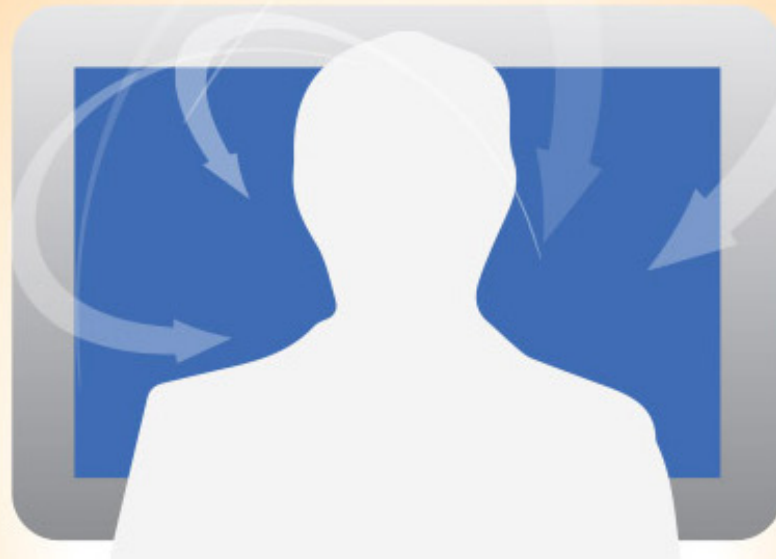


10

USER ENGAGEMENT METRICS

Everyone Can Use



The 10 Engagement Metrics Everyone Can Use

User engagement is the goal for every website, application and piece of online media. Improving it is the desired outcome of creating content, improving design, and optimizing performance. Whether it's an eCommerce store or online game, a social media site or viral video, a banner ad or newspaper, the creators all want to know: are visitors engaged?

Accordingly, marketers today are busy devising novel and creative approaches for measuring user engagement – ranging from deep psychological studies of the subconscious to literally physical tests (in the case of eye-tracking studies). But though these methods are compelling and potentially very useful for those who employ them, they are often too expensive, too unproven, or simply unfeasible to execute for many web businesses.

At Yottaa, we're all about helping web businesses of all kinds measure and improve user engagement. That's why we've come up with a list of 10 metrics – ones we've found are consistently the most relevant to the largest set of our customers. The metrics are simple, easy to collect, and when analyzed together they offer a robust portrayal of user engagement. Best of all, you need just two free products to collect these metrics: Google Analytics and Yottaa Website Test.

If you're looking for a place to start with measuring user engagement, this list will get you on the right foot with a robust set of metrics, and with limited time and effort required. Read on to learn about each metric, why it matters for engagement, and how to collect and analyze it. If you're looking for a place to start with measuring user engagement, this list will get you on the right foot with a robust set of metrics, and with limited time and effort required. Read on to learn about each metric, why it matters for engagement, and how to collect and analyze it.

Prep: what you need to get started

First, you need a Google Analytics account. If you already have one, perfect: you're all set. If you don't, setup involves adding a script to the HTML header of your site. You can follow instructions from Google or any number of walkthroughs online.

Next, go to apps.yottaa.com and create an account (it's a free trial, but that's all you need for this project). This will give you access to the Website Test feature. Here, when you run tests they will be automatically saved to a list where you can revisit, modify, and re-run them at a later date. You can also go to WebsiteTest.com and conduct the tests without a login, but the results will not be saved.

Time to Start Render

What is it? Time to Start Render indicates the beginning of a user's engagement with the page. It's measured by the elapsed time from when the browser requests a web page to the first moment some visible content appears in the browser window. Before Time to Start Render is eclipsed, the user is faced with a blank screen and nothing to engage with.

Why it matters: Improving Time to Start Render allows you to initiate user engagement faster, evoking curiosity and interest in your offering. The user is far less likely to bounce away from the page when some elements have rendered, showing progress and assuring that the rest of the page is on the way.

Stat: One additional second increases bounce rate by 65%.

How to Analyze Effectively: Using Website Test, conduct a series of tests on a number of different pages on your site. Be sure to vary by geography and browser, as these can both affect the result. Time to Start Render is one of the standard metrics shown in the metrics summary; you may view it the average for all samples in a test, or by individual sample.

Also, use the filmstrip and video features to see what assets render first. Typically it's good for engagement to show things like the logo and navigation first, to indicate that the page is real and has structure and organization. If the asset or assets that trip the Start Render metric aren't useful for this early-stage engagement -- for example, footer content or sharing icons -- you may want to consider optimizing the content load order.

Benchmark: The faster the better with Time to Start Render; but the Internet-wide average is 2.5 seconds. The top 10% of sites on the web for this particular metric have Start Render times under 1 second.



Time to Display

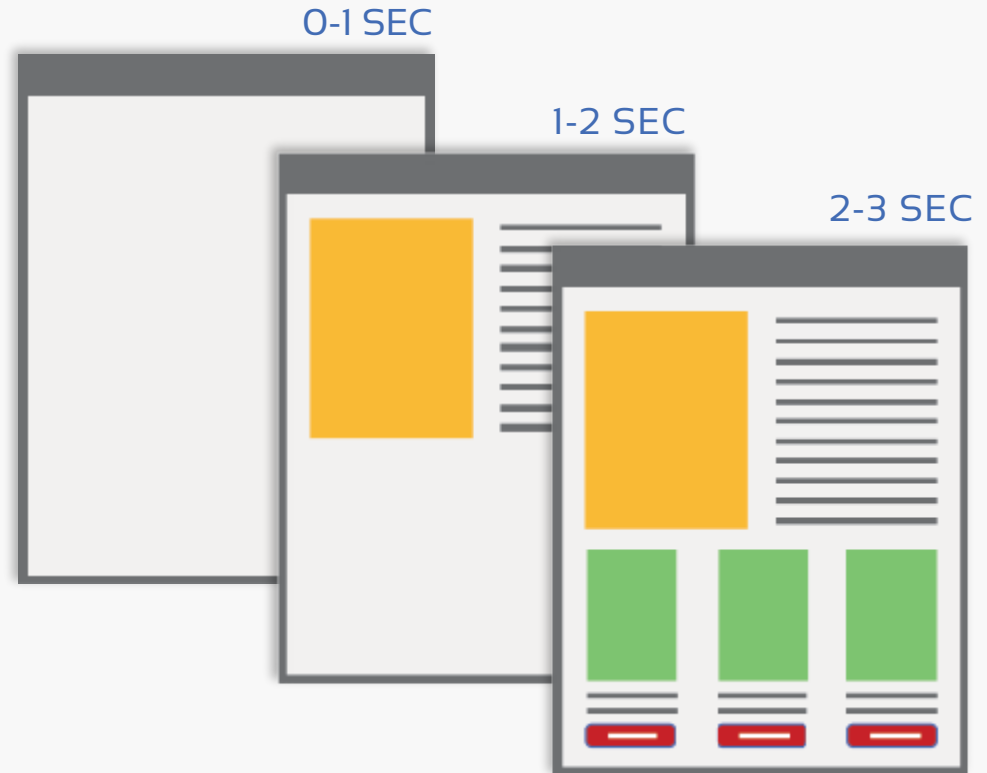
What is it? Time to Display indicates the time until the user can meaningfully engage with a page – even if at that point not all page elements have been fully processed. At the point of Display, the user can read text, see images and navigation, and generally use the page.

Why it matters: Users want to see the content they clicked to see. The faster you can get the crucial content in front of them, the less chance there is of abandonment or dissatisfaction. Improving this metric means improving the perceived usability of the page and grabbing the visitor's full attention.

Stat: One additional second in Time to Display increases the likelihood of abandonment by 7%

How to Analyze Effectively: Just like Time to Start Render, use Website Test, conduct a series of tests on a number of different pages on your site, varying by geography and browser.

Benchmark: The average site on the web has a Time to Display of just over 5 seconds. The fastest sites, however, hover around 2 seconds. Shoot for the stars.



Time to Interact

What is it? Time to Interact indicates the time elapsed when a user has gained complete control of the webpage. It is measured by the time from when the browser requests a web page to the moment the user can fully engage every on-page element.

Why it matters: Time to Interact means the site is fully loaded. This is intrinsically important for user experience, as users may not be able to use all features on the site until this point. Every site is different, however, and you should consider how the interplay between Time to Interact and Time to Display affects your users' experiences. If, for instance, you have set a chat widget to appear a several seconds after the page content loads, then the raw Time to Interact figure might simply reflect that decision, rather than telling you something important about user engagement. On other sites, the Time to Interact will be a crucial indicator: if background loading of assets cause flickering, choppy scrolling, and unresponsive interaction for the user, only at the Interact time will the user experience a site worth engaging with.

How to Analyze Effectively: Use WebsiteTest to find the raw numbers, just like the previous two metrics. You may also, however, want to couple the metrics with a heuristic process to find out what the experience is like on your site. This might involve manually visiting your site from a number of devices and browsers, and connection speeds. You may also look at the filmstrip of screen shots and the video sequence in the Website Test results in order to determine what the experience is like between the Display time and Interact time.

Benchmark: The Internet-wide median Time to Interact is over 6 seconds. For the fastest sites (and those that choose not to delay load any content) the best times are not far off from the Time to Display: around 2.8 seconds. For eCommerce sites, the figures are slightly higher, due to the high numbers of images and social media tags on those sites.



Bounce Rate

What is it? Bounce rate is a key metric in measuring whether a site is instantly engaging and delivers on user expectations. Bounce rate is the percentage of users that visit only one page before exiting your site. Visitors might leave your site from the entrance page if there are site design or performance issues. Keep in mind, though, that sometimes it's a measure of success: it could mean the user has found the information they need on the first page they visit. Thus some businesses choose to focus on improving bounce rate, while others aren't concerned, or even want it to be higher.

Why it matters: Bounce rate is crucial in identifying if your users aren't getting what they want: the right content and the best experience. It also reflects a visitor's perception of the quality of your site, which can prevent future return visits. If you have a high bounce rate, it may be a function of poor performance in metrics like Time to Start Render and Time to Display. It may also grow out of poorly managed keywords and meta descriptions for SEO, since those factors may lead users expect something entirely different than what is on your page, causing them to bounce.

Stat: 42% of bounced visitors will never return to your site.



Bounce Rate

How to Measure Effectively: Bounce rate can be found on the main Audience > Overview page in Google Analytics. The number shown when you first access the page will reflect the average bounce rate over the time span indicated on the top right (typically the most recent 30 days). Click the thumbnail version of the trending graph in the Bounce Rate tile to see it full size and manipulate the time span and frequency of data points on the chart.

Bounce rate is typically very stable when viewed on a daily, weekly, or monthly basis. Peaks and valleys in bounce rate, whether frequent or occasional, are typically indicators of problems with Time to Start Render, Time to Display, or Time to Interact. Cross reference test data from WebsiteTest or your Yottaa account with these peaks and valleys to determine the cause of elevated bounce rate.

Benchmark: Bounce rate is a notoriously difficult metric to benchmark. Site to site, and even page to page within a site, bounce rates can vary widely – and what that variation means for engagement changes as well. On some pages, like eCommerce product category pages, bounce rates under 20% are desired, since they serve mainly to funnel users toward conversion on a different page. On other page types, such as “Contact Us” pages, bounce rates north of 80% may be acceptable.

Rather than comparing your site to internet-wide averages, set your own goals based on your own metrics over time. Compare bounce rate month-over-month and year-over-year-by-month to see how broader changes on your site have affected bounce rate.



Time on Site

What is it? Time on site measures the duration of a visitor session, starting from the moment a visitor lands on the site to the moment the visitor leaves the site. Typically, you want visitors to stay on your site for longer, so they can accumulate more information, find what they're looking for, and thoroughly interact with the site. Note that in Google Analytics, Time on Site only includes the time stamp created upon the final page load of the session, so if the user spends five minutes on a given page before exiting the site, that time is not logged.

Why it matters: While this can be a tricky metric to nail down, it does still give a sense of how long you kept a visitor engaged on your site. On sites like news media, blogs, and eCommerce, more time spent on site is usually an indicator that users are pleased with the content and the experience and are willingly engaging with content. If you notice that users – the ones that didn't already bounce – are leaving more quickly than they were before, that signals work to be done in user experience, content and performance. Longer Time on Site often (but not always) correlates with increased conversions and revenue.

How to Analyze Effectively: Like bounce rate, look for peaks and valleys. This metric may be driven by user behavior at times of day or day of week, but generally it should be consistent. Look for broader trends over time and also identify valleys where time on site dropped, as possible performance problems could have cropped up. This will be reflected in Time to Interact in particular.

Benchmark: Again, like bounce rate, this will depend on the type of visit and type of site. Use your own site's historic data to analyze recent data, rather than Internet-wide averages.



Pages Per Visit

What is it? This metric measures the number of pages visited during a visitor session. Generally a higher number of pages per visit is better. Engaged users view more pages while browsing through a website.

Why it matters: If bounce rate is an indication of how successful you were in charming a visitor with your initial landing page, Pages per Visit indicates how successful your subsequent pages are in maintaining that visitor's focus and attention. Bored visitors leave; those who choose see a number of pages are interested in what the site has to offer, enough that they search for more.

The natural reverse of this principle (as with PPV's cousin, Time on Site) is that high marks may indicate users are searching – resentfully so – through your website for something specific, and it's taking too long for them to find it. In general, though, this phenomenon only occurs with regularity on large corporate/government sites and on poorly designed “brochureware” sites. It's not broadly applicable to most web businesses. Pages per Visit more often correlates with increased conversions and revenue than the opposite.

How to Analyze Effectively: Analyze this metric the way you would Time on Site. It may make sense to analyze both at once: comparing the two may reveal some interesting finds. Intuitively, these metrics ought to rise and fall together. If they don't, do some digging into visitor flows to find out what your users are doing on the site.



Conversion Rate

What is it? “Conversion Rate” varies by industry, company, and individual, but is generally defined as the percentage of visitors to a website that “converted” by completing a desired activity – filling out a form, signing up for something, making a purchase, or otherwise becoming a lead or customer. As driving conversions is often the end goal of a website, this metric often takes on an elevated level of importance when businesses examine these ten metrics. But as we’ll see, it’s not the only important metric.

Why it matters: Conversion is the culmination of one major stage of engagement: the user has been adequately convinced by your site’s offerings to spend the time, and/or money, and/or risk of inbox-clogging to convert. (Whether the user will return to the site, become a repeat customer, or speak highly of the experience are possible next stages of engagement). Whereas improvements in bounce rate, time on site, and pages per visit indicate a strong possibility of greater engagement, conversion is a definitive stake in the ground that says “I am engaged with your product/service!”

Stat: Every second added to your load time results in a 7% loss in conversion.

Also, promotions and seasonality can affect conversion rates. For example, the holiday shopping season typically has a positive effect on conversion rate for shops selling consumer goods: if during your “busy season” your conversion rate is flat or down, that may be a bad sign.



Conversion Rate

How to Analyze Effectively: In your Analytics account, this metric is under Conversions > eCommerce. It requires additional steps to set up, but the result is much richer data set. The trending graph here works the same way as the user metrics. (If you're not an eCommerce or lead-generation website, you can achieve a similar metric by setting goals and tracking goal conversion.)

Conversion rates generally fluctuate more than the previous user behavior metrics on this list, since conversions are more easily affected by site content changes or marketing campaigns. Beyond that, a conversion event is rarer than multi-page visit sessions or bounces. This fluctuation invites some finer-grained analysis by joining analysis of conversion rate by time of day and week, its coincidence with marketing events, and visitor flows from converted users.

Benchmarking: Conversion rates are often very low. Thought leaders speak of sites being “stuck” around 2%; many eCommerce sites (even successful ones) rarely break above 1% in a weekly or monthly basis. If your conversion rate is in the double digits, regardless of what type of site you run, you're doing something right. If it's lower than 2%, there are likely steps you can take to improve it.



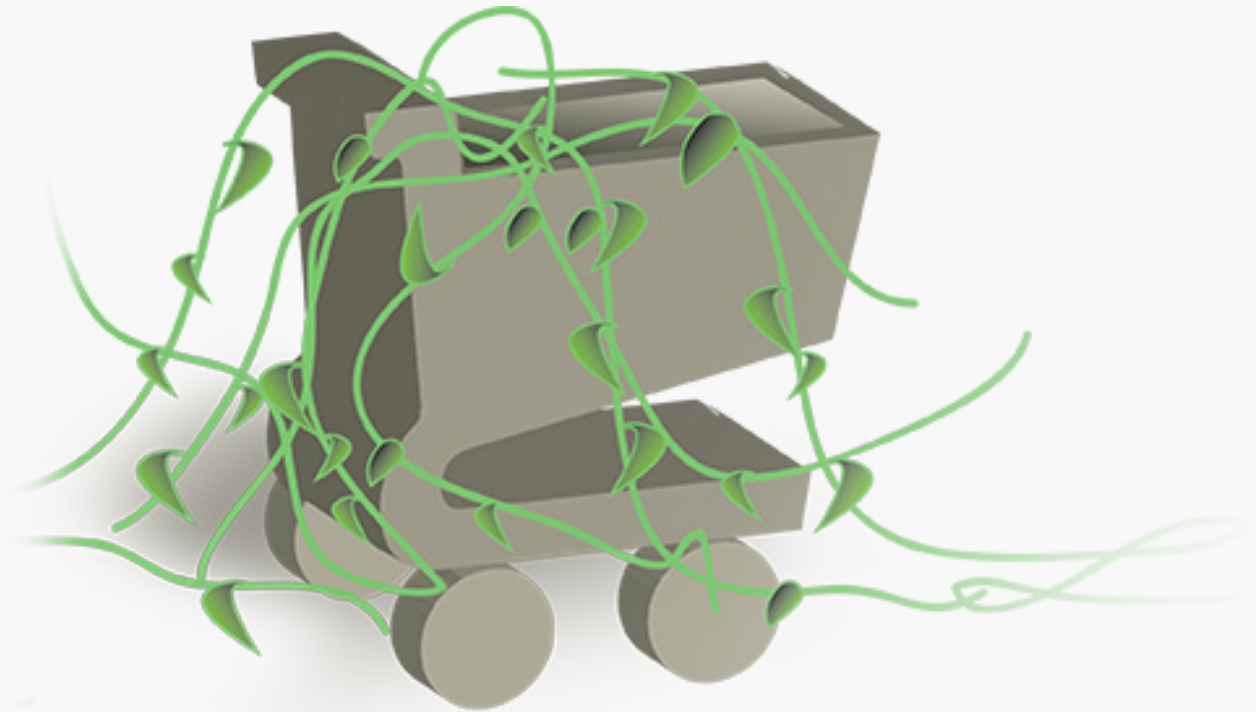
Abandonment Rate

What is it? Abandonment rate often refers to shopping carts, but it also applies to signups or conversion paths. It is the percentage of visits that initiated some conversion activity on your site but didn't finish that activity.

Abandonment rate is an interesting addition to the user engagement metrics list, since it indicates not a success (conversion) or total failure (bounce) but shows the rate of users who were very engaged – enough to take action – but were either blocked from continuing, or missing some ultimate motivating factor.

Why it matters: Abandonment rate indicates the perceived difficulty of a task and the amount of effort the user assumes will be required to complete that task. High or increasing abandonment rates are often attributed to **UX** and design failures, performance problems, and unclear messaging – especially on “deeper” pages, like product pages and checkout pages.

Stat: 29% of users who abandon carts your site never return. On top of that, \$3 billion is lost annually from cart abandonment due solely to slow sites.

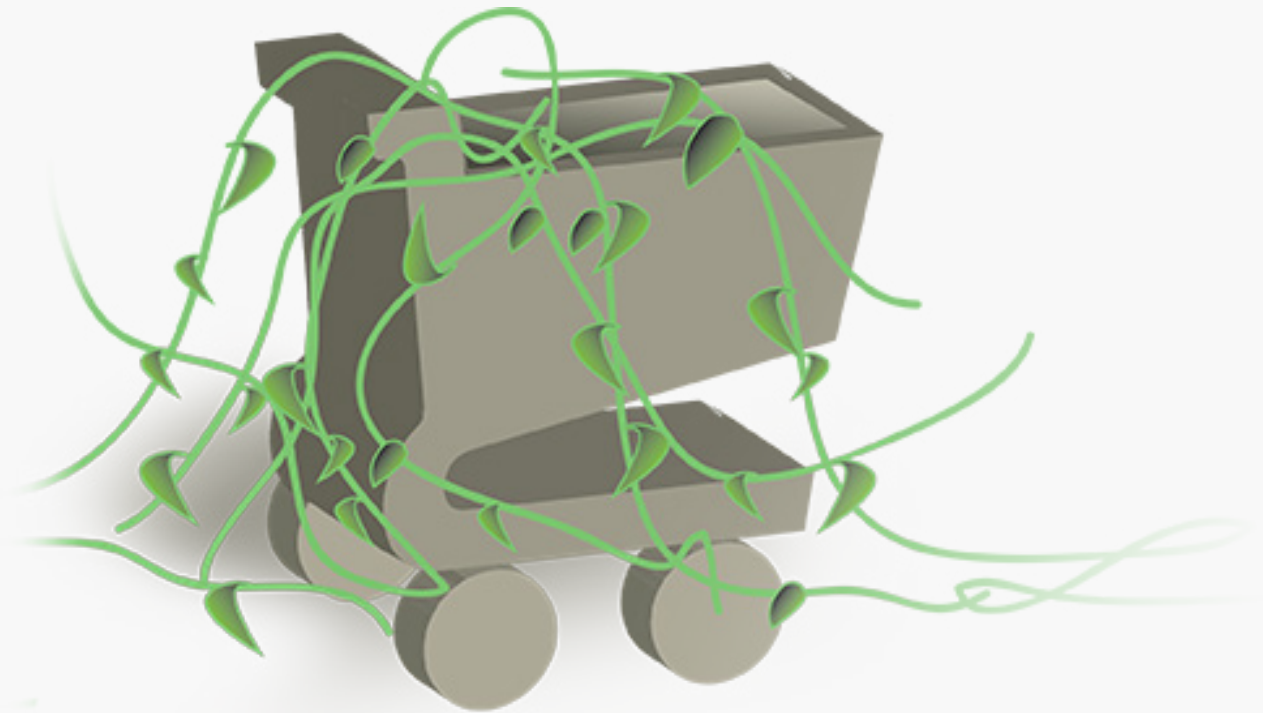


Abandonment Rate

How to Analyze Effectively: This one is trickier, since you have to set up “Goals” defined separately from eCommerce data. Even when, for example, an eCommerce shop is set to log purchases as conversions, it’s beyond scope to know when a user puts something in the shopping cart but then leaves the site. You’ll need to set your conversion activity/shopping cart as a goal, after which time you’ll be able to see the abandon rate under the “Goals” category in GA.

Once set up, you can dive into this metric much the same way you do conversion rate: charting the changes by time increment and comparing it against changes in traffic and marketing events.

Benchmarking: For eCommerce sites, abandon rates are high: one source [link?] reports that 75% abandon rate is the Internet average. Getting your abandonment rate down by several percentage points and sustaining that change over the course of weeks or months would be considered a huge accomplishment, since it ought to directly correlate to increased conversions.



Order Value

What is it? Order value measures the average monetary value per customer who made a purchase or transaction on the site. The basic calculation is:

$$\text{revenue generated} / \text{the number of orders taken}$$

This is a key metric for eCommerce sites, and a valuable indication of how well your site convinced a visitor to purchase, either through content, design, or performance.

Here's a common scenario to describe how a rise in order value happens (apart from factors like promotions or seasonality): think of a user who quickly finds exactly what she wants on the site, and, because the shopping experience had been so easy and positive, decides to go back and browse more products, and ends up selecting a second or third item before checking out. This scenario is directly opposed to one where the user "puts up" with a site long enough to find an item, but gets off as quickly as possible after making the selection because the site experience is so poor.

Why it matters: Increasing order value rarely comes at the expense of conversion. That is, unless major changes are made to the product offerings on a site, an increase in order value is typically accompanied by an increase, or at least consistency, in conversion rate. That means increasing order value is like printing money for your business.

Stat: Pages that are 2 seconds slower have a 4.3% drop in per-user revenue.



Order Value

How to Analyze Effectively: Average order value is one of the standard eCommerce metrics, so no additional configuration is necessary to see it, assuming your eCommerce shop is linked up. Be careful when drilling down to smaller time increments, though – since it is an “average” (versus a “rate”) it can be skewed by outliers. In fact, depending on how many transactions are made on your site per day, and on how widely your product offerings vary in price, average order size can be quite volatile. For instance, a boutique watch store generating just a handful of transactions per day might sell a single heirloom piece worth many times the historical average transaction; the average order value for that week – or month! – might be skewed upward anomalously. Be sure to take this into account when you observe trends over time. It’s best to take a longer view with this metric.

Benchmarking: This is another case where benchmarking against Internet averages is basically useless, unless you can access data for your highly specific industry segment. Outside of simply comparing your own data month-over-month and year-over-year, one rule of thumb would be that, during busy shopping seasons, average order value tends to rise.



Revenue

When it comes to improvement potential, you need to look holistically and carefully at these metrics, and understand the cause-and-effect that various actions have. Possibilities abound: higher abandonment rate can a lower conversion rate; longer Time to Start Render can increase bounce rate and abandonment, and decrease order value; and longer Time to Display can reduce average order value. In one way or another, each of these metrics affects revenue and your site's potential for profit.

There is, however, one ultimate engagement metric: revenue. If you're an eCommerce site, revenue is of course the bar by which you measure success. The reason we include revenue here is to drive home the point that your site's performance in all of the metrics on this list can and do influence revenue, and ought to be considered with due gravity. As your revenue trends over time, for better or for worse, look to the other nine metrics on this list for answers as to why.

Note: For non-eCommerce sites, use the Google Analytics Goals function described earlier to create goals and track conversion rates on those goals. The more granular you get in choosing what those goals are, the closer the goal conversion metric will be to approximating an "ultimate" metric by which to gauge the site's success.



At Yottaa we use these 10 engagement metrics every day to help our customers realize their goals for business success

Our Engagement Cloud service automatically improves performance, transforms content based on user context, and sequences content delivery to improve these metrics across the board.