

Introduction to Google Analytics

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Really?



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Key learning Objectives for Google Analytics training

In this workshop you will:

- Understand how Google Analytics (G.A.) works.
- Discover what web analytics can tell you.
- Gain a clear sense of immediate, practical next steps.
- Get your questions about Google Analytics answered.

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Morning Session: Analytics 101

- An introduction to web analytics and Google Analytics
- How Google Analytics works
- Understanding Google Analytics account setup
- Navigating in the reporting interface
- Understanding Google Analytics standard reports
- Interpreting data to create actionable information
- Go beyond counting visitors: how data relates to your business
- Analytics Terminology

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About Web Analytics

Web analytics is more than collecting data. It involves *analyzing data*, *creating information*, and *generating insight*. It includes information about:

- Who is visiting pages (audience)
- How they arrived (acquisition)
- Pages being visited (behavior)

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How web analytics can be used

- Determine what works (or doesn't work) on your site
- Analyze trends: trends tend to be more important than individual snapshots of data
- Monitor the effectiveness of advertising and marketing campaigns to determine:
 - Which campaigns and mediums generate the most actions
 - What is the lowest cost per action
 - What campaigns have the most conversions

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How you should use web analytics

- Analytics involves measuring, collection and analysis of data for the purpose of optimizing and understanding your business.
- The data isn't the end-goal; use the data to:
 - create information
 - help you and your organization make better decisions
- The data itself can provide information overload

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Data is driving business decisions

- There are more than 50 million sites using Google Analytics
- Data-driven decisions about marketing are expected
- The Mad Men days of ad spending and marketing are gone

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Types of Analytics

- **Off-site analytics:** Internet-wide, describing patterns across the entire Web, or a series of related websites. For example, all news websites, or all online shopping sites
- **On-site analytics:** Provides data about a specific site

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How on-site analytics works

- Javascript code is inserted into website or app being monitored
- Javascript sends data to analytics provider
 - Google, Adobe (Omniture), Webtrends, IBM (Coremetrics)
- Provider collects, processes, organizes, then displays data from site visitors when you log-in
 - If you advertise with Google, analytics data can be combined with adwords data

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Google Analytics setup

- You copy and place .js code on the site you wish to monitor
 - Only use the code on a single site
 - Each site should have its own unique tracking ID
 - Set-up multiple sites with unique code per site
- Types of .js you may see
 - ga.js is the legacy code
 - analytics.js is the new code
 - GTM.js

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Google Analytics setup

- Must have google account
 - Google account can be your @companyname.com domain or gmail
- Each account can access multiple web sites (properties)
 - You can access 50 web properties per account
 - Each user login can access 50 accounts
 - Each account is individual, thus data is not combined between accounts
 - If you want to roll-up data together from multiple divisions, then put them under a single account

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Google Analytics demo account login

- Log-in to your Google account
 - Can be gmail or business email attached to Google account
- <https://analytics.google.com/analytics/web/demoAccount>
then click **—>ACCESS DEMO ACCOUNT<—**
- If you already have a Google Analytics account, the demo site data is added to the sites you already monitor.
- If you have a Google account but not an Analytics account, one is created and the demo account is added to it.

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Google Analytics Account Hierarchy

- **Accounts:** Parent folder containing related websites or apps. Each account may monitor many different websites. A user can have access to multiple accounts.
- **Properties:** Websites or apps being monitored.
- **Views:** Data from properties are reported through views. Views may be configured to display partial sets of data or all data using filters.
 - Some data may be intentionally omitted via views, such as visitors from company network.

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Account

- How you log-in to Google Analytics.
- Your account may be attached to multiple web properties.
- Account may also be attached to different Google services, such as Webmaster tools

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Property

- Each specific website is a property
- A single Google Analytics account can monitor multiple properties

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View (previously called *profile*)

- Defined view of visitor data from a property
- Views may be filtered or unfiltered
- Views are not retroactive; they filter data going forward
- It is possible to filter all website data
- Best practice is to create a raw, unfiltered profile before creating any filtered profiles

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Users

- Individuals who have permission to view data
- Various levels of permissions define privileges
 - Admin
 - Edit
 - View

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Reports

- Information gathered for you regarding site visitors

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Create an unfiltered view (profile)

- As a best practice, create multiple views
- One view should be unfiltered
- Once your data is filtered, it can't be recovered

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Terminology

- Bounce rate
- Visit
- User
- Pageviews
- Unique Visitors

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Metrics

- Metrics are measurements that Google Analytics displays
- Displayed in blue when selecting those to display
- Metrics are displayed in columns

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Examples of Metrics

- Bounce rate
- Visits
- Time on site
- Conversions
- Time on Page
- Clicks
- Impressions
- Unique Page views

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Metrics can be viewed within

- Scorecards
- Columns on tables
- Graphs

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Ways you can review Metrics

- Click a scorecard to graph its data
- Compare metrics
- View related metrics, grouped within a tab

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Dimensions

- Dimensions are attributes describing data.
- Dimensions are generally text (exception is *age of visitor*)
- Displayed in rows
- Displayed in green when selecting those to display

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Examples of Dimensions

- Browser
- Operating System
- Country
- City
- Campaign
- Landing page
- Language
- Device

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Understanding the User Interface

- Select website to view on top left, then select:
 - Reports along left side
 - Date range in upper right
- **Home** provides dashboard of metrics perceived as relevant for your site
 - Each section provides links to more in-depth reports
 - Customized dashboards are also available
- Middle section of left side selects type of reports
 - Audience: Who
 - Acquisition: Where did they come from?
 - Behavior: What
- Bottom left gear icon is the administrative menu
 - eg: add new users; configuration

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Audience Overview

- Overview graph: by default shows information about number of visits and unique visitors, including:
 - Page views
 - Pages per visit
 - Bounce rate
 - Average visit duration
 - This value can be skewed by visits to a single page, where time on site isn't tracked

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The Reporting UI: Date ranges & more

- Change date range that is displayed
 - Adjusted in upper right corner
- Compare
 - date ranges
 - metrics
- Add notes (annotations):
 - Annotations can be public or private

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Date ranges and reporting

- Can customize time period
- Can compare range
 - By default to the previous day/week/
 - Can chose comparison to any other time period that you customize
- Traffic graph along bottom shows dates
- When comparing two periods: always try to compare same day of week to same day of week

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The Reporting UI (continued)

- View new vs. returning visitor information
- Drill-down on demographic information
 - Country > State > City
- Obtain detailed computer system information
 - Operating System
 - Browser
 - ISP

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Standard Reports

Use standard reporting to understand your audience, including information about:

- Audience: Who is visiting
- Acquisition: How your visitors found you
- Behavior: What visitors did on the site
- Conversions: Any goals you've set for your site visitors

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Understanding Averages

- Average numbers tend to be skewed by outlying numbers
- Extremes may create unreliable numbers
- Trend analysis tends to be more valuable

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Understanding Bounce rate

- Bounce is any visitor that only sees one page during a session
- Is bounce rate good or bad?
 - Depends upon the objectives of the page
 - If goal is to drive visitors further into the site, bounce rate should be low
 - If objective is to provide a single piece of information, then a higher bounce rate may be expected.

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Default Display

- Default Metric is sessions (visits)
- You'll can change the metric displayed
- You can select second a second metric
- Displays information for the view (profile) you are viewing; not all sites

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Real-Time Reporting

- Provides only a brief snippet in time
- Can provide a distorted perspective on data
- Like viewing the night sky with a telescope the size of a drinking straw

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Dimensions: Primary & Secondary

- Most reports support primary dimensions
 - Examples of Primary Dimensions
 - Query: What user typed into Google
 - Source: Who sent the traffic
 - Medium: How (email, organic, paid, referral)
- Secondary Dimensions
 - Adds another way to organize data
 - Examples:
 - medium (cpc, referral, etc.)
 - Country
 - Viewing and removing secondary dimensions

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View types within standard reports

- Data, percentage, performance,
- Table view: big picture overview
- Pie charts (not always useful with more than a few dimensions)
- Performance
 - Can sort any column by clicking on it when in a performance view
 - Spend time covering various ways to sort in the performance view

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What were the percent of new visits for the past three months for the site you are measuring?
What is the bounce rate for this period?



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Audience Reporting



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Demographics & Interests

- Age, gender, hobbies
- Must be enabled
- Information taken primarily from:
 - Cookies: visitor's browsing history
 - Google properties

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Geography

- Language
 - Language used is a function of browser
 - Browser doesn't tell you too much as user might be Hispanic but working with an English browser, for example.
- Location
 - Population centers being measured can affect results
 - May want to remove or focus on visitors users from different countries
 - May want to remove visitors from outside your region or country
 - Filter out unrelated traffic
 - Can also filter internal (corporate) traffic using *segments*

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Behavior

- New vs. Returning
 - New Visitors: Is site seeing enough new interest to allow for growth?
 - Return Visitors: Tend to be most likely to take action: is this number consistent or growing?
- Frequency & Recency
 - How frequently do visitors return?
 - How much time do users take between visits?
- Engagement
 - How often do visitors return to site

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Technology

- Does the user's device or browser impact their experience?
 - Browser: Is site developed on one browser but not tested on others?
 - OS: Are mobile or desktop users seeing the site differently?
- Network
 - On which networks are users who visit site?
 - Bulk coming from primary ISPs
 - For B-2-B: search for college, university, corporation
- Plotting rows
 - Clicking checkbox, then click "plot rows"

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Mobile

- Mobile devices used

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Visitor Flow

- How visitors locate then travel through your site
- From entry to exit
- Duration
- Network report
- Devices
 - Can get a better understanding UX concerns by looking at bounce rate and visit duration for specific device types

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When Time on Site isn't...

- Time on site calculated as entry time until the next click
- If visitor visits two pages on the site, but never clicks a link on the second page
 - The only page visited that counts is the first page
 - The time on the final page is not counted
- Visitors only hitting a single page will show as zero seconds, regardless of time spent on that page

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Splitting Content to Accurately Collect Time on Site Data

- Split content amongst pages rather than a single page
 - Allows for better tracking of time on site
 - Can also help SEO
- Alternatively, use events or virtual pageviews on long pages

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- What are the top three states from which traffic visits the site you are monitoring?
- What percent of your traffic is from mobile devices over the past three months?



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Google Analytics 201

- Create unfiltered views (profile)
- Creating Custom Audience Segments
- Understanding what drives traffic to a site (*acquisition*)
- Understanding what visitors do on a site (*behavior*)
- Tracking your marketing initiatives with campaigns
- Determining if site visitors are doing what you want with goals
- Customizing G.A.
 - Alerts
 - Events
 - Dashboards

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Exporting Reports

- Reports can be exported and saved
- Reports can be emailed on a schedule
- Multiple format options exist
- Use CSV for additional manipulation

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Filters & Segments

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Filters: General Information

- Filters are applied on the profile level
 - predefined filters
 - custom filters
- *Data cannot be reprocessed as raw after it has been filtered.*
 - **Always keep at least one unfiltered profile.**

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Predefined filters

- Exclude from domains: excludes traffic from specified domain names
- Exclude traffic from an IP address:
- Include traffic to subdirectories:
 - Use this to allow a profile to view traffic to only one part of a website (eg: blogs)

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Custom filters

- Include / exclude: use this to exclude certain visitors, such as those from an IP range
- Search / replace: Use this to replace codes with plain language. For example, id=100 could be "shoes"
- Uppercase / lowercase: Use to standardize URLs because Google Analytics sees uppercase and lowercase URLs differently, even if they display the same data.
- Advanced: Can combine data from multiple fields.
- Exclude referrers: Use to exclude traffic sent from a domain that you do not want to track. Available for domain or IP address.

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Custom filter example

- Using a filter to show only adwords traffic

	Type	Field	Pattern
Filter 1: Custom include	Campaign source	google	
Filter 2	Custom include	Campaign medium	cpc

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Understanding Segments

- Segments allow filtering of data
- You can redefine segments
- You can apply them retroactively
- You can create and save custom segments
 - Custom segments can use regular expressions
 - Can share or edit custom advanced segments

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Examples of custom segments

- morning visitors
- time on site
- branded keywords
- non-branded keyword (use "exclude" to remove the keywords)

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Acquisition: Traffic Sources



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Overview & Channels

- High-level groupings of how traffic arrived on your site
- Search: Organic, Paid
- Direct: The page directly typed-in or bookmarked
- Referral: Link from another site
- Social: Facebook, Twitter, etc.
- Display advertising

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All traffic

- Direct traffic
 - Keying URL directly into the web address
 - An email from a colleague or untagged link
 - *Outbound email marketing should be tagged so you know the source*
 - Visitors using a bookmark to return to your site
- All referrals: Sites that link to yours

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Campaigns

- Google automatically adds tracking codes to campaigns placed on their network
- Tagged links that point to your site

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Acquisition Reports (continued)

- Keywords
- Cost Analysis
- Adwords
 - Matched Search Queries are key when looking at paid search terms
 - Can see what is being used for search terms
 - **Matched Search Query is what users actually searched for vs. Keyword, which is what was bid on**

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Acquisition Reports (continued)

- Social
 - Certain sites share data with Google Analytics to report activity
- SEO
 - Queries: What users typed into Google
 - Landing Pages: Where users were sent

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Behavior



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Site Content

- When Viewing All Pages section, may be helpful to switch to view by Page Title rather than URL
- Provides page-level metrics rather than site level metrics
- *Navigation summary* for specific pages (selected across the top) shows page visited before and pages visited after
- Landing Pages: Where people are entering your site
- Exit pages: Where people are leaving your site

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Site Speed

- Page Timings: Faster load time is tied to SEO and conversions
- Should optimize page load time so it is decreasing
- Can reduce page load time with
 - Optimized images
 - Optimizing JS
 - CDN

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Additional behavior reports

- Site Search
- Events
- AdSense
- Experiments

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Page analytics Chrome plug-in

- Heat Map
- Percent of what draws clicks on your site



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Use Secondary Dimensions to get detailed page-level data

- Source: Determine home page typed-in directly by users
- Referrals: Can view campaigns and impact on traffic to pages

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Not Provided

- In organic search results, "Not provided" is from users that are logged-in to a Google account
- As more users stay logged-in, and default of Chrome is to remain logged-in, this number will increase

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Data Sampling

- Google Analytics doesn't always display full data
- Data is sampled when:
 - More than 500K visitors
 - More than 50K of rows of data
- Data sampling icon displayed near date range, in upper right corner
- If sampling occurs, there are ways to get more accurate data:
 - Increase precision of sample set
 - Reduce date range to minimize sampling
 - Sampling tends to happen more on custom segments when G.A. needs to calculate data

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Custom Dashboards

- Create from templates or from scratch
- Access shared templates
- Single page view across all report types

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Goals


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Understanding Goals and Conversions

- Google Analytics is at its most powerful when you have goals
 - Goals are essential because they provide the lens through which you see performance
- When you reached a goal you've achieved a *conversion*.
- Having clearly defined goals in place is essential for the optimal use of G.A.
- Not just specific revenue goals – but also
 - What is the purpose of your organizations' digital footprint?
 - What are the goals of your website?

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Two types of goals

- Macro Conversions:
 - Measurable with a dollar impact
 - Ecommerce sales;
 - Lead Generation
- Micro Conversions:
 - Steps along customer journey
 - Downloading a brochure or whitepaper
 - Generally show that the site delivering customer value
 - Show interest in your site or service
 - Examples
 - Playing a video; playing it to the end
 - Downloading a PDF

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Goals and the conversion funnel

- The conversion process, or funnel is the lifecycle for a customer
 - From prospect to customer to repeat customer
 - **Attract > Engage > Convert > Retain > Advocate**
 - The value of conversions tends to increase as you move from attraction to advocate.
- Where does each goal fit in the funnel process
 - Segment goals into top or bottom
 - Think about micro goals and macro goals

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Conversions track interaction with site

- Activity
- Interaction
- Time spent on site

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Examples of goals

- Reaching a destination URL
- Spending a specific amount of time on the site
- Visiting a certain number of pages
- Events: watching a video; downloading a white paper

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Goals can require a funnel

- Optional
- Allows you to define a specific conversion path
- Allows you to define different conversion goals that might have the same result
 - eg: Facebook ads that lead to a sale vs. Adwords spending with same result

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More about goals

- Goals are set at the profile level
 - Part of the administrative area
- You can have
 - Four sets of goals
 - Five goals per set
 - Total of 20 available goals
- Once goals are set, they can't be removed

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Matching URL goals

- Exact match: regular URL
- Head match: Eliminates trailing characters
- RegEx match: Allows you to specify a pattern to match

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Other conversion data

- Ecommerce
- Multi-Channel Funnels
- Attribution

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Most Popular Campaign Dimensions

- **source:** where did they come from
 - Website or social media site
 - none
- **medium:** what's the marketing channel
 - Organic or Paid search
 - Manual tags: email, social, tv, newspaper, magazine, radio
- **campaign**
 - What was this tied to (what do we want people to do, what is the campaign all about? What is the initiative? Similar to Mad Men style campaigns)
 - Awareness
 - New sales
 - Remarketing
 - Use campaigns liberally: there's no limit to the number of campaigns used

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Other Campaign Dimensions

- **keyword:** keywords searched for when using search engine
 - When SSL search is used, value is *(not provided)*
 - To determine "not provided" look at landing page as a secondary dimension to see what users were expecting when searching
- **content:** Identifies specific links in a custom campaign
 - Use if you have multiple call to action links in an email, you can use *content* to determine which of the calls to action is most effective
 - Can be call-to-action, or a more specific drill-down
 - time email was sent
 - different subject line in an email, etc.
 - specific ad size
 - specific ad creative

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Examples of campaigns

Source	Medium	Campaign
Google	CPC (paid)	Remarketing in NY
Twitter	social	free monthly trial

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Ways to use Campaigns

- Tag source, medium, and campaign to determine what marketing efforts are most successful
- For example, a nonprofit could use:
 - campaign = donations
 - medium = social
 - source = (each specific source used in the campaign).

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Campaign Example

- Determining success of an email campaign: Test email subject lines to measure effectiveness
 - Source: weekly email blast; or name of list (where names were acquired)
 - Medium: Email
 - Campaign Name: Date of email campaign
 - Content:
 - add subject line A for first email subject used
 - add subject line B for second email subject used

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Campaigns and Organic Search

- Source and Medium are defined for organic search
- campaigns are not set for organic campaign
- Example
 - source = bing
 - medium=organic
 - campaign=not set
 - keywords=american graphics institute
- Possible source and medium combinations
 - Google/Organic
 - Bing / Organic

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Create a list or table tracking the following for an email campaign you plan to send

- Source
- Medium
- Campaign
- keyword
- content



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Applying custom tags

- Apply tags at the end of the url string
- Place a question mark (?) then follow with tag
- Placing an ampersand (&) between each tag used
- Tags to use are
 - utm_source=
 - utm_medium=
 - utm_campaign=
 - utm_term=
 - utm_content=
- Register for our spring conference: http://www.perio.org/spring-conference?utm_campaign=spring-conference&utm_medium=social&utm_source=facebook

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Additional considerations for custom campaign tags

- Without utm parameters, campaigns appear as "not set" in Google Analytics
- Don't add tags for Google ads as Google applies tags within its network
- Campaigns report show up in the Campaigns section of the Sources
 - Can use a secondary dimension of Medium to determine where campaign was generated from, or you can do this for source

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Additional considerations for custom campaign tags (continued)

- Don't tag internal links
 - Internal tags will override how users arrived on the site
 - Events can be set-up to tag internal links (covered in 301)
- Tagging offline ads: magazines; billboards
- Use redirects on the site, and the redirect inserts the parameters

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Events and advanced topics


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Examples of custom alerts

- bounce rate changes
- traffic decreases / increases

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Internal Site Search

- Discover what users are searching for on your site
- Requires search query parameters in the URL
 - eg: ?q=search-terms
- Use to compare goal completions for visitors who use search vs. visitors that don't
- Use to determine what content users are having difficulty locating
- Site search shows start page, destination page, search terms used

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Not everything is tracked (by default)

Some of what is missing:

- Video plays
- PDF downloads and clicks
- Ecommerce
- Some site searches

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Virtual Pageviews

- You can use virtual pageviews to track items that Google Analytics might otherwise ignore:
- PDF downloads
- Click of video link

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About Virtual Pageviews

- You can provide the filename to identify the name of the pageview
- Virtual pageviews appear as regular pages within Google Analytics reports
- You could create a profile to display only virtual pageviews to separate them for reporting

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Implementing Virtual Pageviews

- The code you use: `onClick="_gaq.push(['_trackPageview','/fake-page-name-here']);"`
- An example for a PDF file:
`<a href="http://www.agitraining.com/sample.pdf" onClick="_gaq.push(['_trackPageview','/sample-pdf']);">`
- Note that code is placed inside the `<a>` tag within the HTML
- An example for a Flash file
On (release) {
 //tracking – no action
 getURL="_gaq.push(['_trackPageview','/media/flash-file.swf']);"
}

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Event tracking

- Events are used to track non-page clicks, similar to a Virtual Pageview, but more granular.
- When using events, keep the following in mind:
- Events do not create a page view
- You can organize events into categories
- Events appear in the Events panel (a separate section – so they don't surface as easily when looking at overview reports)

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Arguments you can use when tracking an event

- Category: "bucket" (eg: videos)
- Action: What occurs with the event (eg: play)
- Label: name (eg: admissions)
- Value: numerical (eg: time of video)

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Implementing Event tracking

- The code you use for events: `_gaq.push(['_trackEvent','name','label','value']);`
- An example event:
`_gaq.push(['_trackEvent','videos','admissions','2:30']);`

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Evaluating Events

- Total events: The total number of times an event occurs.
 - Example: If the play button is being tracked, and it is pressed five times, the value would be five.
- Unique events: The number of times an event occurs per visit
 - Example: If one user presses the same play button five times, it only would report as one.

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Questions?

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