

Distributed Computing

DIANE WOODBRIDGE, PH.D



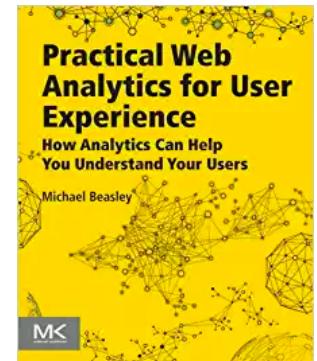
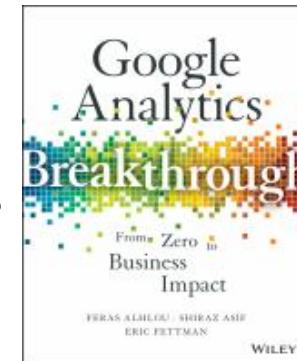
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Additional Readings/Study Guide

Google Analytics Academy (Beginner, Advanced):
<https://analytics.google.com/analytics/academy/>

Google Analytics Breakthrough

Practical Web Analytics for User Experience.
(USF Library has online copies.)



Contents

Web Analytics Overview

Google Analytics Overview

Google Analytics Account and Tracking Code Set-up.

Google Analytics Overview Reports



Web Analytics Overview

Digital Data

- Various devices (desktop, laptop, tablet, smartphone, smart watch, etc.) – Allow customers to browse more information and stay connected.
 - Cloud computing – Collect and analyze data with low cost and more computing power.
- Could be used to analyze customer data by measuring their engagements.



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Web Analytics Overview

Web Analytics

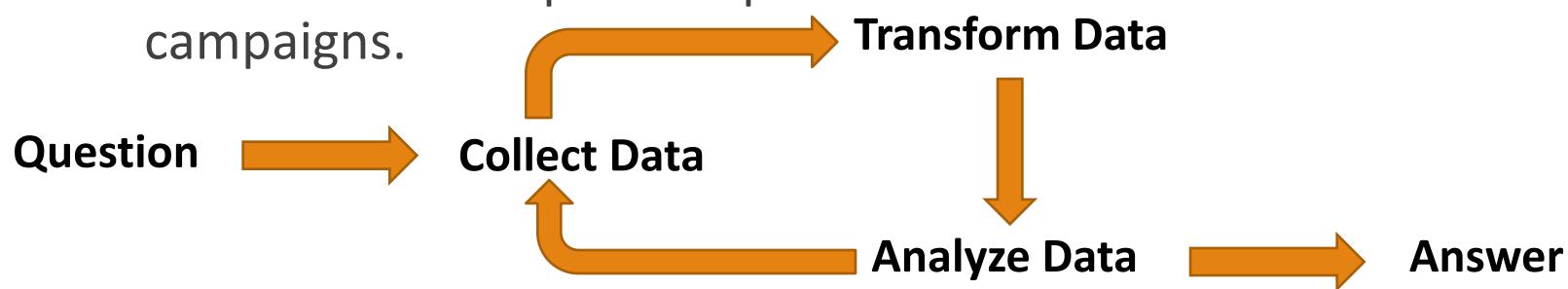
- The analysis of qualitative and quantitative data from your business and the competition to drive a continual change of the online experience that your customers and potential customers have which translates to your desired outcomes.



Web Analytics Overview

Web Analytics

- A set of business and technical activities that define, create, collect, verify or transform digital data into reporting, research, analyses, recommendations, optimizations, predictions, and automations.
- Ex. Collect and analyze what online behavior lead purchases or attractions to help develop suitable and effective online campaigns.



Web Analytics

Firstly, define your business objectives and overall measurement plan.



Web Analytics Goals

e-commerce

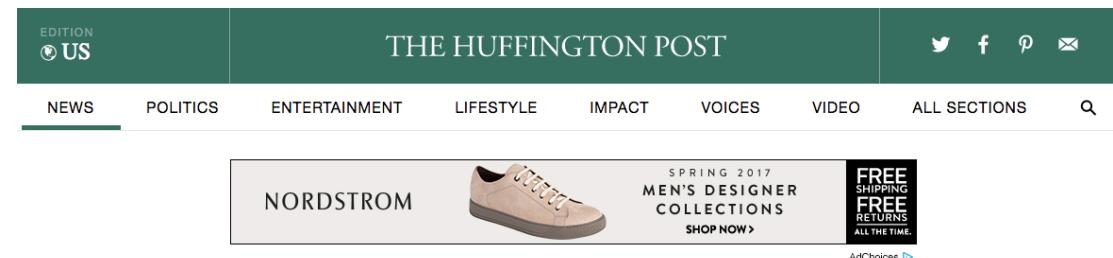
- Sell Products

The screenshot shows the top navigation bar of the Amazon website, which includes a search bar, user profile (Hello, Diane), account links (Account & Lists), and various department icons. Below the header, there's a banner for "NEW & INTERESTING FINDS ON AMAZON" with an "EXPLORE" button. A prominent feature is the "amazon dash" section, which highlights "Free after first press" and shows a hand pressing a blue "TAP HERE" button next to a container of chips and two bottles of Fiji water. Other banners include one for "AmazonFresh: Martha Stewart meal kits now available" showing various dish images, and another for "WANT FAST SPEEDS FOR THE RIGHT PRICE?" featuring an advertisement for CenturyLink High-Speed Internet. At the bottom, there's a section for "Related to items you've viewed" with images of Dash Buttons and a smartphone displaying a map.

Web Analytics Goals

Content Publisher

- Encourage engagement and frequent visitation.



The screenshot shows the top navigation bar of The Huffington Post. It includes a 'EDITION' dropdown set to 'US', followed by links for 'NEWS', 'POLITICS', 'ENTERTAINMENT', 'LIFESTYLE', 'IMPACT', 'VOICES', 'VIDEO', and 'ALL SECTIONS'. On the right are social media icons for Twitter, Facebook, Pinterest, and Email, along with a search icon. Below the main navigation is a promotional banner for Nordstrom's Spring 2017 Men's Designer Collections, featuring a brown leather shoe. The banner also includes 'FREE SHIPPING FREE RETURNS ALL THE TIME.' and an 'AdChoices' link.

‘WIRETAP’ WIPEOUT

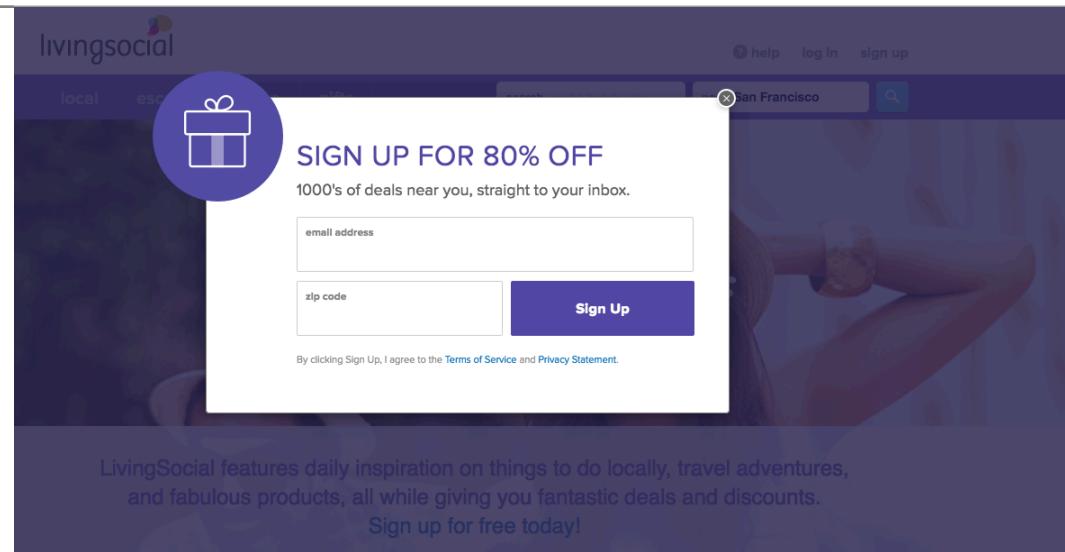


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Web Analytics Goals

Lead Generation

- Identify and cultivate potential customers for a business's products or services.
- Collect contact information for sales.



LivingSocial	Inbox	ACTION REQUIRED: Redeem your LivingSocial Deal Now! - enter your LivingSocial voucher code into the "Apply Promo Code or Gift Certificate
LivingSocial	Inbox	Here is your LivingSocial password reset link - LivingSocial width="112" height="42" /> Hey there! We've received a request to reset your LivingSocial password. Click here to reset it.
LivingSocial	Inbox	Tio Chava's Restaurant - LivingSocial Gourmet & Organic Burgers, Patty Melts, Wings & More : \$30 to Spend on Food and Drinks Tio Chava's
LivingSocial	Inbox	2 Nights on a Tucson Ranch + Trail Ride - LivingSocial Ride and Relax at Tucson's Tanque Verde Ranch Tanque Verde Ranch \$289 http://t.livingsocial.com/2nights
LivingSocial	Inbox	Massage - LivingSocial One-Hour Integrative Swedish Massage Abaton Center of Healing Arts \$32 http://t.livingsocial.com/track/massage
LivingSocial Deals	Inbox	-> Many Congrats, You're Invited: 1000 Thread Count Swiss Dot Sheet Set Is Waiting for... - t.livingsocial.com/track/g_01E193KOG9DNI3PS1
One Stop Shop	Inbox	Free Slurpee, Virgin America Flash Sale, and More - off a LivingSocial purchase of \$30 or more Get \$5 off a purchase of \$30 or more (http://www.livingsocial.com/track/slurpee)



Questions

What is your group project about?

What is the goal of the website?

Which user behaviors to be tracked?



Conversion

Conversion: An activity on your site that is important to accomplish the goal.

- Macro : User actions directly accomplishing the goal.
- Micro : Smaller goals bringing users closer to the macro conversions.
- Examples...

→ Collects and monitor micro and macro conversions.



Google Analytics

Web analytics tool with...

- Collection
- Configuration
- Processing
- Reporting



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Google Analytics

Use Page-tagging technology.

Collect data by...

- Create an Analytics account.
- Add the Analytics tracking code (.js) to each page of your site before closing </head> in the HTML.



Google Analytics

Collect data by...

- Websites – Web tracking code.
- Mobile Applications - iOS, Android SDK.
- Any Internet-connected devices including Online Point-of-sales/Customer Relation Management (CRM) devices –
Measurement Protocol.

[https://support.google.com/analytics/answer/1009612?hl=en\](https://support.google.com/analytics/answer/1009612?hl=en)

<https://support.google.com/analytics/answer/2587086>



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Create Google Analytics Demo Account

<https://www.google.com/analytics/>

Choose “Analytics” and “Try the demo”.

Choose “Access demo account”.

The screenshot shows the Google Analytics interface. At the top, there's a navigation bar with a profile picture for Diane Woodbridge, options to "Add an account", "Manage account", and "Sign out". Below the navigation bar, the main dashboard shows an "Audience Overview" report. The report includes a yellow banner stating "You are using a filtered view, which may cause your Users count to be inaccurate. Learn more X". It also features sections for "ANALYTICS EDUCATION" (with links to "Introduction to Audience Analysis" and "Compare mobile conversion rates"), "Use this section to understand your audience characteristics.", and "Audience Reports" (with icons for Audience, Demographics, and Mobile). On the left side, there's a sidebar with various navigation links: Google Merchandise Store, 1 Master View, Search reports and help, CUSTOMIZATION, Reports, REAL-TIME, AUDIENCE (which is highlighted in orange), Overview, Active Users, Cohort Analysis (BETA), User Explorer, Demographics, Interests, and Geo. A blue callout box points to the "AUDIENCE" link in the sidebar. A blue modal window titled "New Google Analytics navigation" is overlaid on the page, asking if the user wants to take a quick tour. The modal includes a "NO" and "YES" button. The overall interface has a clean, modern design with a light gray background and blue accents for interactive elements.

Google Analytics Demo Account

Demo account data : from Google Merchandise Store including traffic source, content, behavior of users on the site and transaction data.

- <https://www.googlemerchandise.com/>



Google Analytics Demo Account

Demo account data : from Google Merchandise Store including traffic source, content, behavior of users on the site and transaction data.



Google Analytics Demo Account

The image shows the Google Merchandise Store website. At the top left is the store logo. To its right is a search bar with placeholder text "Search...". In the top right corner is a shopping cart icon with a red notification bubble showing the number "0". Below the header is a navigation bar with categories: Apparel, Bags, Drinkware, Electronics, Accessories, Office, Shop by Brand, Nest, and a prominent "Spring Sale" button. The main content area features a large "Spring Sale!" banner on the left and a "FILTER" button on the right. Below these are three product cards, each showing a person wearing a Google-branded hoodie against a white background. The hoodies are dark grey, light grey, and black.

Google Analytics



Main Steps

- **Collection**
- Configuration
- Processing
- Reporting



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Google Analytics



Collect data

- Use Google Analytics Java script tracking code.
- Track a web data during a “session”.
 - Session
 - Google Analytics organizes data by session.
 - Begins when a user navigates to a page that includes the Google Analytics tracking code.
 - Ends after 30 minutes (default) of inactivity.
 - Once Google Analytics processes the data it collects, it's stored in a database where it can't be changed.



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Google Analytics

Collect Data

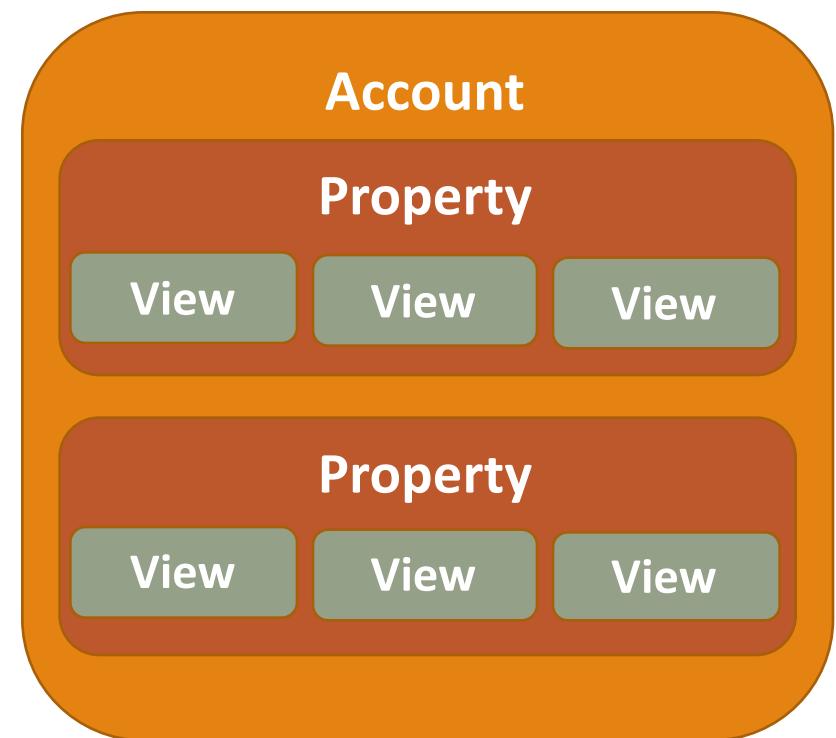
- Hit
 - A URL that passes parameters of information for reporting.
 - Hit data sent from a tracker to Google Analytics.
 - Type
 - pageview - when a user loads a page with the tracking code.
 - event - when a user interacts with a particular element.
 - transaction (e-commerce) - when a purchase happens.
 - Social interaction, User timing, App/Screen, Exception.
- Google Analytics organizes hits into users and sessions.



Google Analytics Hierarchy

Account

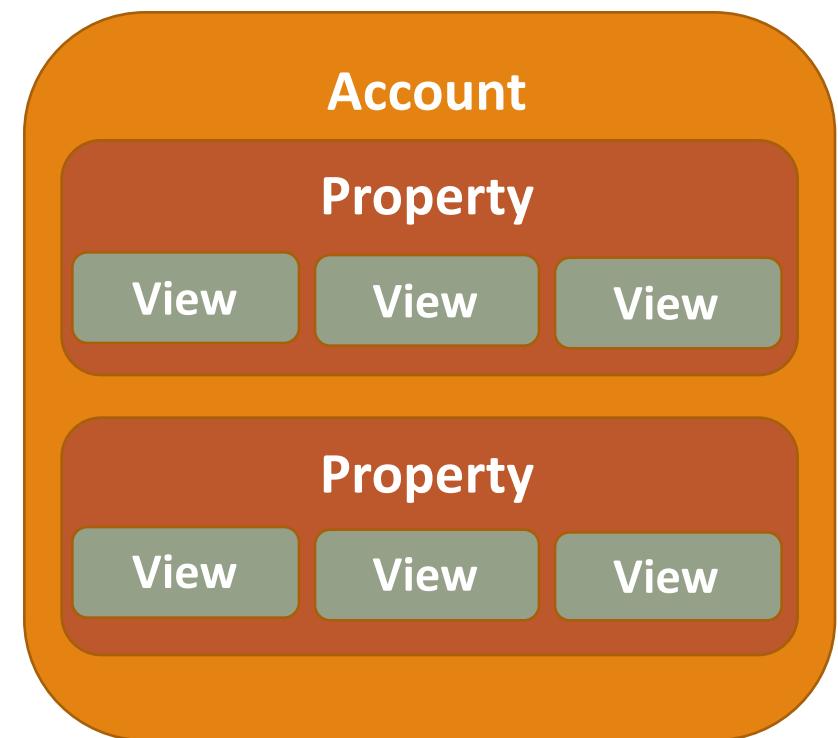
- Create an account for each business.
(Up to 100 Analytics accounts per Google account)
- Have up to 50 properties.



Google Analytics Hierarchy

Property

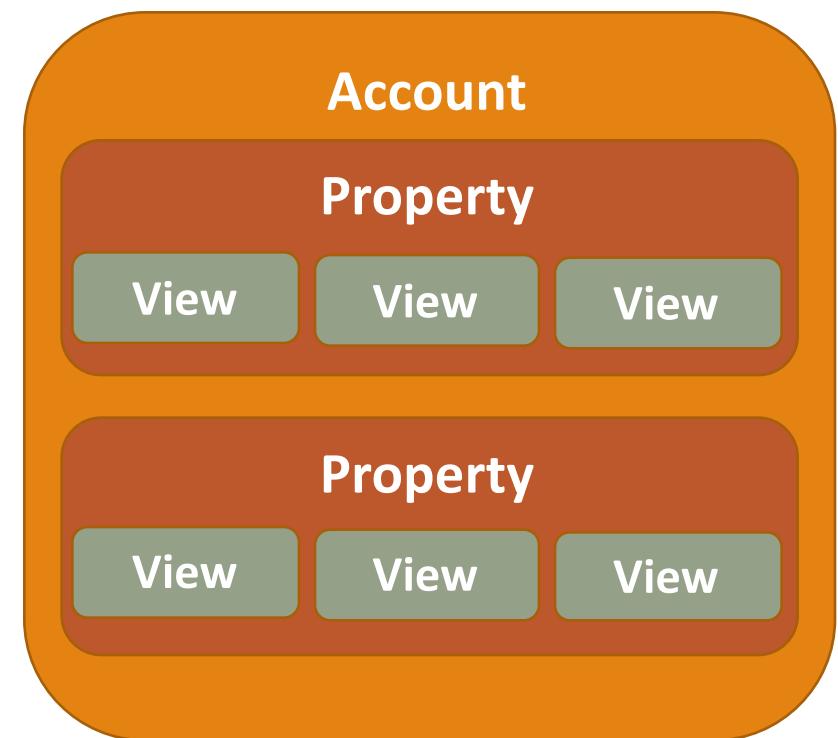
- Allow to see different part of the business (websites, mobile apps, tablet apps, etc.).
- Collect data using a unique tracking ID.
- Can have up to 25 views per property.



Google Analytics Hierarchy

View

- Where you can see reports and analysis tools.
- Users can use filters to customize views and see only a subset of data in your reports.
- New views cannot include website data from before the view was created.
- If you delete a view, admin can recover it within 35 days.



<https://support.google.com/analytics/answer/2649553?hl=en>



Google Analytics Hierarchy

The screenshot shows the Google Analytics interface for the "Google Merchandise Store" account, which contains "1 Master View". The left sidebar includes links for Search reports and help, CUSTOMIZATION, Reports, REAL-TIME, AUDIENCE (with sub-links for Overview, Active Users, Cohort Analysis BETA, and User Explorer), and a bottom navigation bar with Home, Analytics, and Admin.

The main content area displays the "Audience Overview" report. It features a yellow banner stating: "You are using a filtered view, which may cause your Users count to". Below this are standard reporting controls: Email, Export ▾, Add to Dashboard, and Shortcut. The primary data card shows "All Users" with "100.00% Sessions". A secondary card titled "Overview" shows a comparison between "Sessions" (selected) and "Select a metric". The "Sessions" value is listed as "4,000".

Google Analytics Hierarchy

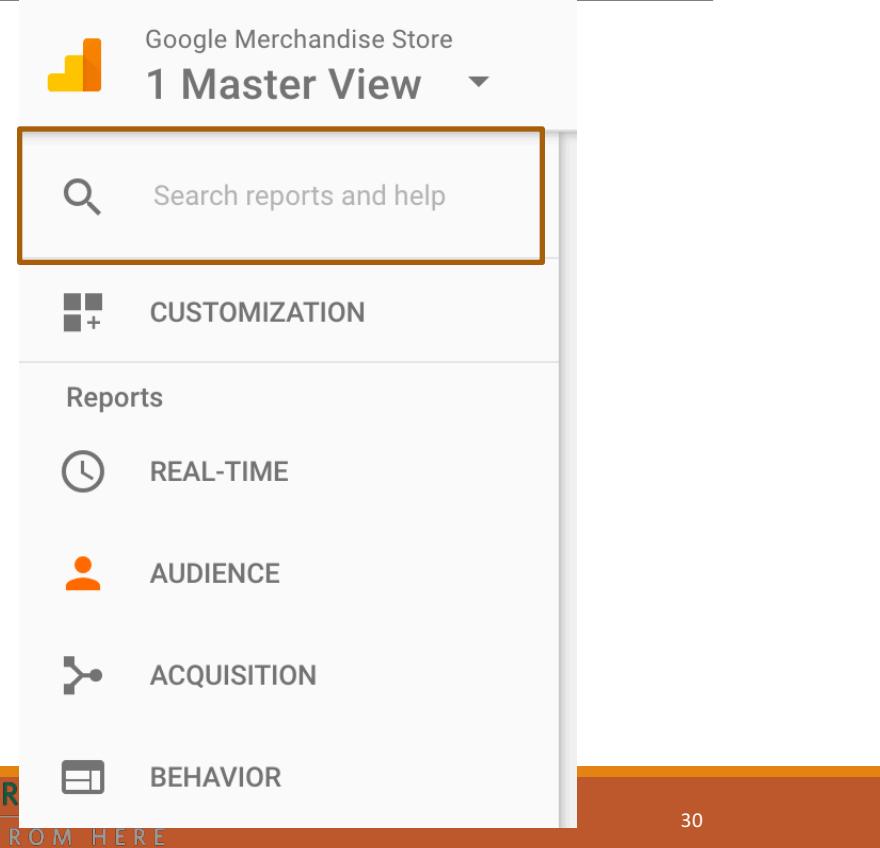
The screenshot shows the Google Analytics interface with the following hierarchy:

- Accounts**: Demo Account (Beta) > Google Merchandise Store > 1 Master View
- Properties & Apps**: UA-54516992-1
- Views**:
 - 1 Master View (92320289)
 - 2 Test View (92324711)
 - 3 Raw Data View (90822334)

A callout box highlights the **Unfiltered View** under Views, with the text: "To ensure you can always access the original data".

Google Analytics Account

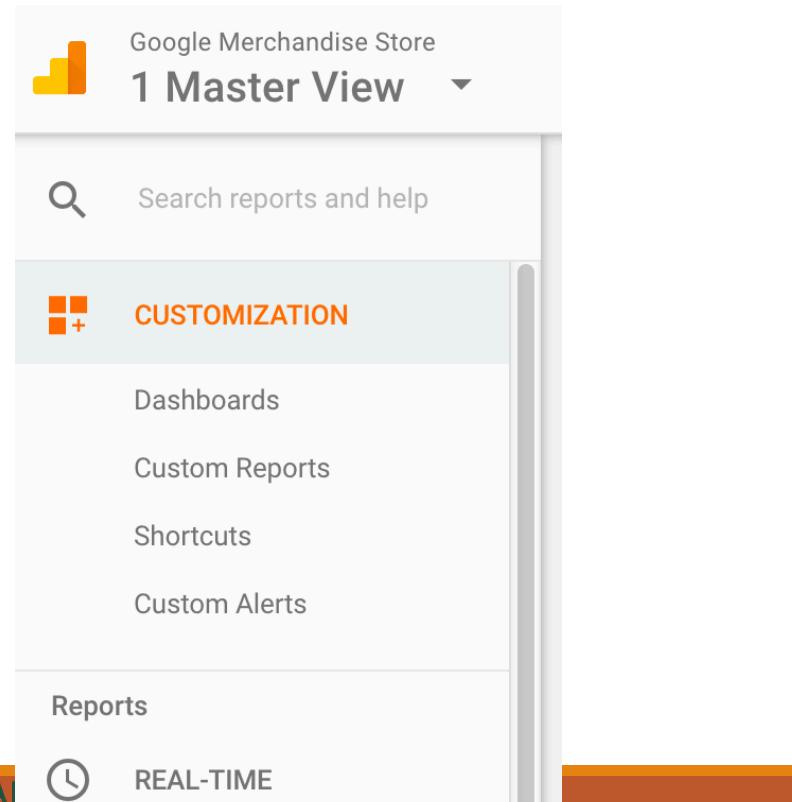
Search : Search reports and help.



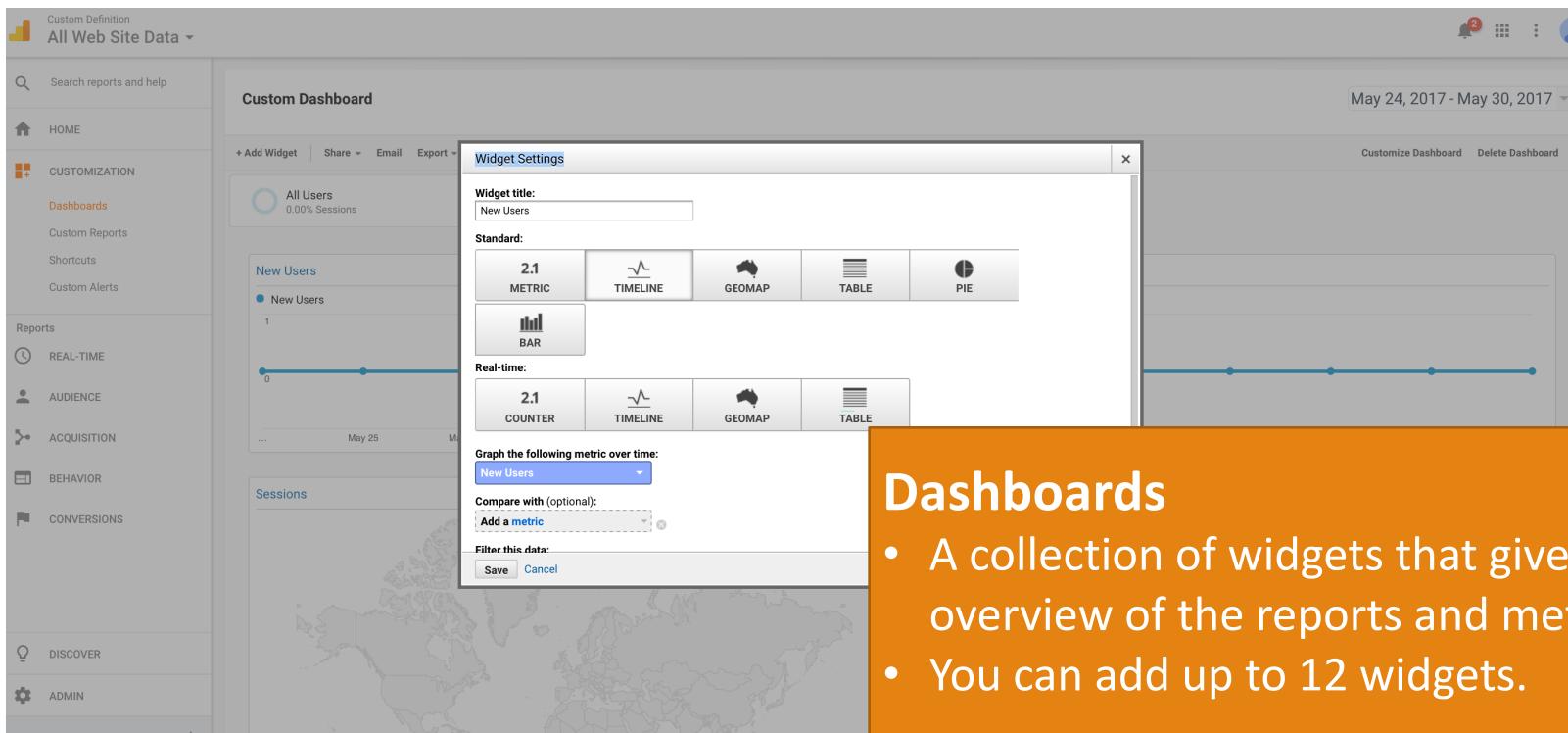
The screenshot shows the Google Analytics dashboard. At the top, there is a header with the Google Merchandise Store logo and a dropdown menu showing "1 Master View". Below the header is a search bar with the placeholder "Search reports and help", which is highlighted with a red border. The main content area is divided into several sections: "CUSTOMIZATION" (with a grid icon), "Reports" (with a clock icon), "REAL-TIME" (with a person icon), "AUDIENCE" (with a person icon), "ACQUISITION" (with a person icon), and "BEHAVIOR" (with a bar chart icon). The entire interface has a light gray background with white cards for each section.

Google Analytics Account

Customization : Create dashboards, customized reports, shortcuts, custom alerts.



Google Analytics Account



The screenshot shows the Google Analytics interface with a 'Custom Dashboard' selected. A 'Widget Settings' dialog is open over a 'New Users' metric card. The dialog title is 'Widget Settings' and the 'Widget title:' field contains 'New Users'. Below it, there are two tabs: 'Standard:' and 'Real-time:'. Under 'Standard:', the '2.1 METRIC' tab is selected, showing a bar chart icon labeled 'BAR'. Under 'Real-time:', the '2.1 COUNTER' tab is selected, showing a timeline icon labeled 'TIMELINE'. At the bottom of the dialog, there's a dropdown for 'Graph the following metric over time:' set to 'New Users', a 'Compare with (optional)' dropdown with 'Add a metric' placeholder, and a 'Save' button.

Dashboards

- A collection of widgets that give you an overview of the reports and metrics.
- You can add up to 12 widgets.



Google Analytics Account

Reports

- Real-time
- Audience
- Acquisition
- Behavior
- Conversion

Reports

-  REAL-TIME
-  AUDIENCE
-  ACQUISITION
-  BEHAVIOR
-  CONVERSIONS

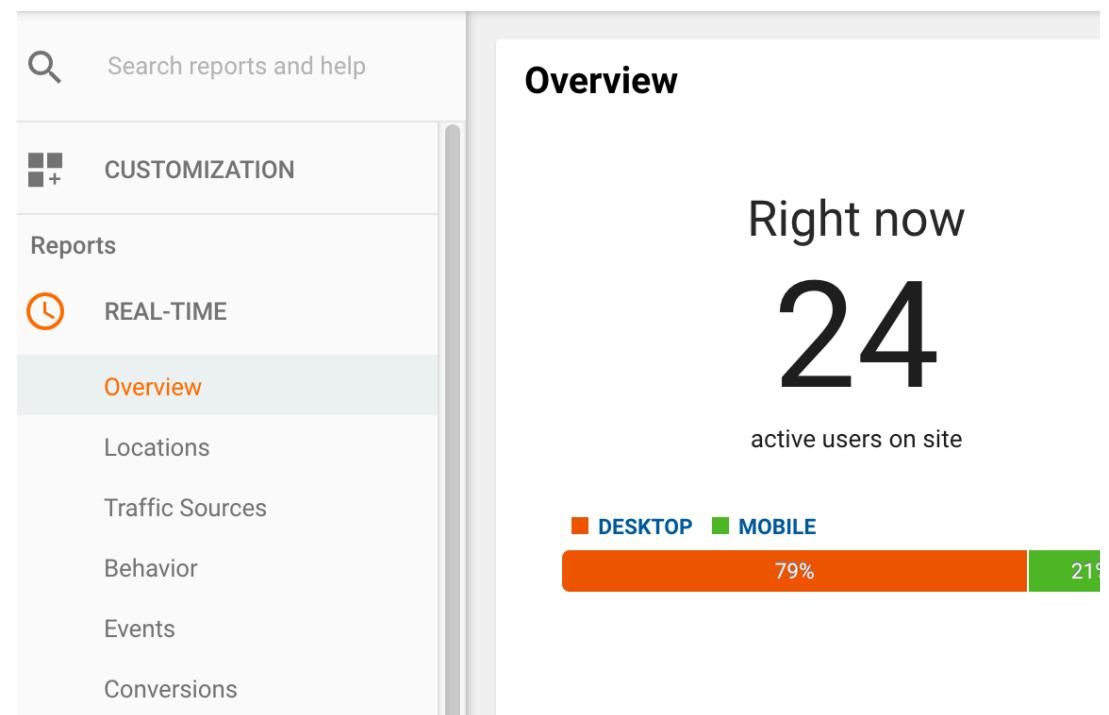


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Google Analytics Account

Real-time reports

- Report live user behaviors including location, traffic sources and conversions.



Google Analytics

The screenshot shows the Google Analytics Audience Overview dashboard for the "Google Merchandise Store" account. The date range is set to "May 25, 2017 - May 31, 2017". The chart displays the number of users over time, starting at approximately 2,500 on May 25, dipping slightly to about 2,200 on May 27, and then recovering to around 2,500 by May 31.

Date	Users
May 25	~2,500
May 26	~2,400
May 27	~2,200
May 28	~2,150
May 29	~2,250
May 30	~2,400
May 31	~2,500

A callout box highlights a note: "The date range set for a Dashboard doesn't apply to Real-Time widgets."

Google Merchandise Store
1 Master View

Audience Overview

Email Export Add to Dashboard Shortcut

This report is based on 100% of sessions. Learn more Greater precision

May 25, 2017 - May 31, 2017

All Users 100.00% Users + Add Segment

Overview

Users vs. Select a metric

Hourly Day Week Month

Users

3,000

2,500

2,000

1,500

1,000

500

0

May 26 May 27 May 28 May 29 May 30 May 31

New Visitor Returning Visitor

The date range set for a Dashboard doesn't apply to Real-Time widgets .

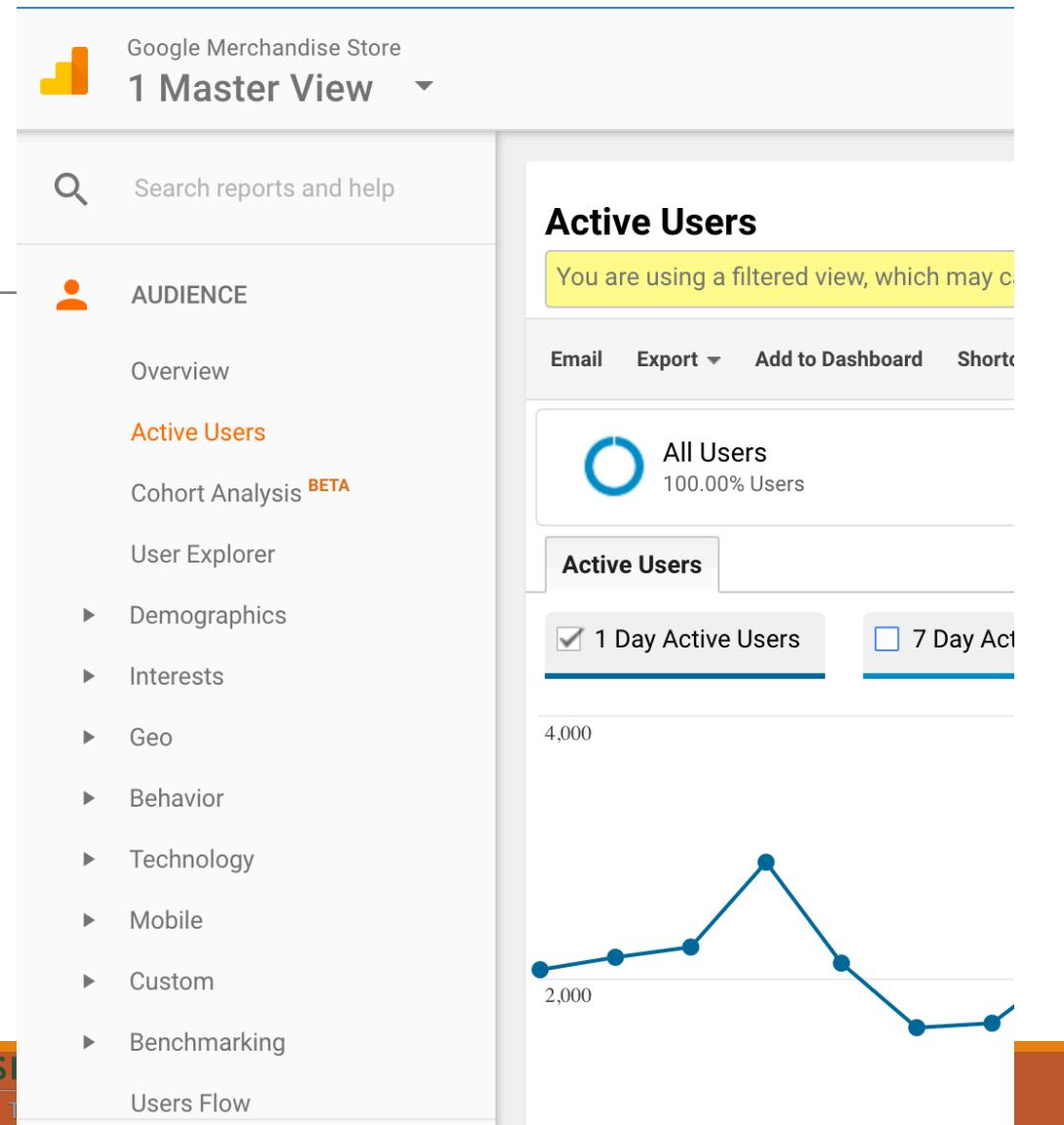
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35

Google Analytics

Audience reports

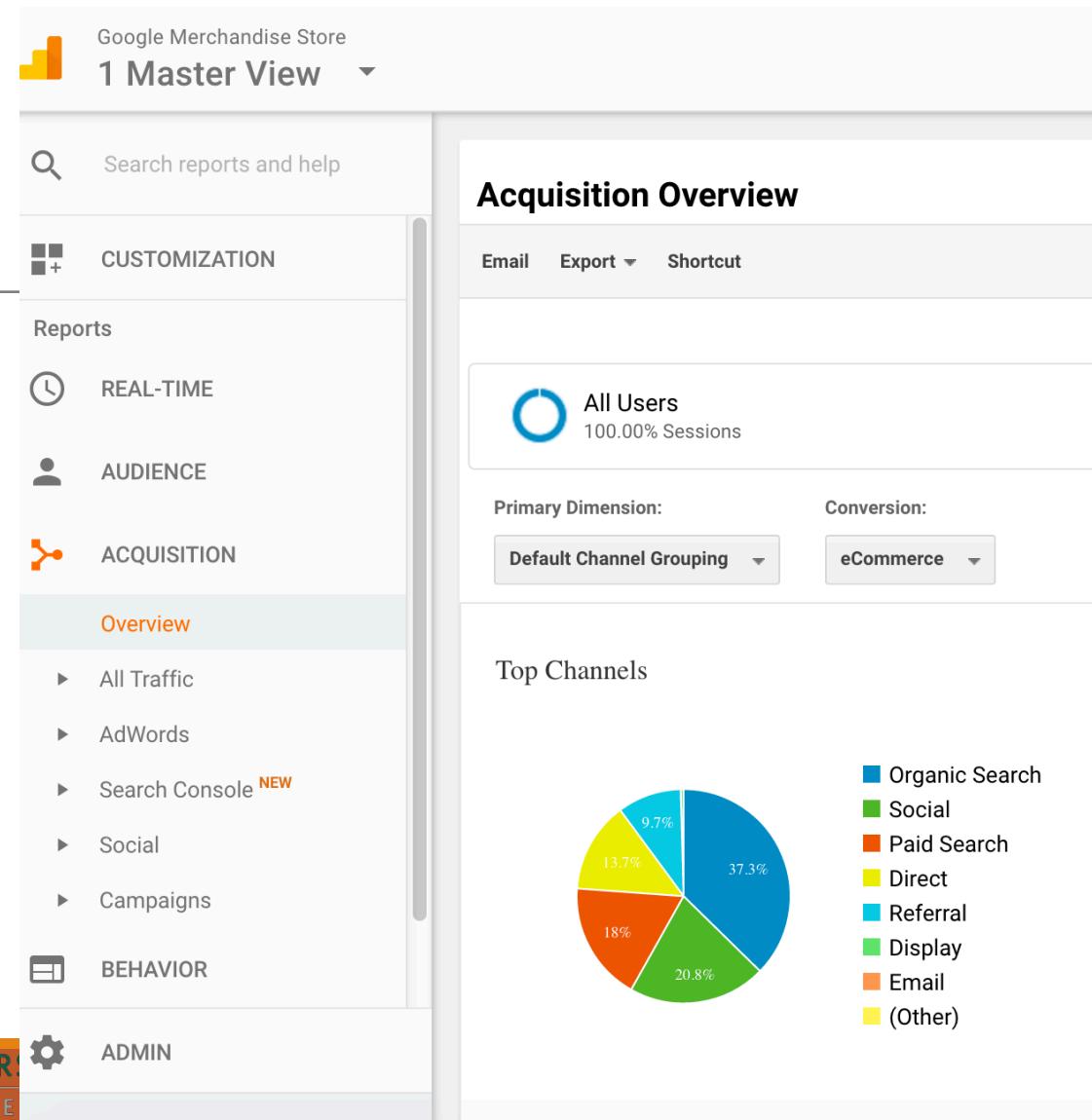
- Report characteristics of users including age, gender, interests and whether they're new or returning.



Google Analytics

Acquisition reports

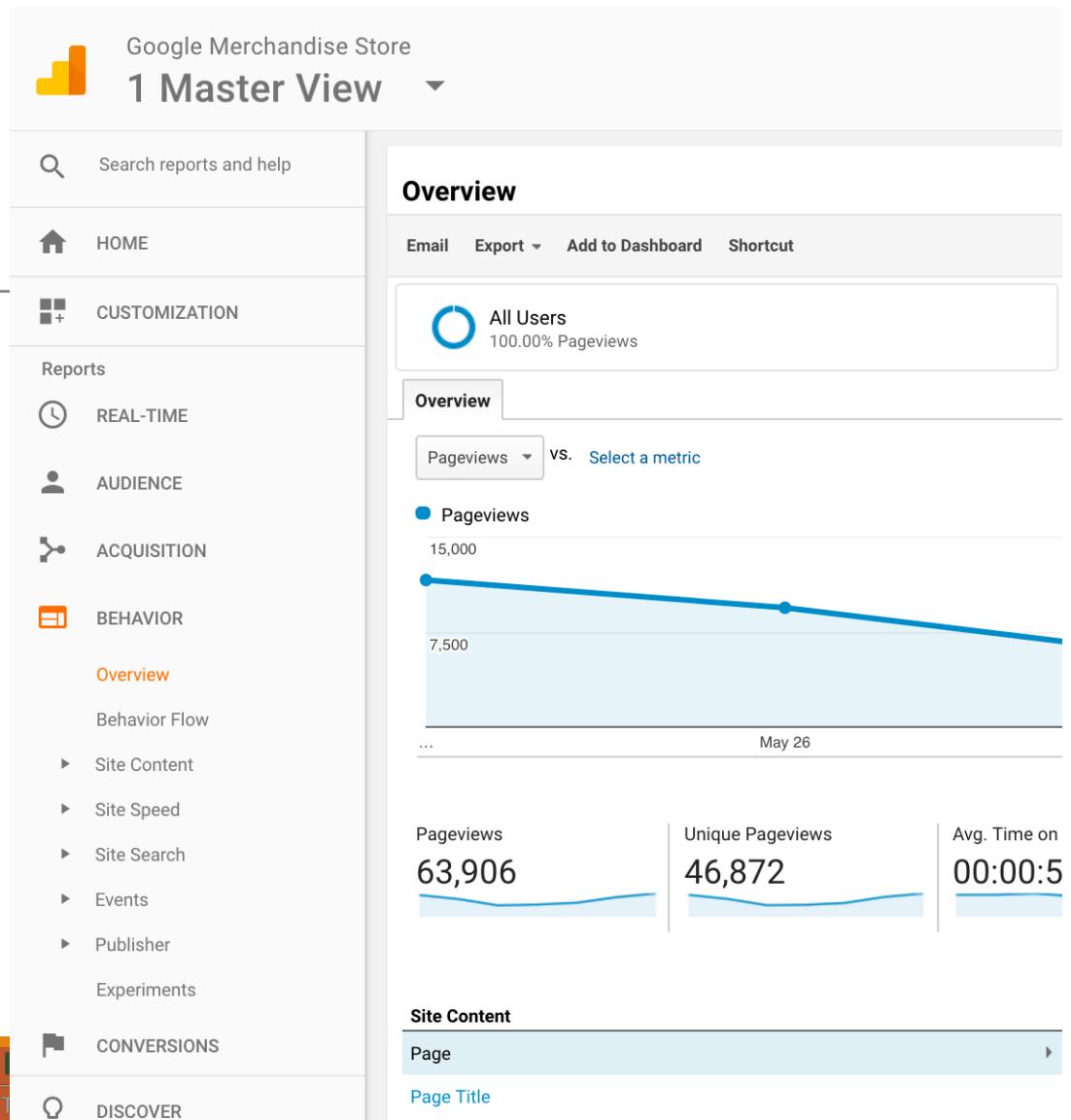
- Show which channels, source, medium brought users to your site.



Google Analytics

Behavior reports

- Report how people engaged on the site including which pages they viewed, and their landing and exit pages.
- With additional implementation, you can track what users searched for and whether they interacted with certain elements.



Google Analytics

Conversion reports

- Track website goals based on your business goals.

The screenshot shows the Google Analytics interface for the "Google Merchandise Store" account, specifically the "1 Master View". The left sidebar navigation includes links for Search reports and help, ACQUISITION, BEHAVIOR, CONVERSIONS (selected), Goals (expanded), Overview (selected), Goal URLs, Reverse Goal Path, Funnel Visualization, Goal Flow, Smart Goals, Ecommerce, Multi-Channel Funnels, Attribution, and ADMIN.

The main content area displays the "Overview" report. It shows a summary for "All Users" with "100.00% Goal Completions". A dropdown menu for "Goal Option" is set to "Goal 1: Purchase Completed". Below this, there are two sections: "Overview" and "Purchase Completed (Goal 1 Completions) vs. Selected". The "Overview" section contains four metrics: "Purchase Completed (Goal 1 Abandonment Rate)", "Purchase Completed (Goal 1 Completions)", "Purchase Completed (Goal 1 Conversion Rate)", and "Purchase Completed (Goal 1 Value)". The "Purchase Completed (Goal 1 Completions) vs. Selected" section features a line chart showing performance over time, with a notable dip around February 8th.

Google Analytics Account

Admin : Include settings (permissions, tracking code, view settings and filters, etc.)

The screenshot shows the Google Analytics Admin interface. At the top, it displays "Google Merchandise Store" and "1 Master View". The main area is titled "Administration" and shows the "Demo Account (Beta)" structure:

- ACCOUNT:** Demo Account (Beta)
 - Account Settings
 - User Management
 - All Filters
 - Trash Can
- PROPERTY:** Google Merchandise Store
 - Property Settings
 - Tracking Info
- VIEW:** 1 Master View
 - View Settings
 - Goals
 - Filters
 - Ecommerce Settings
 - Calculated Metrics BETA

On the left, there is a sidebar with various icons for search, reports, users, and more. At the bottom right, there is a page number "40".

Google Analytics Data

Collects

- The total time a user spends on your site.
- The time a user spends on each page and in what order those pages were visited.
- What internal links were clicked.
- The geographic location of the user.
- Screen size and whether Flash or Java is installed.
- The referring site.
- Type of browser, Device, OS, Language, Traffic source, etc.
- Avoid sending PII to Google when collecting Analytics data.



Overview Reports

Provides a high level summary.

Each report include Overview Report.

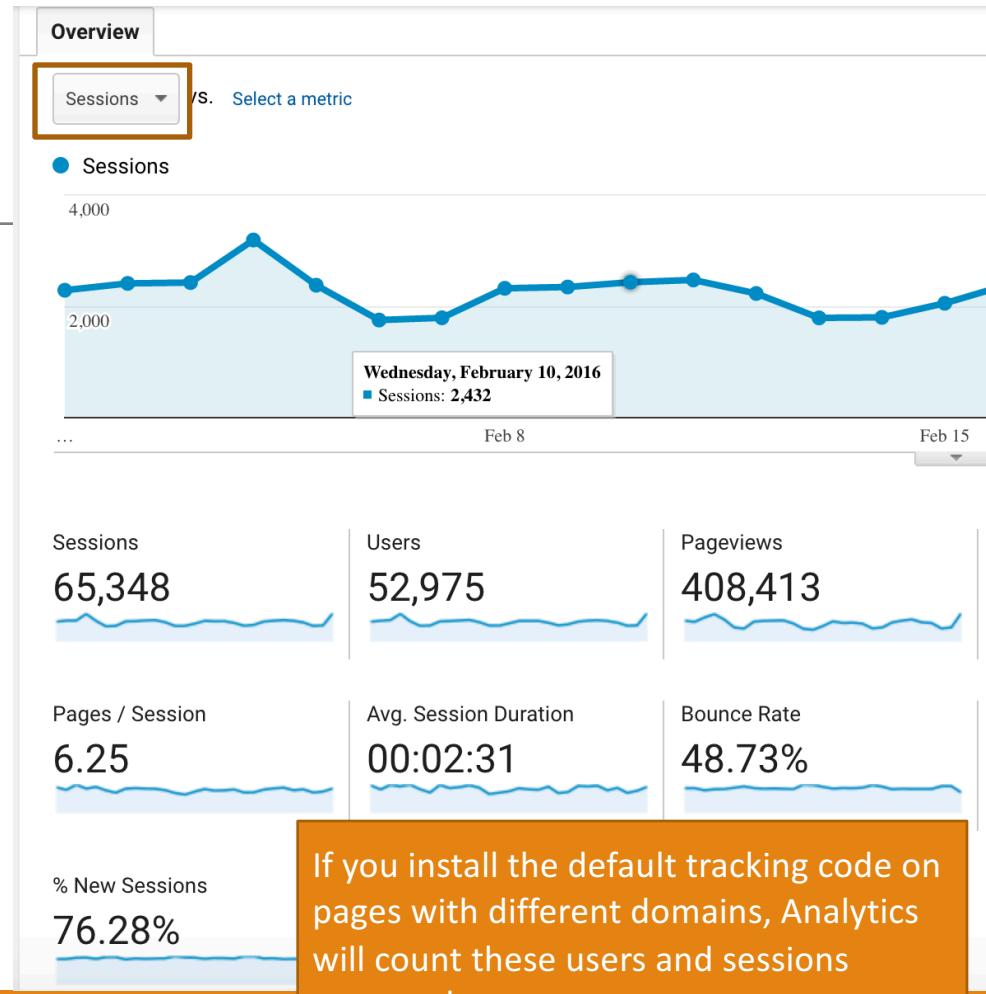


Overview Reports

Audience Overview : Break your users down by different characteristics including geography, technology and behaviors.

of users, # pages they visited in a session, average session duration, bounce rate, etc. per Demographics, System, Mobile, Language.

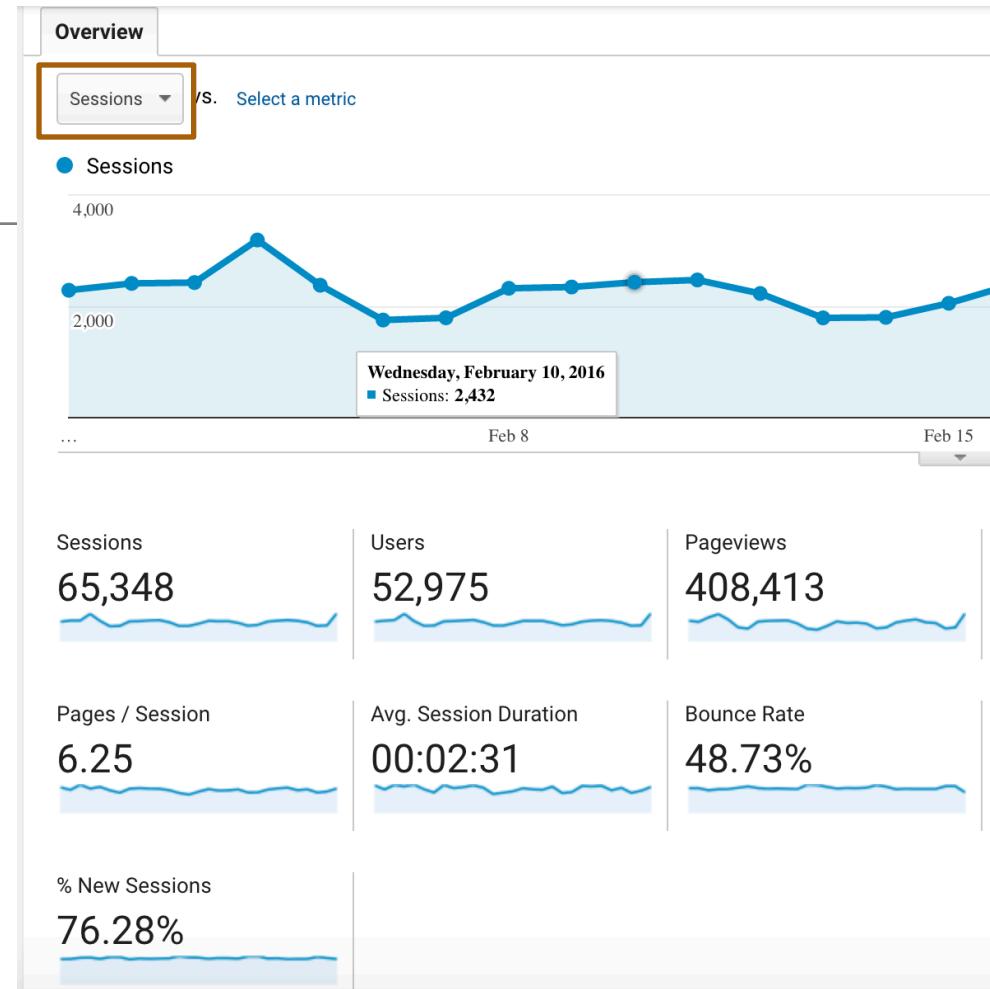
- Users - Users that had at least one session on your site in the given date range.
Users are distinguished by anonymous unique ID using first-party cookies (_ga).
- Cross-device tracking?



Overview Reports

Audience Overview

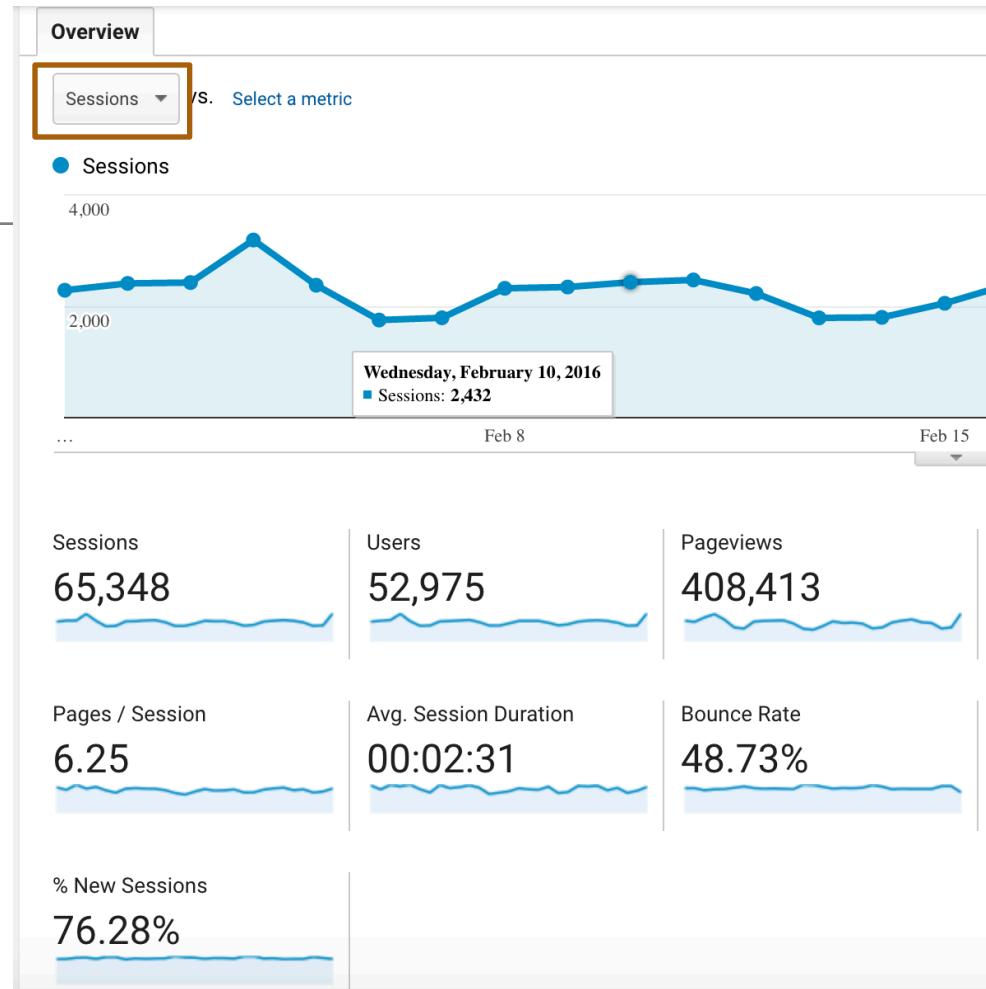
- New Users: Users with new unique ID.
- Number of Session per User: The average number of Sessions per User.
- Pageviews : The total number of times that pages with the Google Analytics tracking code were loaded/displayed. This includes repeated viewings of a same page by the same user.
- Pages/Session : The number of pages viewed during each session.



Overview Reports

Audience Overview

- Avg. Session Duration : Avg. length of a session.
- Cf. Avg. Time on Page.
- Bounce Rate: The percentage of users who left the site after viewing a single page and taking no actions.



Overview Reports

Audience Overview : # of users, pages they visited in a session, average session duration, bounce rate, etc. Per

- Demographics
 - Demographics and interests data provides information about the age and gender of your users.
 - Collected by the **DoubleClick third-party cookie and the Device Advertising ID**.

Demographics
Language
Country
City
System
Browser
Operating System
Service Provider
Mobile
Operating System
Service Provider
Screen Resolution

Country	Users	% Users
1. 🇺🇸 United States	5,587	45.13%
2. 🇮🇳 India	840	6.79%
3. 🇬🇧 United Kingdom	641	5.18%
4. 🇯🇵 Japan	411	3.32%
5. 🇨🇦 Canada	360	2.91%
6. 🇩🇪 Germany	249	2.01%
7. 🇫🇷 France	234	1.89%
8. 🇹🇼 Taiwan	234	1.89%
9. 🇦🇺 Australia	222	1.79%
10. 🇪🇸 Spain	212	1.71%

<https://www.google.com/settings/u/0/ads/authenticated>

<https://support.google.com/analytics/answer/2799357?hl=en>



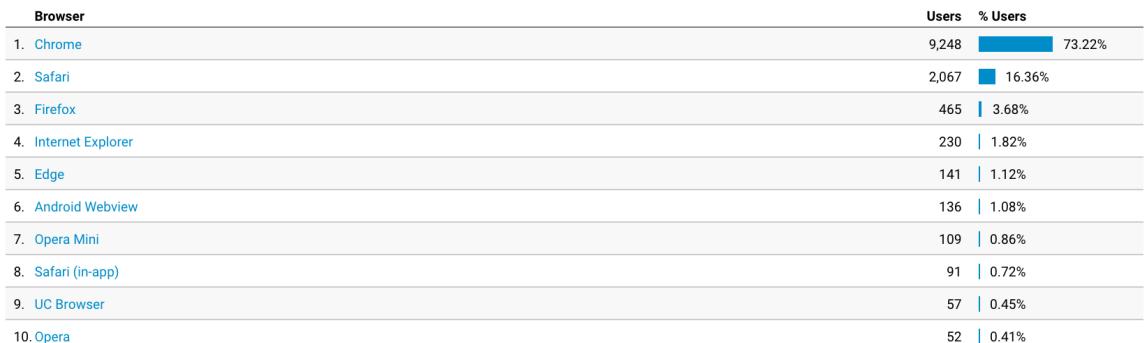
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Overview Reports

Audience Overview : # of users, pages they visited in a session, average session duration, bounce rate, etc. Per

- System
 - Technology including Browser, OS and Network Provider that users use to consume your contents.
 - Helps to plan your implementation accordingly.

Demographics
Language
Country
City
System
Browser
Operating System
Service Provider
Mobile
Operating System
Service Provider
Screen Resolution



<https://support.google.com/analytics/answer/1012034>

[view full report](#)



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Overview Reports

Audience Overview : # of users, pages they visited in a session, average session duration, bounce rate, etc. Per

- Mobile
 - Which mobile devices are being used to interact with your content.



<https://support.google.com/analytics/answer/1012034>

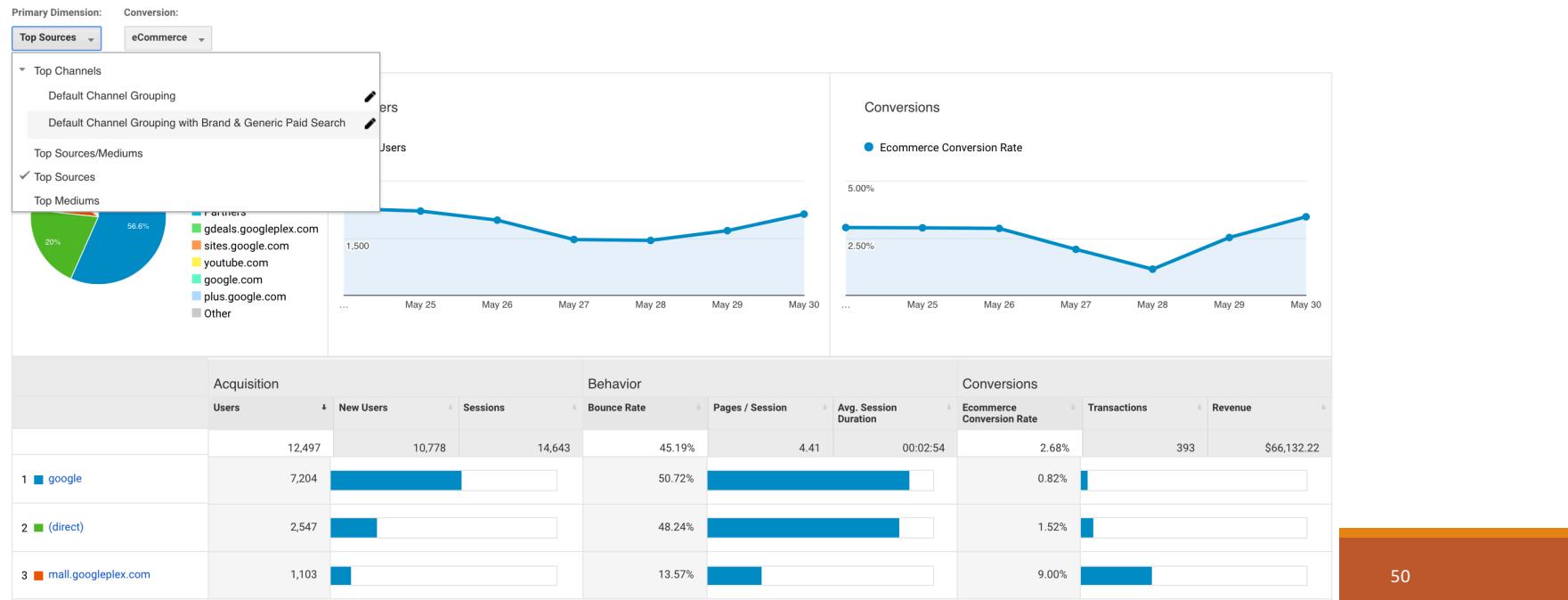


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Overview Reports

Acquisition Overview

- Users, New Users, Sessions per channel, sources and medium.



Overview Reports

Acquisition Overview

- Users, New Users, Sessions per
- Sources : the origin of a referral.
- Medium : the general category of the source.
 - Organic – unpaid search.
 - CPC (Cost per click) – paid search.
 - Referral – Traffics coming from another site.
 - Social – From a social media.
- Channel : Groups of the most common sources and medium of traffic.



Overview Reports

Behavior Overview

- Pageviews, Unique Pageviews, Avg.Time on Page, Bounce Rate, % Exit Per Site Content, Site Search, Events.
- Exit Rate : Percentage that were the last in the session for all pageviews to the page.
- Cf. Bounce Rate.



Overview Reports

Behavior Overview

- Pageviews, Unique Pageviews, Avg.Time on Page, Bounce Rate, % Exit Per
- Site Content : Page URL and page title.

Site Content	Page	Pageviews	% Pageviews
Page	1. /home	13,555	21.21%
Page Title	2. /basket.html	3,834	6.00%
Brands (Content Group)	3. /google+redesign/shop+by+brand/youtube	3,058	4.79%
Product Categories (Content Group)	4. /google+redesign/apparel/mens/mens+t+shirts	2,212	3.46%
Clothing by Gender (Content Group)	5. /signin.html	2,184	3.42%
Site Search	6. /google+redesign/nest/nest-usa	1,591	2.49%
Search Term	7. /store.html	1,467	2.30%
Events	8. /asearch.html	1,378	2.16%
Event Category	9. /google+redesign/electronics	1,174	1.84%
	10. /yourinfo.html	1,025	1.60%

[view full report](#)

Overview Reports

Behavior Overview

- Pageviews, Unique Pageviews, Avg.Time on Page, Bounce Rate, % Exit Per
- Site Search : Which search terms they entered, and how effectively the search results created deeper engagement with your site.

Site Content	Search Term	Total Unique Searches	% Total Unique Searches
Page	1. gopher	14	93.33%
Page Title	2. nexus	1	6.67%
Brands (Content Group)			
Product Categories (Content Group)			
Clothing by Gender (Content Group)			
Site Search			
Events			
Event Category			

This report was generated on 6/1/17 at 2:49:19 PM - [Refresh Report](#)

Overview Reports

Behavior Overview

- Pageviews, Unique Pageviews, Avg.Time on Page, Bounce Rate, % Exit Per
- Events : User interactions with content that can be tracked independently from a web page or a screen load.
 - Ex. Downloads, mobile ad clicks, gadgets, Flash elements, AJAX embedded elements, video plays, etc.

Site Content	Event Category	Unique Events	% Unique Events
Page	1. Enhanced Ecommerce	7,807	 99.33%
Page Title	2. Contact Us	53	0.67%
Brands (Content Group)			view full report
Product Categories (Content Group)			
Clothing by Gender (Content Group)			
Site Search			
Search Term			
Events	Event Category		
	Event Category		

Dimensions and Metrics

Dimension : An attribute of a data set that can be organized for better analysis.

Metric : The numbers in a data set often paired with dimensions.

→ Only certain dimensions and metrics can be used together to create valid combinations.

Example.

<https://developers.google.com/analytics/devguides/reporting/core/dimsmets#cats=user,session>

<https://support.google.com/analytics/answer/1033861?hl=en>



Dimensions and Metrics

Ex.

- Browser Dimension - what browsers people are using.
- Session Metrics

Demographics	Browser	Sessions	% Sessions
Language	1. Chrome	43,752	66.95%
Country	2. Safari	10,198	15.61%
City	3. Firefox	4,706	7.20%
System	4. Internet Explorer	3,031	4.64%
Browser	5. Android Browser	914	1.40%
Operating System	6. Edge	665	1.02%



Dimensions and Metrics

Ex.

- Mobile Service Provider Dimension
- % Sessions Metrics

Demographics	Service Provider	Sessions	% Sessions
Language	1. (not set)	3,960	19.89%
Country	2. time warner cable internet llc	845	4.24%
City	3. verizon online llc	821	4.12%
System	4. service provider corporation	757	3.80%
Browser	5. charter communications	454	2.28%
Operating System	6. comcast cable communications inc.	419	2.10%
Service Provider	7. t-mobile usa inc.	388	1.95%
Mobile	8. sprint communications inc.	342	1.72%
Operating System	9. at&t internet services	334	1.68%
Service Provider	10. comcast cable communications holdings inc	319	1.60%

Full Reports

On the bottom of “Overview Reports”, there is a link for “view full report”.

The screenshot shows a reporting interface with a sidebar and main content areas. The sidebar includes links for Reports, REAL-TIME, AUDIENCE, Overview, Active Users, Cohort Analysis (BETA), User Explorer, Demographics, Interests, Geo, Behavior, and Technology. The main content area has two sections: 'Demographics' and 'Language'. The 'Demographics' section contains links for Language, Country, and City. The 'Language' section displays a list of top languages with their session counts and percentages. A 'view full report' button is located at the bottom right of the language table.

	Sessions	% Sessions
1. en-us	45,163	69.11%
2. en-gb	2,571	3.93%
3. es	1,200	1.84%
4. ru	1,168	1.79%
5. fr	1,135	1.74%
6. de	1,035	1.58%
7. pt-br	830	1.27%
8. ja	696	1.07%
9. tr	649	0.99%
10. ja-jp	583	0.89%

[view full report](#)



Full Reports

Explorer

- Summary : Dimension of 1) Acquisition, 2) Behavior, 3)Conversions
- Behavior metrics of users, pages/session, avg. session duration, etc.



Full Reports

Primary Dimensions.

Secondary Dimensions.

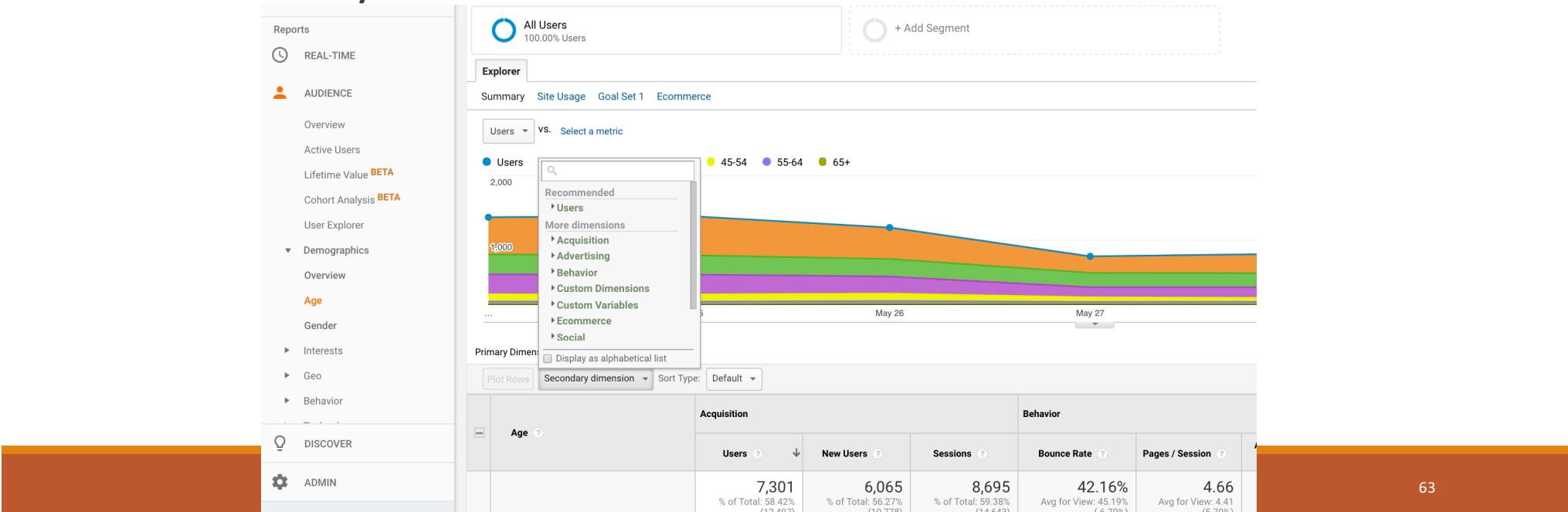
- Secondary Dimension : An additional dimension you can add to a report for more specific analysis.



Full Reports

Primary Dimensions.

Secondary Dimensions.



Example

Find what kinds of browsers were used in different countries for visiting the website?



Example

Primary Dimension: Country City Continent Sub Continent

Secondary dimension: Browser

Advanced search bar and filter icons.

Country	Browser	Acquisition			Behavior			Conversions	
		Sessions	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration	Transactions	
		65,348 % of Total: 100.00% (65,348)	76.36% Avg for View: 76.28% (0.11%)	49,902 % of Total: 100.11% (49,848)	48.73% Avg for View: 48.73% (0.00%)	6.25 Avg for View: 6.25 (0.00%)	00:02:31 Avg for View: 00:02:31 (0.00%)	1,063 % of Total: 100.00% (1,063)	
1. 🇺🇸 United States	Chrome	25,690 (39.31%)	65.71%	16,881 (33.83%)	37.93%	8.92	00:03:21	902 (84.85%)	\$
2. 🇺🇸 United States	Safari	6,903 (10.56%)	71.69%	4,949 (9.92%)	55.80%	4.71	00:01:54	77 (7.24%)	
3. 🇺🇸 United States	Firefox	1,903 (2.91%)	88.18%	1,678 (3.36%)	43.93%	5.34	00:02:19	23 (2.16%)	
4. 🇺🇸 United States	Internet Explorer	1,450 (2.22%)	78.34%	1,136 (2.28%)	50.69%	4.32	00:01:57	15 (1.41%)	
5. 🇬🇧 United Kingdom	Chrome	1,415 (2.17%)	79.58%	1,126 (2.26%)	53.57%	3.62	00:01:27	1 (0.09%)	
6. 🇨🇦 Canada	Chrome	1,192 (1.82%)	74.83%	892 (1.79%)	29.45%	10.35	00:03:33	5 (0.47%)	
7. 🇮🇳 India	Chrome	995 (1.52%)	89.15%	887 (1.78%)	50.85%	4.57	00:02:18	1 (0.09%)	
8. 🇩🇪 Germany	Chrome	789 (1.21%)	83.78%	661 (1.32%)	55.89%	4.72	00:01:39	0 (0.00%)	



Example

Country		Browser	Acquisition			Behavior			Conversions	eCommerce
Country	Browser	Sessions	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration	Transactions	Revenue	
		682 % of Total: 1.04% (65,348)	83.28% Avg for View: 76.28% (9.18%)	568 % of Total: 1.14% (49,848)	50.88% Avg for View: 48.73% (4.42%)	5.12 Avg for View: 6.25 (-18.12%)	00:02:01 Avg for View: 00:02:31 (-19.86%)	1 % of Total: 0.09% (1,063)	\$398 % of Total: (\$122,2	
1. 🇦🇺 Australia	Firefox	19 (2.79%)	105.26%	20 (3.52%)	42.11%	4.58	00:02:26	0 (0.00%)	\$0.00	
2. 🇦🇺 Australia	Android Browser	9 (1.32%)	100.00%	9 (1.58%)	44.44%	2.22	00:00:23	0 (0.00%)	\$0.00	
3. 🇦🇺 Australia	Edge	7 (1.03%)	100.00%	7 (1.23%)	71.43%	7.14	00:01:00	0 (0.00%)	\$0.00	
4. 🇦🇺 Australia	Opera	1 (0.15%)	100.00%	1 (0.18%)	100.00%	1.00	00:00:00	0 (0.00%)	\$0.00	
5. 🇦🇺 Australia	Safari (in-app)	3 (0.44%)	100.00%	3 (0.53%)	66.67%	2.00	00:06:59	0 (0.00%)	\$0.00	
6. 🇦🇺 Australia	Internet Explorer	23 (3.37%)	91.30%	21 (3.70%)	52.17%	2.00	00:00:37	0 (0.00%)	\$0.00	
7. 🇦🇺 Australia	Safari	151 (22.14%)	82.12%	124 (21.83%)	54.30%	2.97	00:01:17	0 (0.00%)	\$0.00	
8. 🇦🇺 Australia	Chrome	469 (68.77%)	81.66%	383 (67.43%)	49.68%	6.04	00:02:20	1 (100.00%)	\$398.06 (10)	



Report Precision Configuration

Google Analytics uses sampling to retrieve data from large, complex data sets faster.

- Greater precision : Default
 - Slow response, greater precision.
 - Accurate with additional response time.
- Faster response
 - Less accurate, but faster.

Mar 14, 2017 - Mar 20, 2017 ▾

This report is based on 100% of sessions. [Learn more](#)

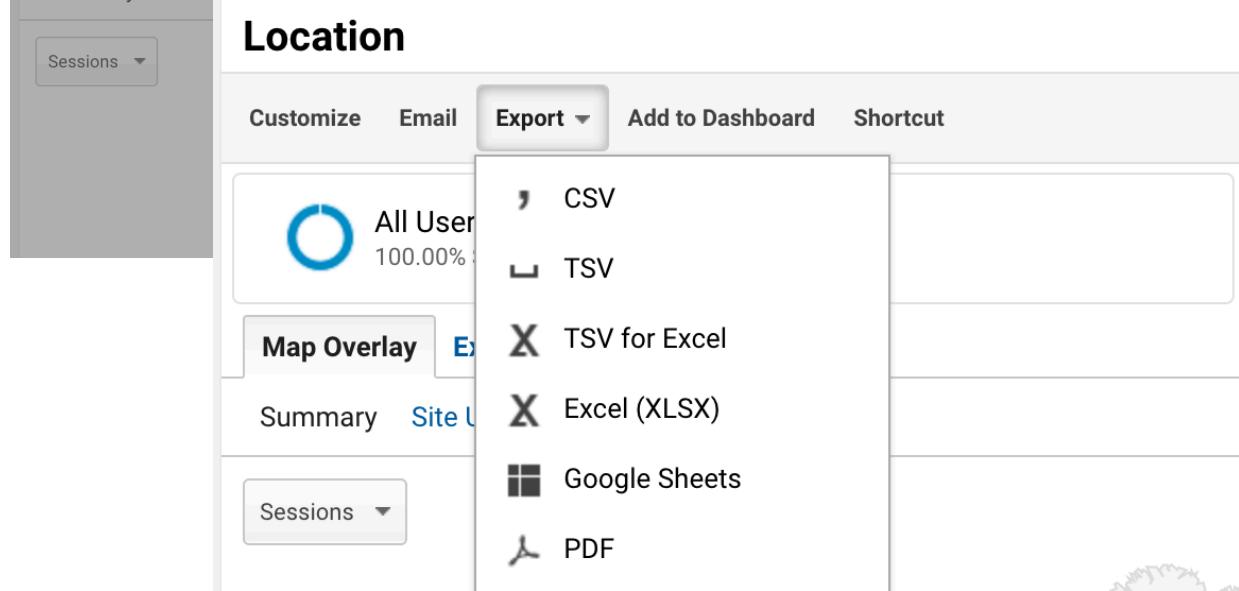
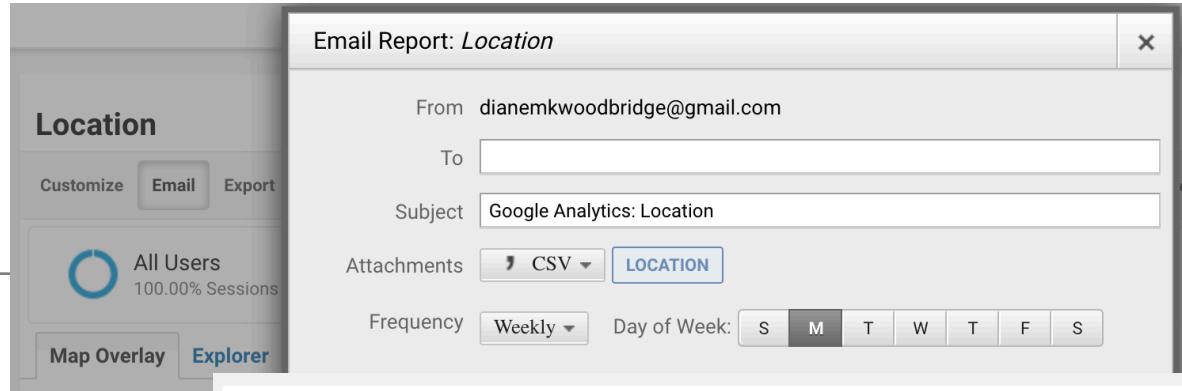
Faster response ▾ 



Export Report

Email

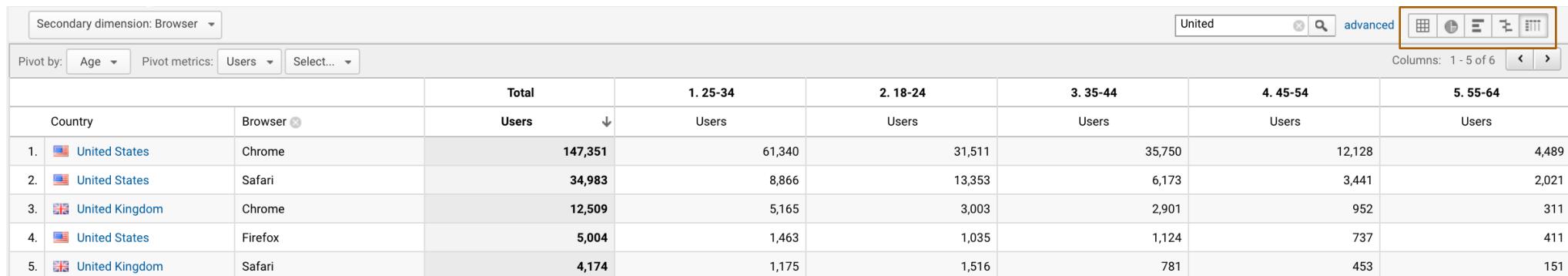
Export as a file.



Google Analytics

Views

- Table View
- Percentage - Pie Chart.
- Performance – Bar Chart, Individual performance metric.
- Comparison - Above/below average of the site average.
- Pivot



The screenshot shows a Google Analytics Pivot view. The top navigation bar includes 'Secondary dimension: Browser' dropdown, 'United' location, search bar, and advanced filtering icons. Below the navigation is a toolbar with 'Pivot by: Age', 'Pivot metrics: Users', 'Select...', and column controls for 'Columns: 1 - 5 of 6'. The main table displays user data across five age groups (1. 25-34, 2. 18-24, 3. 35-44, 4. 45-54, 5. 55-64) categorized by Country (United States and United Kingdom) and Browser (Chrome, Safari, Firefox). The data shows the total number of users and the number of users in each age group for each combination of country and browser.

		Total	1. 25-34	2. 18-24	3. 35-44	4. 45-54	5. 55-64
Country	Browser	Users	Users	Users	Users	Users	Users
1. United States	Chrome	147,351	61,340	31,511	35,750	12,128	4,489
2. United States	Safari	34,983	8,866	13,353	6,173	3,441	2,021
3. United Kingdom	Chrome	12,509	5,165	3,003	2,901	952	311
4. United States	Firefox	5,004	1,463	1,035	1,124	737	411
5. United Kingdom	Safari	4,174	1,175	1,516	781	453	151

Example - Tracking Your Website

Go to [Google Analytics](#).

Choose “Google Analytics Sign Up For Free”.

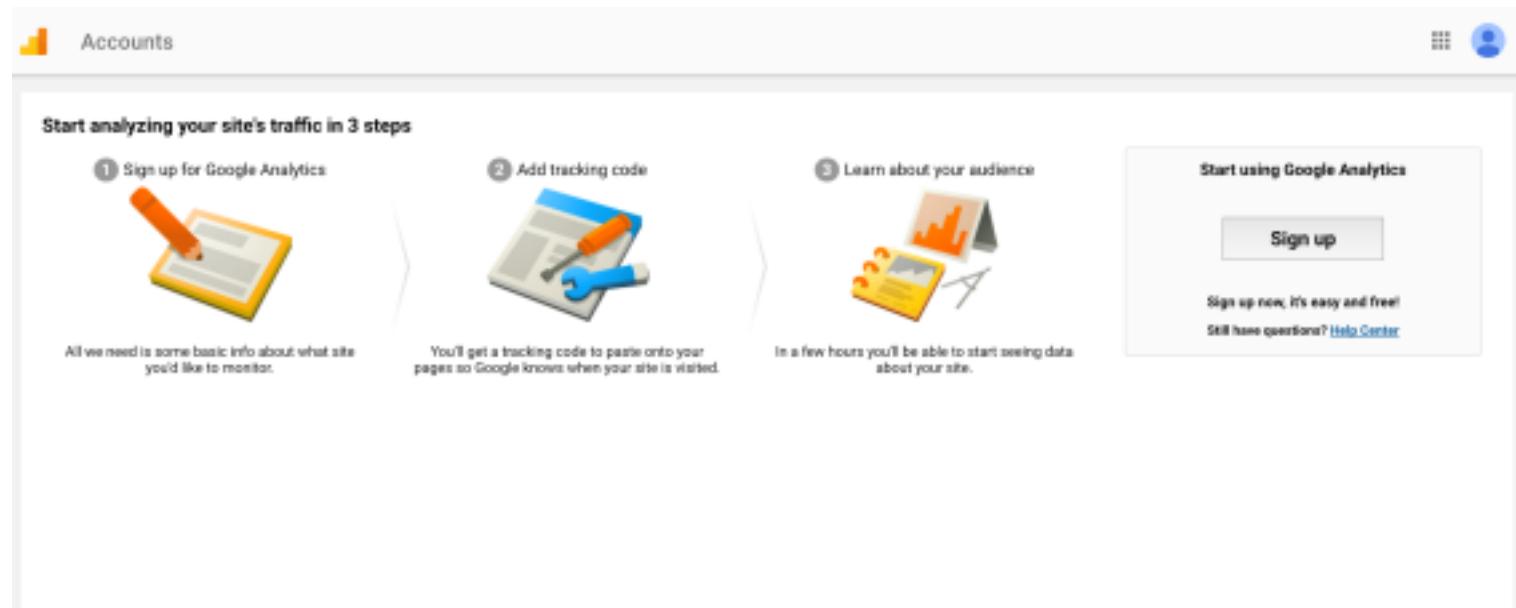
The screenshot shows the Google Analytics Solutions homepage. At the top, there's a navigation bar with links for Analytics, Tag Manager, Optimize, Data Studio, Surveys, Attribution, Audience Center, and Analytics 360 Suite. On the right side of the header, there are 'SUPPORT' and 'SIGN IN' buttons. Below the header, a large banner features the text 'SOLUTIONS FOR COMPANIES OF ALL SHAPES AND SIZES.' followed by four service cards:

- Google Analytics**: Gain new insight with a total view of the customer experience. [SIGN UP FOR FREE](#)
- Google Tag Manager**: Update your website tags easily, without having to edit code. [SIGN UP FOR FREE](#)
- Google Optimize**: Test and deliver more personal experiences on your site. [SIGN UP FOR FREE](#)
- Google Data Studio (beta)**: Empower everyone to tell better stories and make better decisions with data. [SIGN UP FOR FREE](#)

At the bottom of the page, there are two orange decorative bars on the left and right sides.

Tracking Your Website - Creating an Account

Choose “Sign Up” and fill in your information.



Tracking Your Website - Creating an Account

Choose “Get Tracking ID”.

The screenshot shows the 'Data Sharing Settings' section of the Google Analytics 'Accounts' page. It includes a summary of data sharing options and four checkboxes for sharing with Google products & services, benchmarking, technical support, and account specialists. A note at the bottom explains how Google safeguards data. A status message indicates 1 out of 100 accounts are in use. Buttons for 'Get Tracking ID' and 'Cancel' are at the bottom.

Data Sharing Settings

Data you collect, process, and store using Google Analytics ("Google Analytics data") is secure and kept confidential. This data is used to provide and maintain the Google Analytics service, to perform system critical operations, and in rare exceptions for legal reasons as described in our [privacy policy](#).

The data sharing options give you more control over sharing your Google Analytics data. [Learn more](#).

Google products & services RECOMMENDED

Share Google Analytics data with Google to help improve Google's products and services. If you disable this option, data can still flow to other Google products explicitly linked to Analytics. Visit the [product linking](#) section in each property to view or change your settings.

Benchmarking RECOMMENDED

Contribute anonymous data to an aggregate data set to enable features like benchmarking and publication that can help you understand data trends. All identifiable information about your website is removed and combined with other anonymous data before it is shared with others.

Technical support RECOMMENDED

Let Google technical support representatives access your Google Analytics data and account when necessary to provide service and find solutions to technical issues.

Account specialists RECOMMENDED

Give Google marketing specialists and your Google sales specialists access to your Google Analytics data and account so they can find ways to improve your configuration and analysis, and share optimization tips with you. If you don't have dedicated sales specialists, give this access to authorized Google representatives.

Learn how Google Analytics [safeguards your data](#).

You are using 1 out of 100 accounts.

[Get Tracking ID](#) [Cancel](#)

Tracking Your Website - Creating an Account

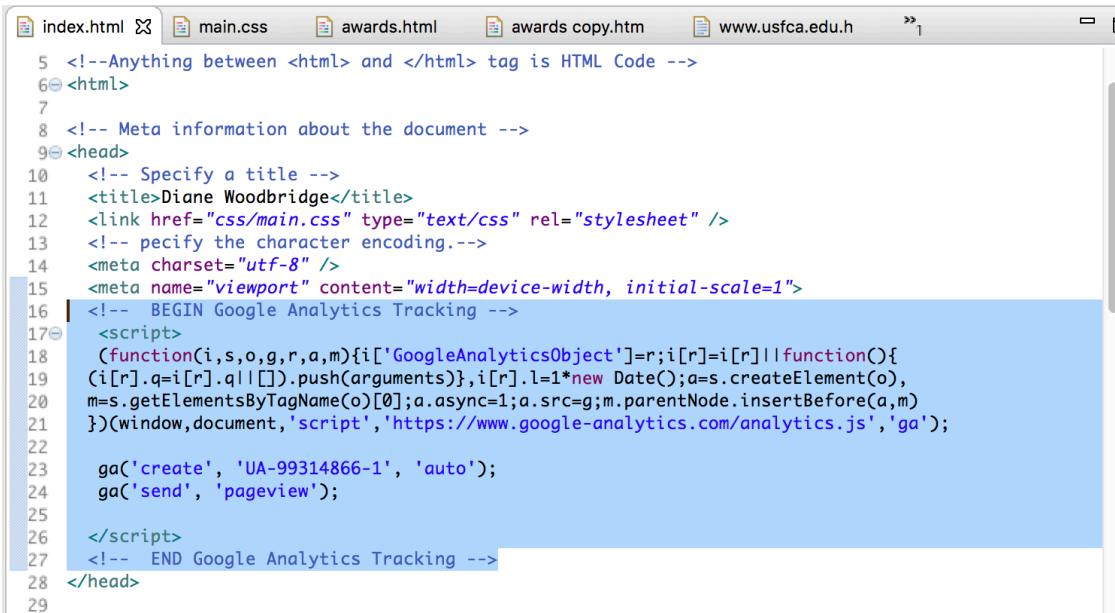
Done! - Copy your tracking code to every page of a website you want to track once implementation planning is done.

The screenshot shows the Google Analytics Admin interface for a property named "Diane Personal Webpage". In the "PROPERTY" section, the tracking ID "UA-99314866-1" is displayed. A yellow callout box with a red border and white text provides instructions: "This is the tracking ID for your Google Analytics property. If you are using a 3rd-party web hosting provider like WordPress, Godaddy, or Wix, you will need to follow their instructions to set up Google Analytics on your website." Below the tracking ID, there is a "COPY" button. The "Website tracking" section contains the Universal Analytics tracking code, which is a script tag. The code includes functions like `ga` and `ga('create')` with parameters like "UA-99314866-1" and "test". At the bottom of the tracking code section, there is a "PHP Implementation" section with two bullet points: "Use the code above to create a file named "analyticstracking.php", and include the file on each PHP template page." and "Add the following line to each template page immediately after the opening <body> tag: <?php include_once("analyticstracking.php"); ?>".

Tracking Your Website

- Tracking

The .js code snippet should be added just before closing </head> tag.



A screenshot of a code editor showing an HTML file named index.html. The code editor has tabs for index.html, main.css, awards.html, awards copy.htm, and www.usfca.edu.h. The code itself is a snippet for Google Analytics tracking. It starts with a comment about the HTML code block, followed by the opening <html> tag, meta information, and the <head> tag. Inside the <head> tag, there is a comment for the title, a <title> tag with the value "Diane Woodbridge", a <link> tag for the main.css stylesheet, a character encoding meta tag, and a viewport meta tag. Below these, there is a script block for Google Analytics. The script begins with a function that creates a GoogleAnalyticsObject if it doesn't exist. It then pushes arguments into a queue, creates a date object, and creates a script element. The script's source is set to https://www.google-analytics.com/analytics.js, and its name is 'ga'. Finally, it calls 'create' with the ID 'UA-99314866-1' and 'auto', and 'send' with the pageview. The script block is closed, followed by a comment for the end of the tracking code, and the </head> tag is closed. The entire <head> section is highlighted with a light blue background.

```
5  <!--Anything between <html> and </html> tag is HTML Code -->
6  <html>
7
8  <!-- Meta information about the document -->
9  <head>
10   <!-- Specify a title -->
11   <title>Diane Woodbridge</title>
12   <link href="css/main.css" type="text/css" rel="stylesheet" />
13   <!-- pecify the character encoding.-->
14   <meta charset="utf-8" />
15   <meta name="viewport" content="width=device-width, initial-scale=1">
16   <!-- BEGIN Google Analytics Tracking -->
17   <script>
18     (function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){
19       i[r].q=i[r].q||[];i[r].l=1*new Date();a=s.createElement(o),
20       m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m)
21     })(window,document,'script','https://www.google-analytics.com/analytics.js','ga');
22
23     ga('create', 'UA-99314866-1', 'auto');
24     ga('send', 'pageview');
25
26   </script>
27   <!-- END Google Analytics Tracking -->
28 </head>
29
```

<https://support.google.com/analytics/answer/1008080?hl=en>



Tracking You - Tracking

```
<head>
  <!-- BEGIN Google Analytics Tracking -->
  <script>
    (function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){
      (i[r].q=i[r].q||[]).push(arguments)},i[r].l=1*new Date();a=s.createElement(o),
      m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m)
    })(window,document,'script','https://www.google-analytics.com/analytics.js','ga');

    ga('create', 'UA-99314866-1', 'auto');
    ga('send', 'pageview');

  </script>
  <!-- END Google Analytics Tracking -->
```

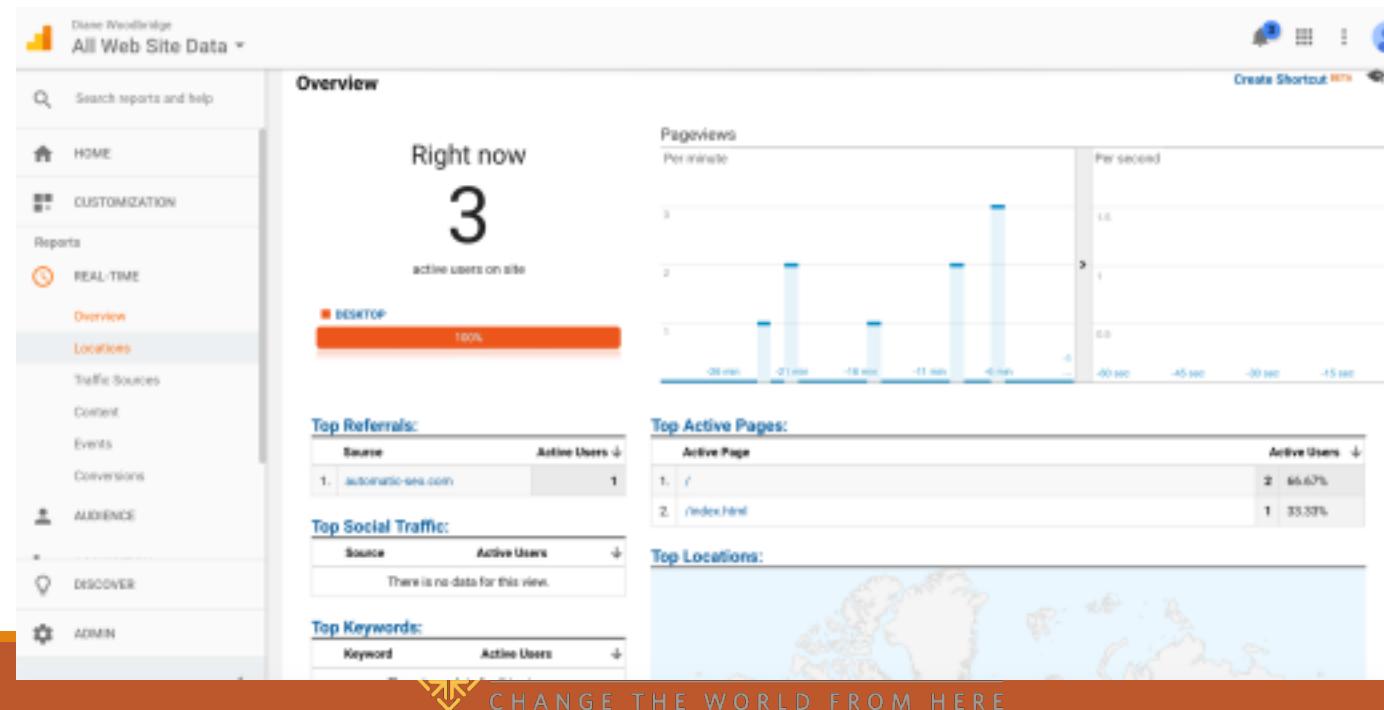
1. Creates a <script> element that starts downloading the analytics.js JavaScript library from <https://www.google-analytics.com/analytics.js>
2. Initializes a global ga function (called the ga() command queue) that allows you to schedule commands to be run once the analytics.js library is loaded and ready to go.
3. Adds a command to the ga() command queue to create a new tracker object for the property specified via the 'UA-XXXXX-Y' (UA-Account-Property#)parameter.
4. Adds another command to the ga() command queue to send a pageview to Google Analytics for the current page.



Tracking Your Website

- Tracking

Check real-time report.



Example – Tracking Your Website

What happens if you disable/delete cookies?

- Google Analytics will not be able to associate user behavior data with past data collected.
- Google Analytics will set a new unique ID and browser cookie the next time a browser loads a tracked page.



References

Google Analytics Academy :

<https://analytics.google.com/analytics/academy/>



UNIVERSITY OF SAN FRANCISCO
CHANGE THE WORLD FROM HERE