time; it's wasteful. Similarly, if the item is heavy, it will slow him down and take longer to reach his destination.

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Here are five of the top tactics to start optimizing your site for speed and engagement:

# 1

## Define Measurable Goals

**Know your company's goals**, and within those whether there are specific goals for your website. For example, your website optimization project will be different if your primary goal is to increase inbound leads by 20% versus increasing eCommerce conversions by 20%. Pro tip: our friends at HubSpot have published an excellent glossary of [website optimization terms](#).

**Eliminate assumptions** by understanding your website's current business metric performance. Google Analytics is commonly used for this purpose, and even provides an [eCommerce dashboard out-of-the-box](#). Choose a representative timeframe (for example, the previous fiscal quarter) and note the [performance of key metrics](#) that are related to the goals you identified in the previous step.

**Define measurable website goals** based on your analyses. Now that you understand your company goals, and your current website performance, you can set specific, well-defined metric goals for your website and measure their performance relative to the representative timeframe you've chosen.



# 2

## Load Every Page on Every Device

**Optimize the entire visitor flow** (not just your homepage and landing pages).

Conversion marketers know that optimized landing pages convert between 27% and 42% better. But if your goal is to encourage users to spend more time on your site, and to have them view more pages, then you'll need to optimize every page the visitor sees. Abandonment rate increases just as conversion potential decreases - 7% for every additional second of latency.

**Optimize specifically for Mobile.** Mobile browsing has exploded, with over 50% of the time spent on eCommerce shopping occurring from mobile devices, and the sharpest uptick in spending coming from tablet users. Studies show that 29% of users who have a poor experience on your site will never return - that's a huge opportunity cost. Your website optimization effort must include both desktop and mobile visitor contexts. Pro tip: don't discount tablet-specific optimizations to maximize conversions!

**Search engine crawlers are the bots behind the SEO scenes**, so ensure you have optimized both desktop and mobile versions of your site because

Google and other search engine providers rank those contexts differently, because users have different but consistently high expectations between desktop and mobile browsing. For example, you actually want to disable most of your optimizations and remove dynamic content for search engines. Something that's counterintuitive for a content marketer but works wonders for conversion!





# 3

## Display Relevant Content First

**Put mobile first.** Whether you use responsive web design (RWD) or separate www and m.site deployments today's omni-device website consumer expects a consistently great experience, including consistent treatment of your content.

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Planning for the smallest viewports and lowest-powered devices first, forces you to optimize your content placement and your message, and enables you to amplify that impact as viewport real estate grows.

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**Showcase your high-value, curated content.** User browsing and buying behavior proves that powerful content is key to a successful inbound strategy. Ensure every visitor is presented with relevant content first, and enrich the experience with CTAs and related content that encourages engagement with your site.

**Withdraw workarounds.** Studies from Google and others prove that users hate interstitial offer pages, distracting popups, and auto-playing multimedia content because they result in inconsistent performance and get in the way of the content they visited your site for in the first place. Often times companies insert these elements to direct users to “the right content” but studies show they’re actually just a good way to increase a user’s web stress.



# 4

## Minimize Disruptions

***Eliminate outages and opportunity cost.*** Any single point of failure or bottleneck can spell disaster for an online business by compromising employee productivity, risk losing revenue – on average \$5,600/min - and customers, force you to pay SLA-based penalties, and severely damage your brand.

***Avoid page load or content errors.*** Page and content errors decrease a user's perceived value of, as well as their own perception that they are capable of completing a task on your site. Ensure that you diligently monitor for and eliminate any content or server errors.

***Go the last mile.*** Optimizing for efficiency isn't just important for speed. Delivering less content and performing fewer round trips to assemble a mobile or desktop web page enables you to overcome shaky internet connections or frequently lost connectivity challenges to maximize mobility for your users and ensure that you capitalize on the booming mobile market.

# 5

## Delivery content “Just In Time”

**Prioritize above-the-fold content.** We don't just mean putting the right content above the fold, but also prioritizing rendering so that essential content displays above the fold, while less-important and invisible below-the-fold content remains unloaded until the user scrolls down. This creates an immediately engaging experience and delivers the right content to the user first.

**Enrich user experiences with personalization.** Of course, you think. But most personalization elements are treated exactly like other content. Comment areas, social media integration and customer service callouts are most impactful (and really only relevant) once the user has had time to consume your key content.

**Analyze while you optimize.** Rich graphics and personalization features can feel like a must-have, and in some cases they are. In those (most) cases

your users will have a better, snappier experience if you load content just before it becomes visible in the viewport. But A/B split testing is crucial as you optimize so you can ensure your efforts are justified and improving users' engagement with your site.



## What To Look For Next in Web Performance

## Exceptional Mobile Performance

As we've previously covered, user engagement is the key to understanding and delivering on web performance. But there are new techniques that go beyond FEO and optimize on-the-fly in response to user context. One of the most important clues relates to device, and whether the user is coming from a mobile phone, tablet, or desktop. The mobile revolution has created a significant challenge for legacy approaches to website optimization, as mobile users behave differently, access your site differently, and shop differently. Users context switch every second, and in just one second a visitor's likelihood to bounce increases by 65%, so delivering a fast, personalized mobile experience is key to harnessing this audience.

You can learn more about the impact of mobile and how to fix a poor experience in [this blog post](#).

## Just-in-Time Content

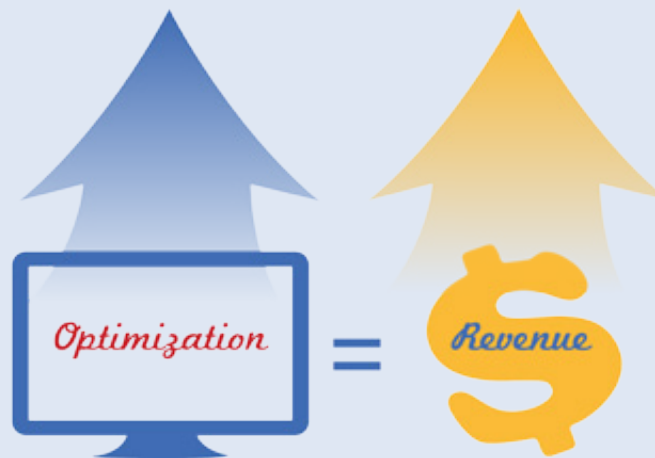
We've discovered something controversial: sometimes speed isn't the key. Employing just-in-time content on your site is a means of delivering site content based on the user's flow through your site. By applying sequencing, prioritization, and responsiveness based on the visitor's context, you can make site transactions more personalized and engaging, resulting in improved marketing metrics. Yottaa technology specifically senses a user's location, browser, device, Internet connectivity, and in-page interaction to sequence content delivery and rendering, prioritizing page elements for optimal timing and order.

We take this subject on in our post [Why Sequencing is More Important Than Speed.](#)



## Conclusion

For a marketer looking to make easy, immediate improvements to conversion rate, revenue, time on site, and more, web performance is the solution to implement. While working hand-in-hand with your other marketing efforts, these technical solutions can yield big results with minimal effort. Getting started could mean a meeting with your IT team to discuss a plan for manual improvements, or you could look to implement an automated solution like Yottaa that optimizes on-the-fly. But no matter where you start, there is a web performance solution that meets your needs!

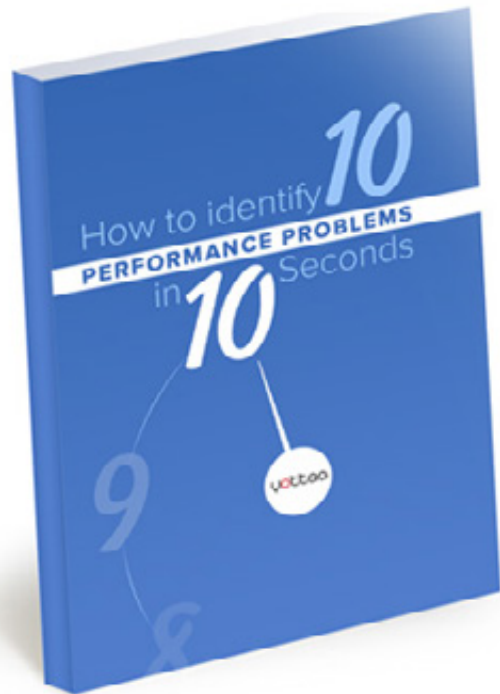




Free Ebook:

## *A Designer's* GUIDE TO **WEB PERFORMANCE**

In this eBook you will learn why web performance matters for designers, how to design and build fast websites from the start, and how to approach design with performance as a priority.



HOW TO IDENTIFY **10**  
**PERFORMANCE PROBLEMS**  
*in* **10** SECONDS



# *Bonus!*

10 key user engagement metrics  
to measure and improve, and how  
performance impacts each.