

What Is Google Analytics and Why is it Important?

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What can Google Analytics track? - it can track video game consoles, mobile phones, computers, even refrigerators!

Segmentation - a subset of your Analytics data. For example, of your entire set of users, one segment might be users from a particular country or city. Another segment might be users who purchase a particular line of products or who visit a specific part of your site.

Segments let you isolate and analyze those subsets of data so you can examine and respond to the component trends in your business.

Adding Internal Context to Data is important

Conversions and Conversion Attribution

- **Macro-conversions:** Someone completes an action important to your business (sales transactions)
- **Micro-conversions:** An action that does not immediately contribute, but leads to a macro conversion (ex: signups for your email newsletter, account creations, and other activities that often precede a purchase)
- **Attribution:** Assigning credit to a conversion.
- **Last Click Attribution:** the last touchpoint would receive 100% of the credit for the sale.

Steps to Creating a Google Analytics Measurement Plan

Define a Measurement Plan

- Assemble someone who knows business
- Assemble someone who understands analytics
- Assemble someone who is technical
- Document business objective (ex: strategy being selling project and engaging users)
- Tactics, KPI's, Segments (ex: new vs returning customers, geography)

Document Technical Infrastructure

- Involve your IT team.

Create a Basic Implementation Plan Based on Environment

- Standard Google Analytics page tag
- Goals and Ecommerce Tracking
- Filters
- Campaign Tracking
- Custom Reports and Dashboards

Maintain and Refine Your Plan

Michael's Side-Notes

- You cannot manage what you can't measure
- Implementation is important (if this goes bad, numbers don't mean anything).
- Maintain and refine -what's working? How can we scale and replicate it? If something is not working, how do we eliminate that?
- In marketing, never have a rigidly set budget

Platform Principles

Data Collection: Collection is all about getting data into your Google Analytics account.

To collect data, you need to add Google Analytics code to your website, mobile app or other digital environment you want to measure. This tracking code provides a set of instructions to Google Analytics, telling it which user interactions it should pay attention to and which data it should collect. The way the data is collected depends on the environment you want to track.

For example, you'll use the JavaScript tracking code to collect data from a website, but a Software Development Kit, called an SDK, to collect data from a mobile app.

Each time the tracking code is triggered by a user's behavior, like when the user loads a page on a website or a screen in a mobile app, Google Analytics records that activity. First, the tracking code collects information about each activity, like the title of the page viewed. Then this data is packaged up in what we call a "hit". Once the hit has been created it is sent to Google's servers for the next step -- data processing.

Data Processing and Configuration - During data processing, Google Analytics transforms the raw data from collection using the settings in your Google Analytics account. These settings, also known as the configuration, help you align the data more closely with your measurement plan and business objectives.

For example, you could set up something called a Filter that tells Google Analytics to remove any data from your own employees. During processing, Google Analytics would then filter out all of the hits from your employees, so that this data wouldn't be used for your report calculations.

You can also configure Google Analytics to import data directly into your reports from other Google products, like Google AdWords, Google AdSense and Google Webmaster Tools. You can even configure Google Analytics to import data from non-Google sources, like your own internal data. It's during the processing stage that Google Analytics then merges all of these data sources to create the reports you eventually see in your account.

It's important to note that once your data has been processed, it cannot be changed. For example, if you set a filter to exclude data from your employees, that data will be permanently removed from your reports and can't be recovered at a later date.

Reporting: After Google Analytics has finished processing, you can access and analyze your data using the reporting interface, which includes easy-to-use reporting tools and data visualizations. It's also possible to systematically access your data using the Google Analytics Core Reporting API. Using the API you can build your own reporting tools or extract your data directly into third-party reporting tools.

Dimensions: Users and sessions, actions

Metrics: Quantitative measure of users, sessions, and actions

Dimensions and metrics are usually shown in a table.

Dimension of action: ex: page they used

Metrics can be averages, such as average number of pages per session

Visitors or users metric: used to understand audience

Visits / sessions: Persists until a user stops acting on a site for 30 minutes.

Text based site versus video site: For a video site, it'd make sense to set session timeout to longer than 3 minutes

Page view metric: how many times a page is viewed

Bounce rate: percent of sessions with one user action and immediate leaving. Gives you an idea of your user's intentions

Time metrics and bounce rate are important in determining user activity

Michael's Side-Notes

- **Two second bounce:** hard bounce (unqualified traffic you don't want to see)
- **Any time past two seconds:** soft bounce

Concepts to Look More In-Depth At

- Tag management
- Plugins
- Properties get a unique tracking ID

Set up a plan prior to setting up an account and views.

Once you delete a view, it is lost forever. When you make a new view, it has no historical information from previous views.

Views You Should Have

Unfiltered data view: collects all properties and doesn't exclude any data. Don't delete it!

Master view

A test view: to try new settings

Filters

Filters allow you to limit and modify the data that is included in a view. For example, you can use filters to exclude traffic from particular IP addresses, focus on a specific subdomain or directory, or convert dynamic page URLs into readable text strings. Filters can isolate data and clean up data. Not applied retroactively to your data, only collect from the day they are made.

- Predefined Filters
- Custom filters

Limitations of Filters

Filters are destructive. Filtering your incoming hits permanently changes those hits in that view, according to the type of filter. Therefore, you should ALWAYS maintain an unfiltered view of your data.

Filters require up to 24 hours before they are applied to your data.

Fields specified in a filter must exist in the hit and not be null in order for the filter to be applied to that hit. For example, if you are filtering on *Hostname*, but the hit does not contain that field (perhaps the hit was sent via the Measurement Protocol and that request did not contain the &dh parameter), then any filters acting on Hostname will be ignored and the hit will be processed as if there was no filter.

Filters are account-level objects. If you edit a filter at the view level, you are also changing the filter at the account level. This means that any other views that use this filter will also be affected by your change. If you want to customize a single instance of an existing filter used by multiple views, create a new filter and apply it to that single view.

Goal Types

Destination Goals: Page on website when users see when they complete an activity. Triggers conversion. This is the URL that will trigger a goal. Don't enter in the full URL, use only what comes after the domain. So if the full URL is www.bleh.com/pricing, enter in `"/pricing"`.

Event goal: triggered when a user does something specific. Similar to virtual page views, you have to add a bit of JavaScript to the element that you want to track. This tells Google Analytics when an event has occurred.

Pages per visit: Instead of tracking how much time people spend on your site, this goal tracks the number of pages each visitor sees before they leave. Once again, it's ideal for customer support sites.

Time on site: Each time someone views a page, the Google Analytics Tracking Code sends a timestamp to the Google Analytics servers.

Use goals to track macro and micro conversions.

Concepts to Look More In-Depth At

- Setting Up Funnels
- Multi-funnel report

Things to Note

Goal conversion counter: 1 per visit

E-commerce transaction can be counted more than once per visit. Don't add a /goal Value here