Web Analytics Guide for Gateway Websites: Getting Started with Definitions, Goals, & Metrics

By

Shari Thurow, Founder & SEO Director

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About Shari Thurow:

- Web professional since 1995, pioneering search-engine friendly website design.
- Author of *Search Engine Visibility* & co-author of *When Search Meets Web Usability*.
- Columnist for Marketing Land & Search Engine Land.
- Co-founder of the Information Architecture Gateway.
- Website usability/UX professional since 2002.
What we’ll cover:

• Definition & purpose of web analytics
• Answers to questions that analytics software delivers
• Conversions & analytics
• Micro conversions vs. macro conversions
Introduction to Web Analytics

PURPOSE OF WEB ANALYTICS
Simplest definition:

**Web analytics** is the measurement, collection, analysis, & reporting of web data for purposes of understanding & optimizing web usage.

From Usability.gov:

Web analytics is the collection, reporting, and analysis of website data. The focus is on identifying measures based on your organizational and user goals and using the website data to determine the success or failure of those goals and to drive strategy and improve the user’s experience.

Analytics software can answer the questions:

- **Who** visited your website?
- **When** did they visit your website?
- **Where** are users accessing your site? **What language** are they using?
- **How** did they navigate/use your website?
- **What** did users do?
Analytics software cannot answer the question:
“Content is king.

Context is the kingdom.”

- Eric Reiss, CEO of The FatDUX Group
  Author of Usable Usability
  Co-founder, Information Architecture Institute
Learn about site visitors:

- **Users**: 4,799
- **New Users**: 4,276
- **Sessions**: 6,151
- **Number of Sessions per User**: 1.28
- **Page Views**: 16,764
- **Pages/Session**: 2.73
- **Avg. Session Duration**: 00:02:07
- **Bounce Rate**: 45.33%
- **New Visitors**: 24.6%
- **Returning Visitors**: 75.4%

Date Range: 27 Jan 2018 - 25 Feb 2018
Browsers used:

| Browser          | Device Category | Users (May 2019) | % Change (Year-over-Year) | % Change (Month-over-Month) | % of Total Users | Avg. Session Duration (Days) | Revenue ($1K) | Conversion Rate
|------------------|-----------------|------------------|--------------------------|-----------------------------|-----------------|----------------------------|--------------|------------------|
| Chrome           | Desktop         | 106,185          | -1.90%                   | -23.00%                     | 32.8%           | 1.09                        | 0.89K         | 0.75%
| Firefox          | Desktop         | 36,155           | -6.37%                   | -16.04%                     | 10.3%           | 1.02                        | 1.07K         | 1.02%
| Chrome           | Mobile          | 59,408           | -5.34%                   | -21.01%                     | 17.9%           | 1.53                        | 1.09K         | 0.72%
| Opera            | Desktop         | 15,266           | -0.79%                   | -14.17%                     | 4.3%            | 1.96                        | 0.94K         | 0.67%
| Internet Explorer| Desktop         | 14,812           | -0.93%                   | -15.19%                     | 4.5%            | 1.67                        | 0.79K         | 0.46%
| Safari           | Mobile          | 12,328           | -0.23%                   | -12.77%                     | 3.86%           | 1.00                        | 0.74K         | 0.49%
| Chrome           | Tablet          | 8,576            | -2.64%                   | -16.61%                     | 2.53%           | 1.04                        | 0.77K         | 0.53%
| Edge             | Desktop         | 8,035            | -0.39%                   | -14.25%                     | 2.4%            | 1.08                        | 0.72K         | 0.47%
| Safari           | Desktop         | 9,977            | -1.93%                   | -16.07%                     | 3.05%           | 1.06                        | 0.75K         | 0.56%
| Safari           | Tablet          | 3,669            | +1.04%                   | +30.13%                     | 1.00%           | 1.70                        | 0.79K         | 0.70%
What you can learn:

Create **custom reports, dashboards, shortcuts, alerts**, and so forth.

What is happening on your website **right now?**

**Who** is visiting your website? **Where** are they at?

**How** did visitors arrive on your website?

**What** did visitors do on your website?

Are visitors doing what you want them to do? Did visitors **convert**?
Search engine optimization (SEO) is optimizing a website for **people who use** search engines.
**Bounce rate** is single-page sessions divided by all sessions, or the percentage of all sessions on your site in which users viewed only a single page and triggered only a single request to the Analytics server.

Bounce rate for a page is based only on sessions that start with that page.

https://support.google.com/analytics/answer/1009409?hl=en
Bounce rate – potentially a misleading metric:
Case study #1:

How to prevent infection

The first step is to avoid the source of the outbreak. The CDC recommends throwing out all romaine lettuce at home, even if you've eaten some of it and no one has gotten sick. This includes whole heads of romaine lettuce, baby romaine, and bags or boxes of pre-cut lettuce and salad mixes that contain romaine, including Caesar salads. Any lettuce of unknown origin should be thrown out, just in case.

Restaurants and retailers should take care to not serve or sell any salads that contain romaine lettuce.

If E. coli O157:H7 has somehow entered your kitchen, thoroughly wash and sanitize refrigerator drawers and shelves where the lettuce was stored. Wash your hands before you prepare food and again before you eat. Kitchens should be kept clean during food preparation as well. Though this outbreak is traced to lettuce, you can avoid other sources of E. coli by cooking meat thoroughly, avoiding unpasteurized dairy products and juices, and not swallowing water when swimming.

This article was written by Dr. Sunny Intwala on 5/3/18, and updated on 11/21/18 by Dr. Tiffany Yeh, an endocrinology fellow at New York-Presbyterian Weill Cornell Medical Center and a member of the ABC News Medical Unit.
Case study #2:

Results for: types of breast cancer

Results 1-10 of 21014 for: types of breast cancer

Study in mice shows that an aggressive type of breast cancer is linked to an inflammatory protein. Aberrant expression of an inflammatory protein, nitric oxide synthase 2 (NOS2), may enhance the progression and metastasis of an aggressive and less common form of breast cancer, known as the estrogen receptor-negative type of disease.

Common Cancer Types
List of common cancer types, or cancers that are diagnosed with the greatest frequency in the United States; provides most recent incidence and mortality statistics for these cancers.

Types of Cancer Treatment
This page lists the different cancer treatments, including chemotherapy, radiation therapy, immunotherapy, and targeted therapy and takes you to more information about each type.

Types of Cancer Clinical Trials
Information about the several types of cancer clinical trials, including treatment trials, prevention trials, screening trials, supportive and palliative care trials. Each type of trial is designed to answer different research questions.

Types of Cancer Research (Infographic)
Purpose of web analytics:

• Learn about site visitors, including their search behaviors
• Troubleshoot issues on website
• Determine conversions
Troubleshoot issues on website:
Example A:

Click To Call

Example B:

Click To Call

Call

FINISH
Determine conversions:
Views:

A reporting **view** is the level in a Google Analytics account where you can access reports and analysis tools.
Filters:

You can use **filters** to customize views & see only a subset of data in your reports.
Filters (cont’d):

<table>
<thead>
<tr>
<th>Rank</th>
<th>Filter Name</th>
<th>Filter Type</th>
<th>Remove</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Exclude internal traffic</td>
<td>Exclude</td>
<td>remove</td>
</tr>
</tbody>
</table>
TYPES OF CONVERSIONS
In analytics, a **conversion** is the completion of an activity that is important to the success of your business, such as a completed sign up for your email newsletter (a goal conversion) or a purchase (a transaction, sometimes called an ecommerce conversion). A conversion can be a macro conversion or a micro conversion.

A **macro conversion** is typically a completed purchase transaction.

In contrast, a **micro conversion** is a completed activity, such as an email signup, that indicates that the user is moving towards a macro conversion.

[https://support.google.com/analytics/topic/1631741](https://support.google.com/analytics/topic/1631741)
[https://support.google.com/analytics/answer/6086209?hl=en](https://support.google.com/analytics/answer/6086209?hl=en)
Some typical macro conversions:
1. Visits ecommerce site
2. Views product
3. Starts checkout
4. Offer upsells
5. Completes purchase
MICRO CONVERSION RATE = 50%

Why might site visitors abandon the site funnel at this point?

- Comparison shopping
- Not exactly what they wanted
- Price too high
- Not ready to make a purchase at this time
- Other reasons?

https://inchoo.net/online-marketing/conversion-rate-optimization-basics/
Prioritized calls to action (CTAs) & micro conversions:

Become a profitable Content Strategist.

We teach freelancers, agencies and entrepreneurs the skills and strategy involved in high-performing brand content marketing.
Macro conversion:
Conversions can come from social media:

<table>
<thead>
<tr>
<th>Social Network</th>
<th>Analytics</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Users: 17,230</td>
<td>% of Total: 56.2%</td>
</tr>
<tr>
<td></td>
<td>New Users: 8,834</td>
<td>% of Total: 24.0%</td>
</tr>
<tr>
<td></td>
<td>Sessions: 21,910</td>
<td>% of Total: 63.7%</td>
</tr>
<tr>
<td></td>
<td>Bounce Rate: 45.4%</td>
<td>Avg. Time on Page: 2.33</td>
</tr>
<tr>
<td></td>
<td>Pages / Session: 0.02</td>
<td>Avg. Session Duration: 00:02:07</td>
</tr>
</tbody>
</table>

- Facebook: Users: 15,185 (82.01%) New Users: 7,922 (52.60%) Sessions: 10,476 (47.70%) Bounce Rate: 53.42% Avg. Time on Page: 2.37 |
- Pinterest: Users: 1,654 (7.64%) New Users: 1,225 (7.12%) Sessions: 2,041 (13.00%) Bounce Rate: 70.26% Avg. Time on Page: 1.71 |
- YouTube: Users: 124 (0.52%) New Users: 66 (0.41%) Sessions: 157 (0.72%) Bounce Rate: 47.77% Avg. Time on Page: 3.45 |
- Instagram Stories: Users: 57 (0.20%) New Users: 15 (0.09%) Sessions: 70 (0.23%) Bounce Rate: 45.75% Avg. Time on Page: 1.91 |
- Twitter: Users: 46 (0.20%) New Users: 32 (0.19%) Sessions: 64 (0.23%) Bounce Rate: 48.40% Avg. Time on Page: 4.79 |
- Reddit: Users: 46 (0.20%) New Users: 36 (0.21%) Sessions: 47 (0.21%) Bounce Rate: 42.56% Avg. Time on Page: 4.41 |
- LinkedIn: Users: 11 (0.05%) New Users: 6 (0.04%) Sessions: 12 (0.05%) Bounce Rate: 41.67% Avg. Time on Page: 4.17 |
- Reddit: Users: 46 (0.20%) New Users: 36 (0.21%) Sessions: 47 (0.21%) Bounce Rate: 42.56% Avg. Time on Page: 4.41 |
- MeWe: Users: 9 (0.03%) New Users: 5 (0.03%) Sessions: 9 (0.03%) Bounce Rate: 83.33% Avg. Time on Page: 1.00 |

Web Analytics for Gateway Websites

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Some sample conversion tracking:
You can set up goal funnels:

In web analytics, a **key performance indicator** (KPI) is a metric that helps you understand how you are doing against your objectives.

Business Objectives > Goals > KPIs > Metrics

**Goals** are a way to measure how well your site fulfills targeted objectives (i.e. Thank You pages, Download Complete pages, etc.)

**Targets** are numerical values you have pre-determined as indicators success or failure. Create targets for each web analytics key performance indicator.
Goal description
Name: Newsletter Signup
Goal type: Destination

Goal details
Destination
Equals to: /thanks
Case sensitive
For example, use My Screen for an app and /thankyou.html instead of www.example.com/thankyou.html for a web page.

Value
OFF
Assign a monetary value to the conversion.

Funnel
ON
Use an app screen name string or a web page URL for each step. For example, use My Screen for an app and /thankyou.html instead of www.example.com/thankyou.html for a web page.

<table>
<thead>
<tr>
<th>Step</th>
<th>Name</th>
<th>Screen/Page</th>
<th>Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Newsletter Form</td>
<td>/signup</td>
<td>NO</td>
</tr>
</tbody>
</table>
### Goal setup

**Custom**

### Goal description

**Edit**

**Name:** Purchase Confirmation

**Goal type:** Destination

### Goal details

#### Destination

- **Equals to:** ![Confirmation](example.com/confirmation)
- **Case sensitive:** [Off]
  
  For example, use **My Screen** for an app and ![thankyou.html](example.com/thankyou.html) instead of ![www.example.com/thankyou.html](example.com/thankyou.html) for a web page.

#### Value

**OPTIONAL**

- **Off**
  - Assign a monetary value to the conversion.

#### Funnel

**OPTIONAL**

- **On**
  - Use an app screen name string or a web page URL for each step. For example, use **My Screen** for an app and ![thankyou.html](example.com/thankyou.html) instead of ![www.example.com/thankyou.html](example.com/thankyou.html) for a web page.

<table>
<thead>
<tr>
<th>Step</th>
<th>Name</th>
<th>Screen/Page</th>
<th>Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mailing Details</td>
<td>Mailing</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Billing Details</td>
<td>Billing</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Review Page</td>
<td>Review</td>
<td></td>
</tr>
</tbody>
</table>

*Add another Step*
What are the macro & micro conversions here?

InterMine integrates biological data sources, making it easy to query and analyse data.

InterMine is open source (LGPL 2.1) and free to use.

It's a software system that you can install on your own servers to make data available on the web.

There are many different InterMines worldwide, covering a broad range of model organisms and life science research areas.
# How about this page?

<table>
<thead>
<tr>
<th><strong>Developers</strong></th>
<th><strong>Biologists</strong></th>
<th><strong>Contact</strong></th>
<th><strong>Resources</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>API Clients</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We have client libraries to make querying InterMine super-easy! There's one for each of B, Python, Perl, JavaScript (node or browser), Ruby, and Java.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="#">Go there now&gt;&gt;</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>API Documentation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dive straight into our API with interactive live documentation.</td>
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</tr>
<tr>
<td><a href="#">Go there now&gt;&gt;</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Contributing to InterMine</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you'd like to start contributing to InterMine, whether you're a student interested in GSOC, a developer from a lab running InterMine, a Hackathon enthusiast, or something else - here's what you need to know!</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="#">Go there now&gt;&gt;</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Developer docs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation for new and veteran InterMine developers. Includes getting started tutorials, system requirements, configuration info, and troubleshooting tips.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="#">Go there now&gt;&gt;</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Developer email list</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sign up, ask for help, get updates, or just browse the archives to see if a problem you've having has happened before.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="#">Go there now&gt;&gt;</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>InterMine Chat (Discord)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chat in real time with InterMiners (UK day time) or with the rest of the community. There's a general chit-chat channel for important stuff like cat pictures, and a support channel for technical queries.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="#">Go there now&gt;&gt;</a></td>
<td></td>
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</tbody>
</table>
Key takeaways:

• **Keep it simple.** Analytics software can seem overwhelming. So start with something that’s easy to do, such as clearly defining your calls to action (CTAs) for each type of web page.

• **Define business goals.** What are your 3 main macro conversions? You can always add other goals once you get used to the interface.

• **Understand your target audience.** Don’t only rely on analytics data to understand user expectations. Use qualitative methods as well.

• **Remember...** analytics is an ongoing process of refining your website to achieve business goals & meet user expectations.
Thank you!

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