Introducing the next generation of Analytics

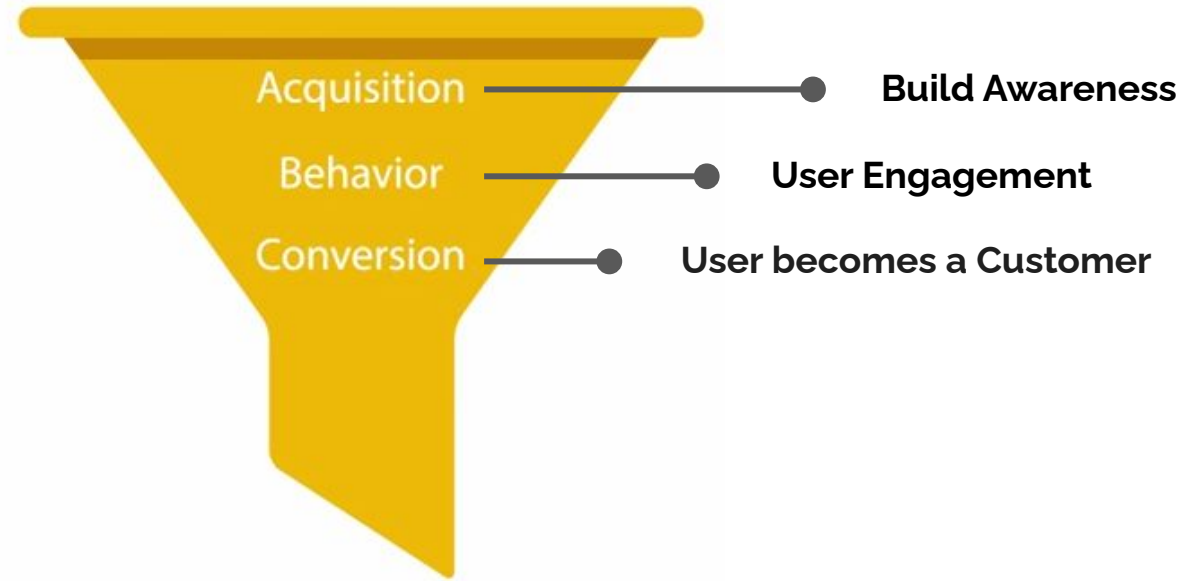
Google Analytics 4 (GA4)

Agenda

- The value of Digital Analytics
- What is GA4?
- How GA4 works?
- Access demo account
  - Home Page
- GA4 Structure
- Basic Setting
  - Data Collection
  - Data Retention
  - Report Identity
  - Attribution Setting
- Reports
  - Realtime
  - Life cycle
    - Acquisition
    - Engagement
    - Monetization
  - User
    - Demographics
    - Tech
- Events
- Dimension
- Metrics
- Exploration
  - Free form
  - Funnel exploration
  - Path exploration
  - Segment overlap
  - Blank

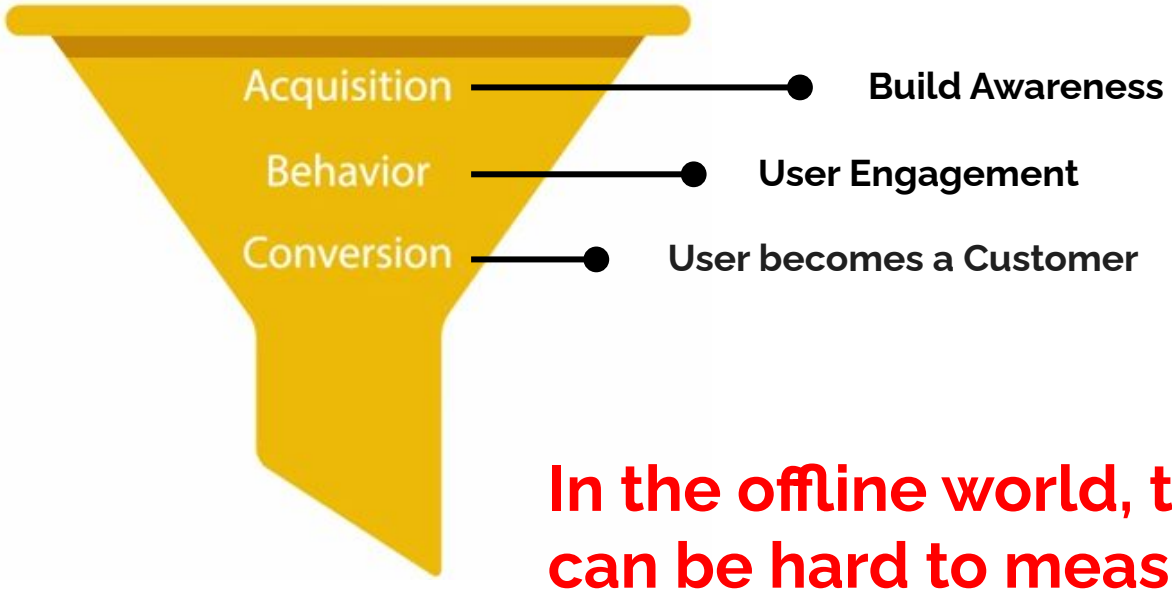
The value of Digital Analytics

In marketing, a **purchase funnel** reflects the different stages of customer engagement. A basic purchase funnel includes:



The value of Digital Analytics

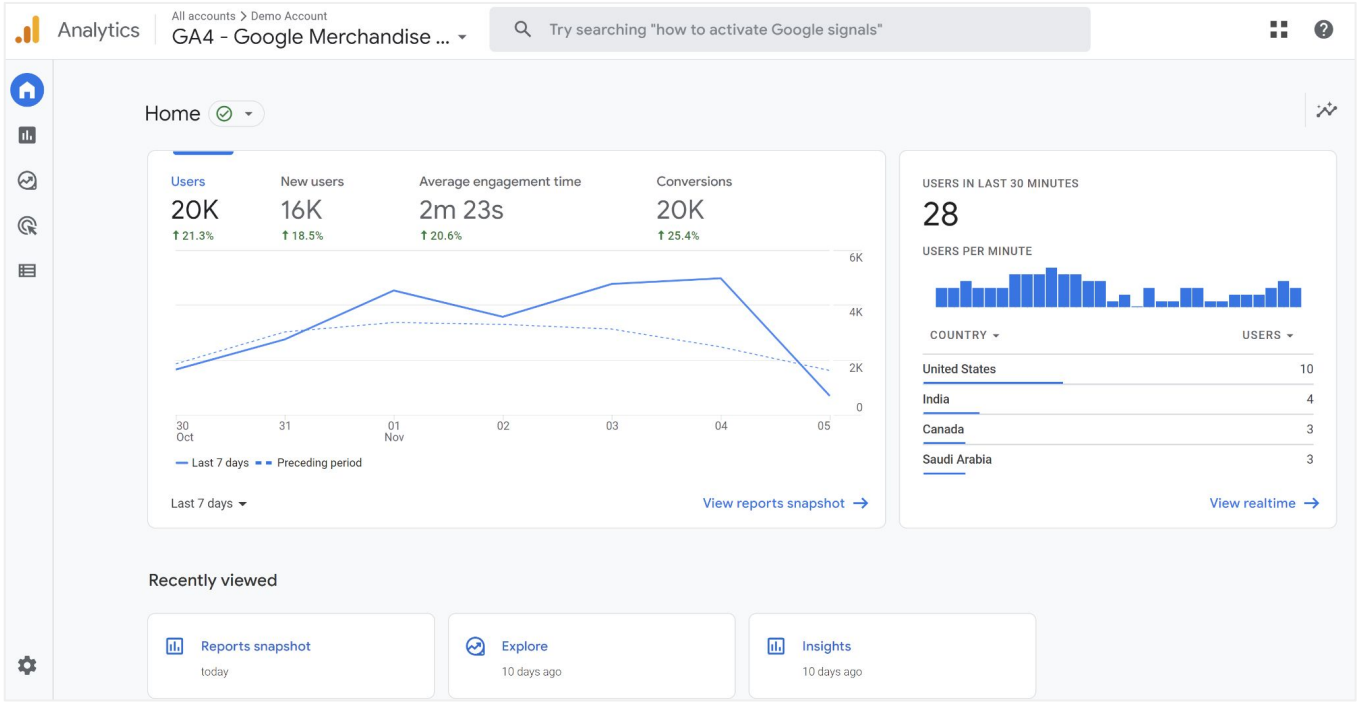
In marketing, a **purchase funnel** reflects the different stages of customer engagement. A basic purchase funnel includes:



In the offline world, this process can be hard to measure.

What is GA4?

GA4 is a web analytics service offered by Google that tracks and reports website traffic.



How GA4 works?

Cookies

A small piece of data **stored on the user's computer** by the web browser

JavaScript

Snippet of JavaScript code of Google Analytics on the website.

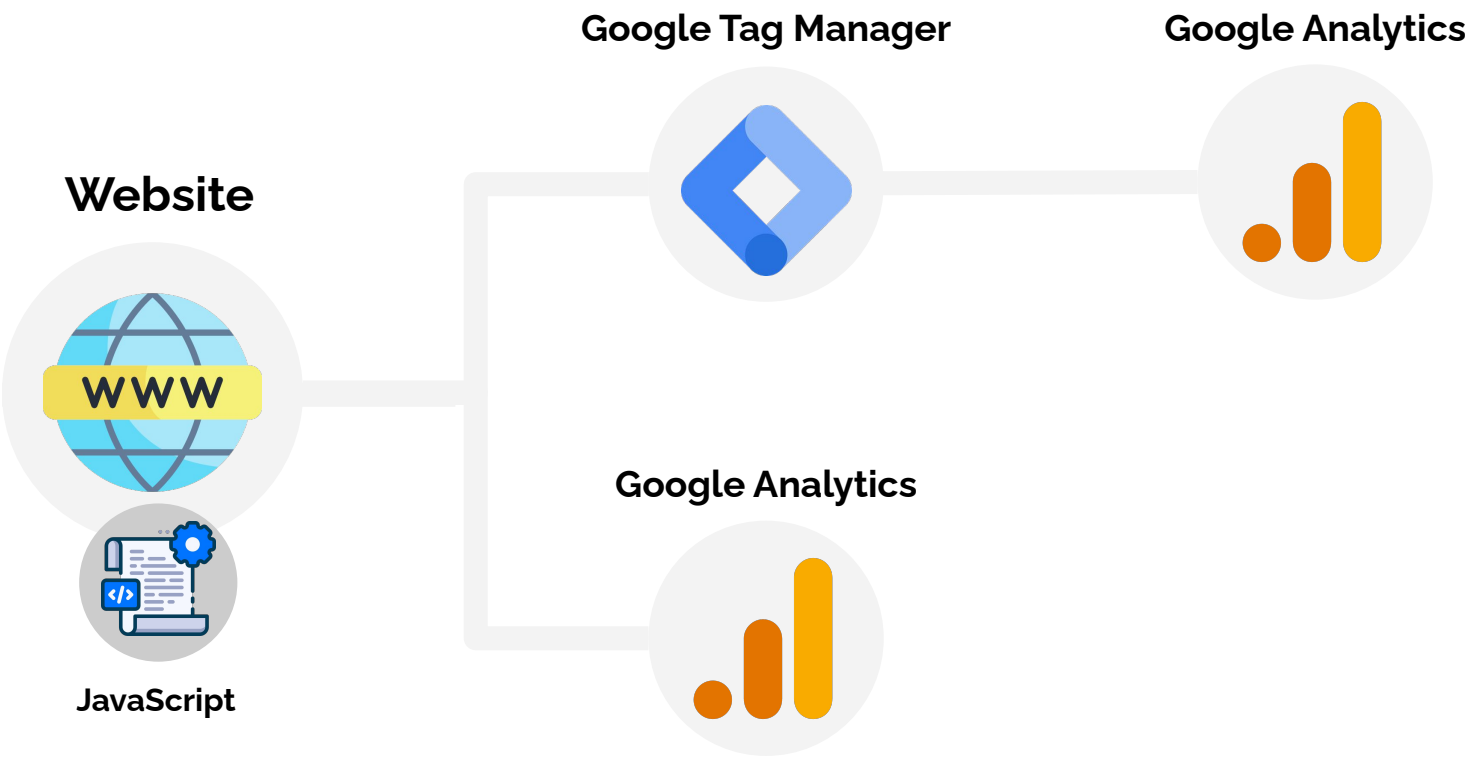
Google Server

Store data from Snippet code and send them to Google Analytics

Google Analytics

Display data from Google Server

How to collect data to GA4?



Access Demo Account

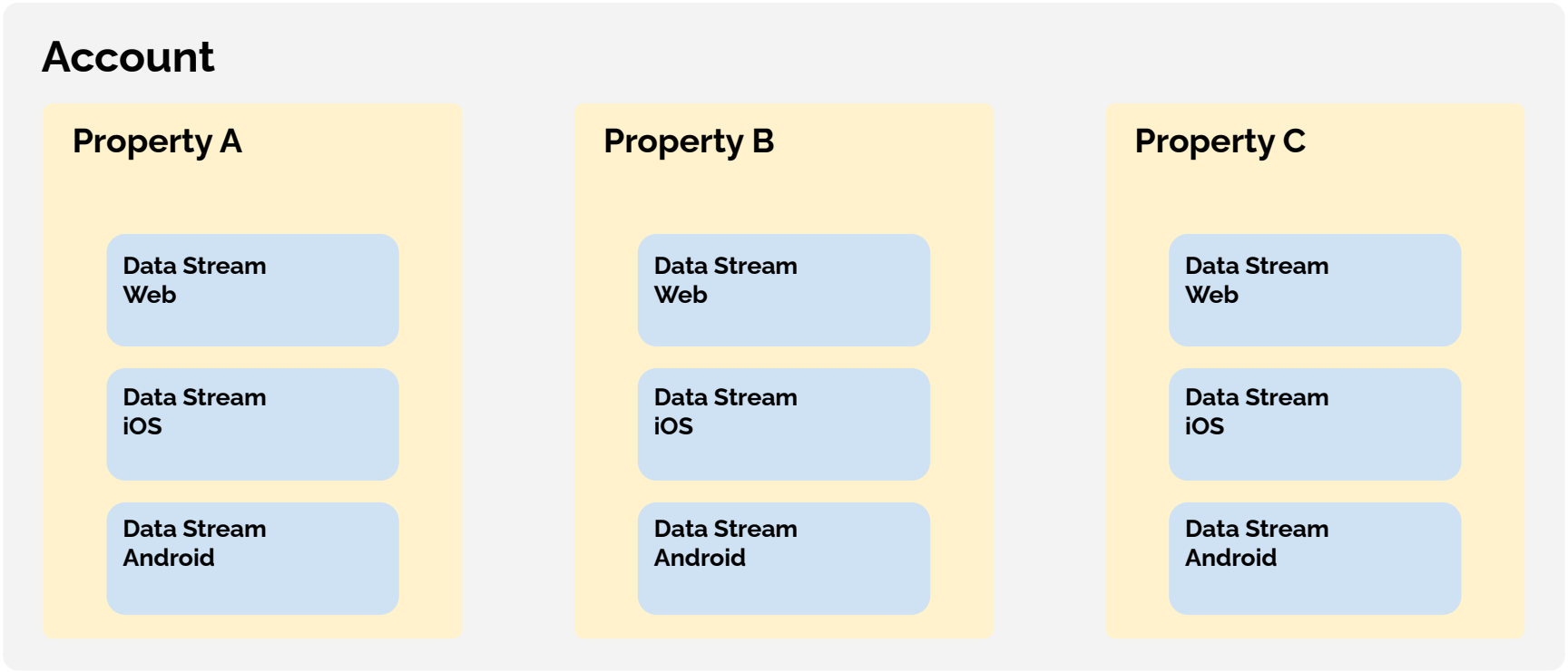
https://support.google.com/analytics/answer/6367342?hl=en#zippy=%2Cin-this-article

Access the demo account, which contains three properties, by clicking one of the following links based on the property you would like to access first. You can change to the other properties at any time by using the account selector.

- Google Analytics 4 property: Google Merchandise Store (web data)
- Google Analytics 4 property: Flood-It! (app and web data)
- Universal Analytics property: Google Merchandise Store (web data)

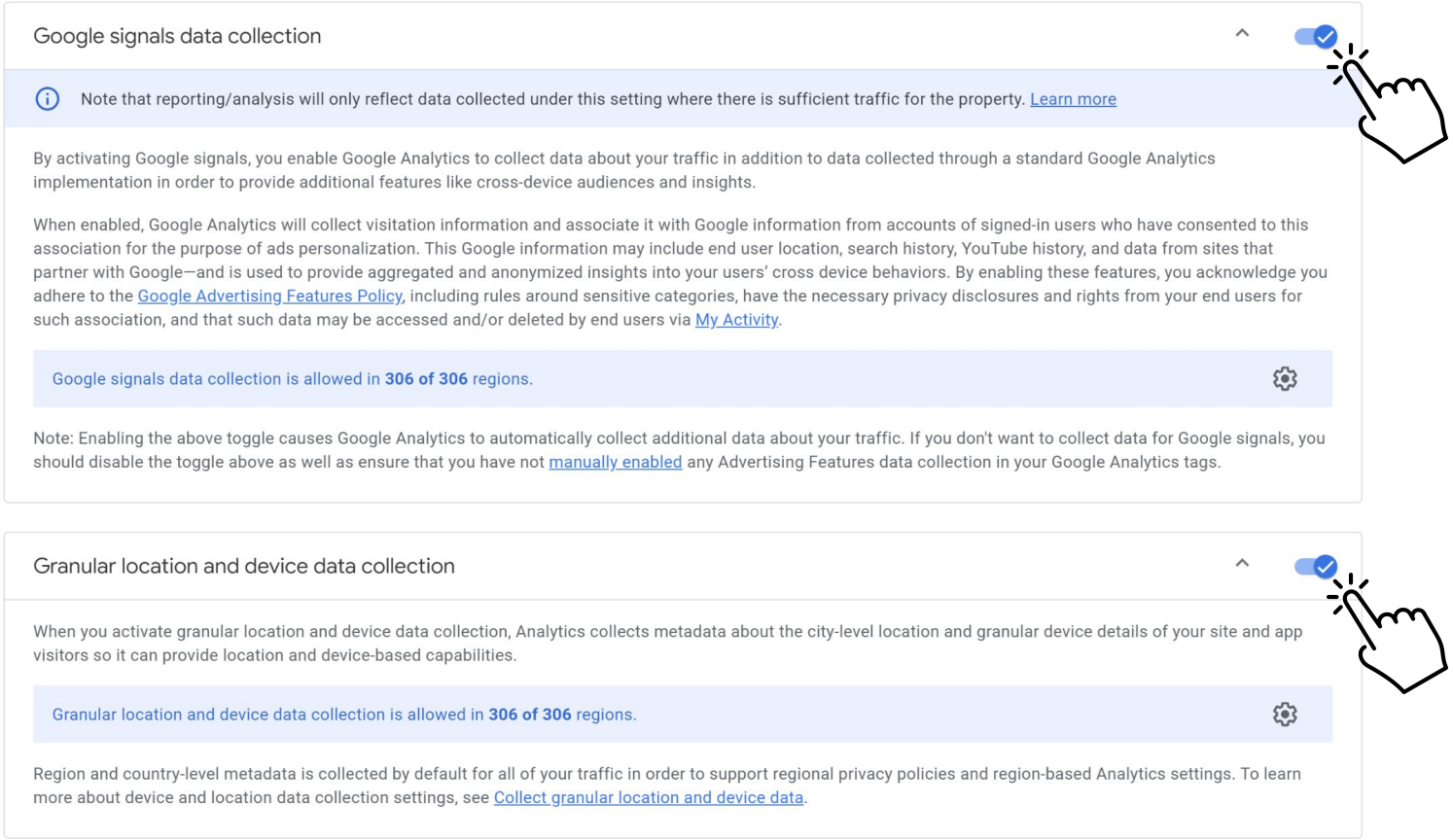
See below to learn more about what data these properties contain. You can remove the demo account at any time.

GA4 Structure



Basic Setting

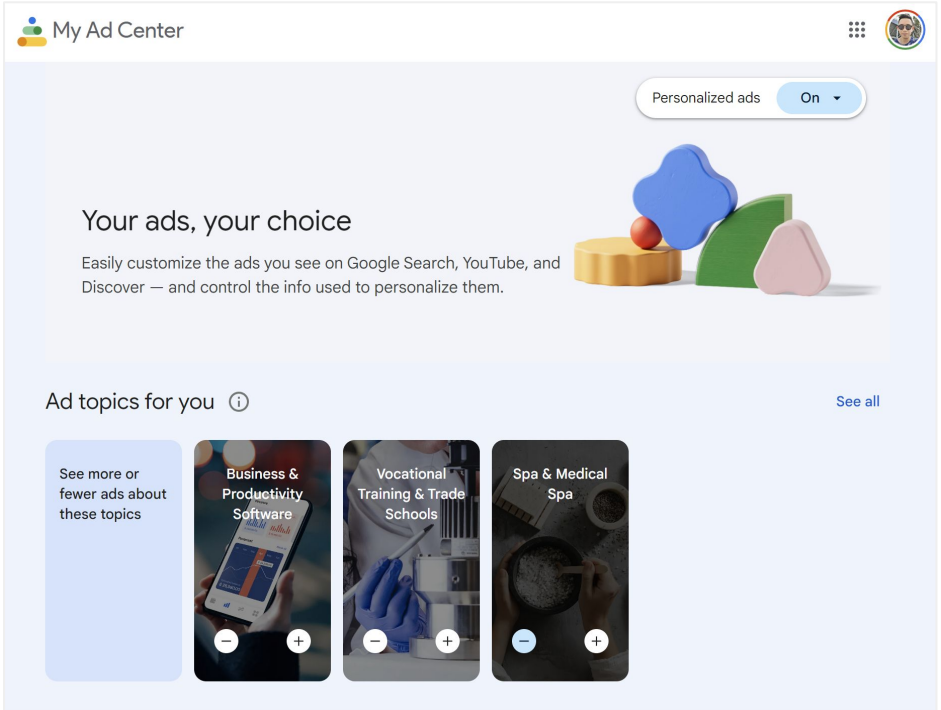
Data Collection Setting



Google Signals

Google signals are session data from sites and apps that Google associates with users who have **signed in to their Google accounts**, and who have **turned on Ads Personalization**.

https://myadcenter.google.com/



Data Retention Setting

User and event data retention

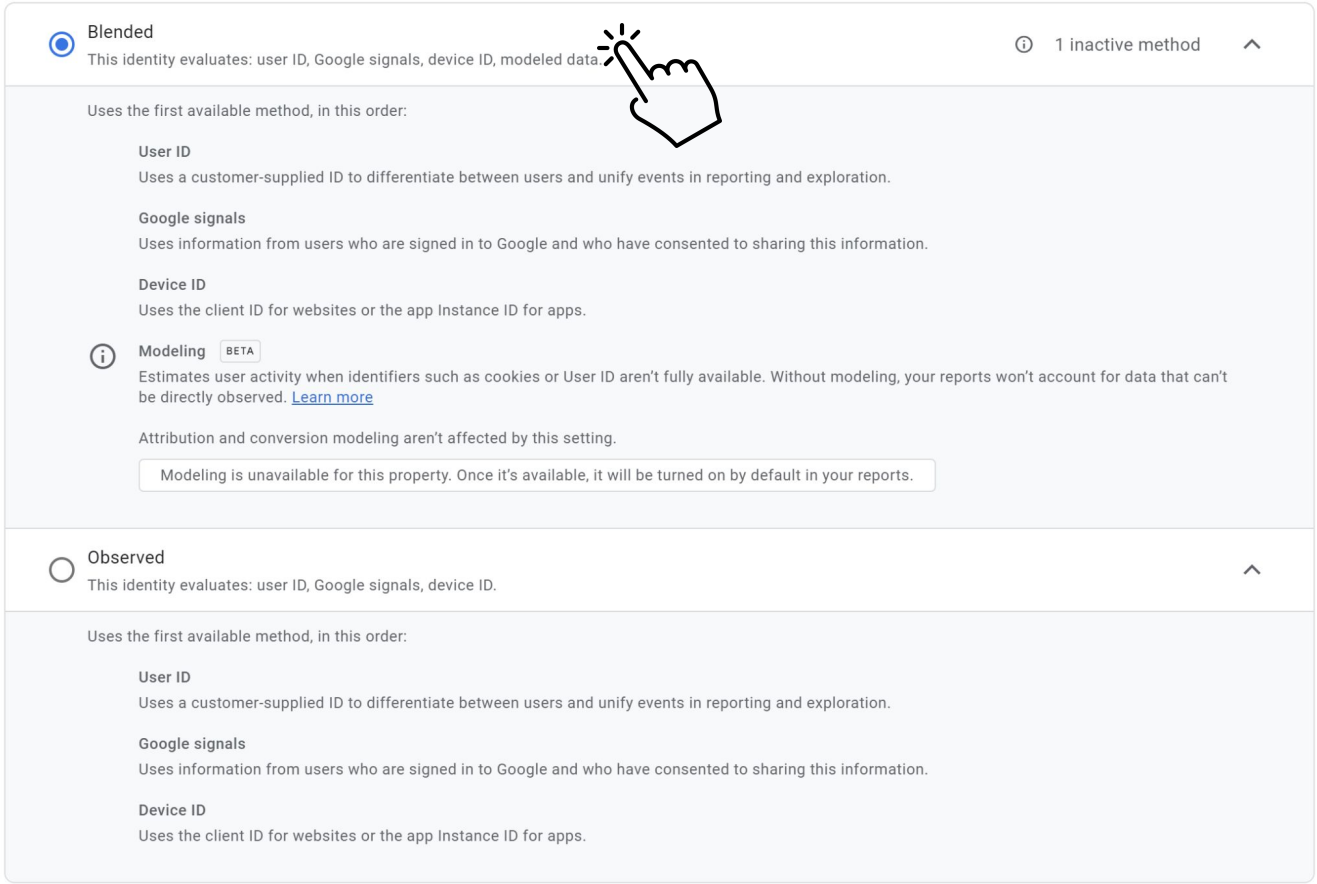
You can change the retention period for data you send that is associated with cookies, user identifiers, or advertising identifiers. These controls don't affect most standard reporting, which is based on aggregated data. Changes to these settings take effect after 24 hours. Learn more

Event data retention 14 months

Reset user data on new activity

Save Cancel

Reporting Identity



Attribution Setting

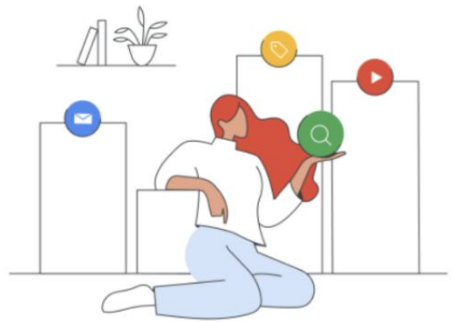
Reporting attribution model

Affects conversion and revenue data

The attribution model used to calculate conversion credit in your reports within this Analytics property. Changing the attribution model will apply to both historical and future data. These changes will be reflected in reports with conversion and revenue data. User and session data will be unaffected. Learn about how attribution models affect your reporting data

Reporting attribution model

Cross-channel data-driven model

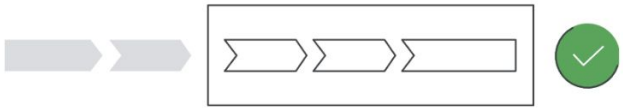


Attribution Setting

Lookback window

Affects all data

Conversions can happen days or weeks after a person interacts with your ad. The lookback window determines how far back in time a touchpoint is eligible for attribution credit. For example, the 30-day lookback window will result in January 30 conversions being attributed only to touchpoints occurring from January 1 - 30.



Changing the lookback window will only apply going forward. These changes will be reflected in all reports within this Analytics property.

Acquisition conversion events
(i.e., first_open, first_visit)

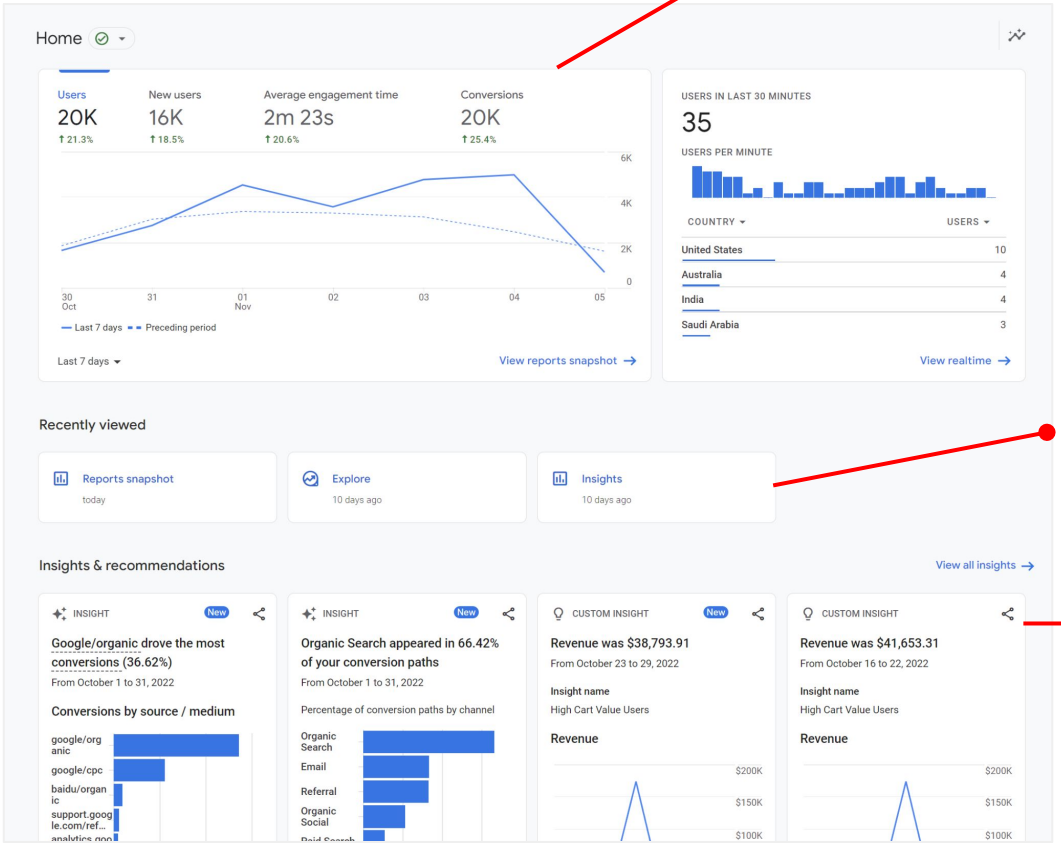
- ○ 7 Days
- ◉ 30 Days **(recommended)**

All other conversion events

- ○ 30 Days
- ○ 60 Days
- ◉ 90 Days **(recommended)**

Reports

Home

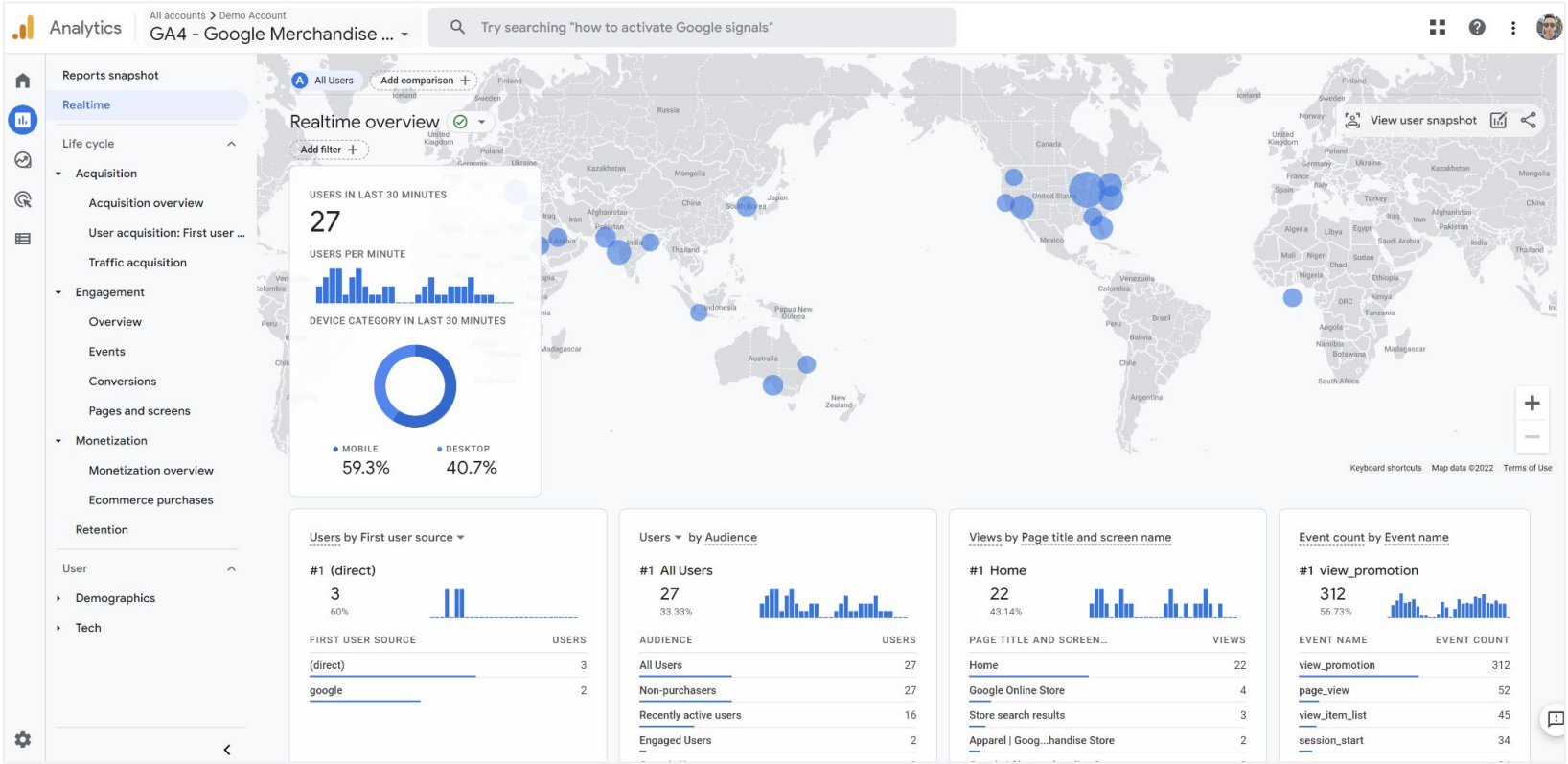


Overview Metrics The overview card shows metrics that are relevant to you with a trendline for each metric.

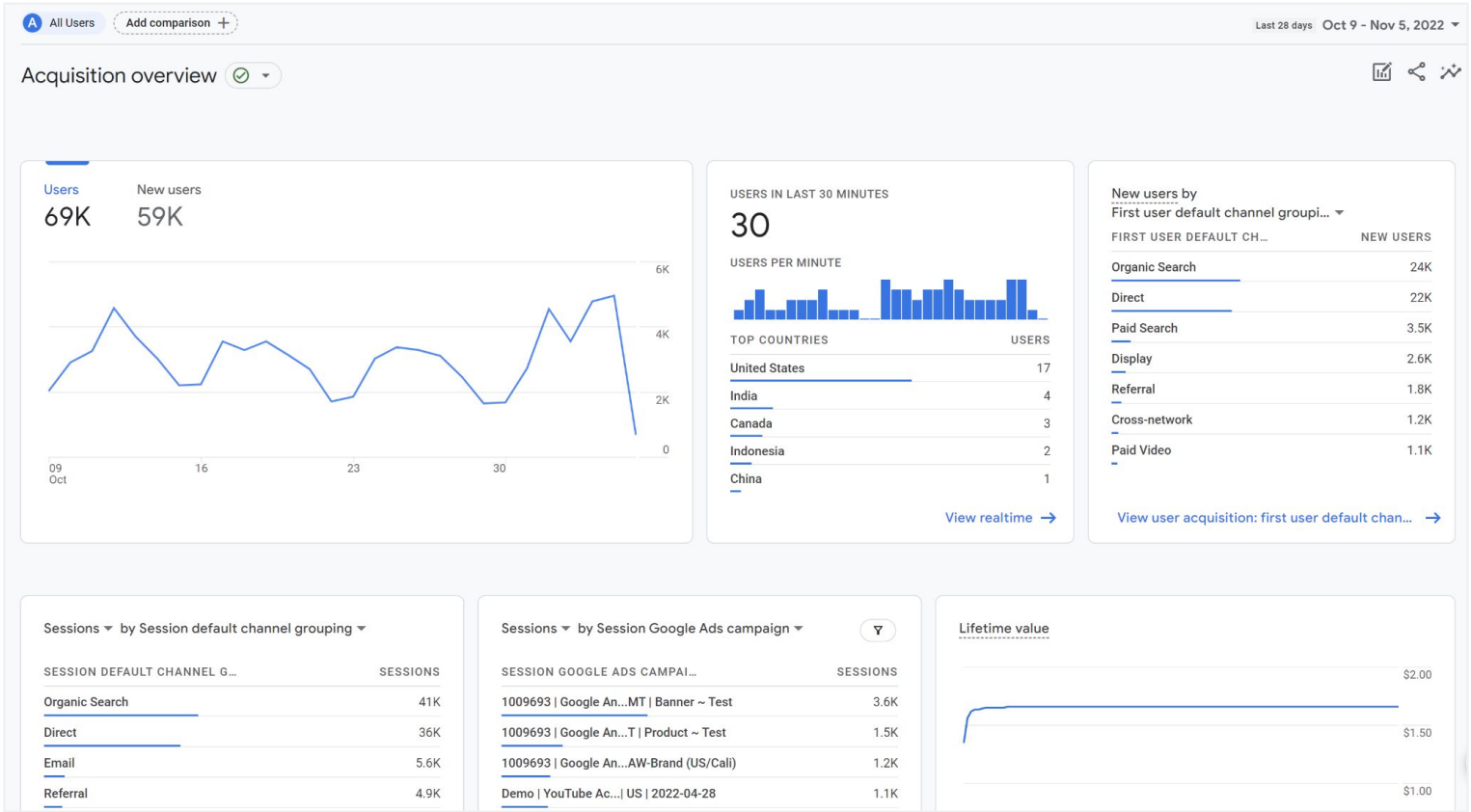
Recently viewed provides links to parts of your Analytics account that you visited most recently.

Insights & recommendations

Realtime


Analytics
All accounts > Demo Account
GA4 - Google Merchandise ...
Try searching "how to activate Google signals"
Reports snapshot
Realtime
Life cycle
Acquisition
Acquisition overview
User acquisition: First user ...
Traffic acquisition
Engagement
Overview
Events
Conversions
Pages and screens
Monetization
Monetization overview
Ecommerce purchases
Retention
User
Demographics
Tech
All Users
Add comparison
Realtime overview
Add filter
View user snapshot
USERS IN LAST 30 MINUTES
27
USERS PER MINUTE
DEVICE CATEGORY IN LAST 30 MINUTES
MOBILE
59.3%
DESKTOP
40.7%
Keyboard shortcuts
Map data ©2022
Terms of Use
Users by First user source
#1 (direct)
3
60%
FIRST USER SOURCE
USERS
(direct) 3
google 2
Users by Audience
#1 All Users
27
33.33%
AUDIENCE
USERS
All Users 27
Non-purchasers 27
Recently active users 16
Engaged Users 2
Views by Page title and screen name
#1 Home
22
43.14%
PAGE TITLE AND SCREEN...
VIEWS
Home 22
Google Online Store 4
Store search results 3
Apparel | Goog...handise Store 2
Event count by Event name
#1 view_promotion
312
56.73%
EVENT NAME
EVENT COUNT
view_promotion 312
page_view 52
view_item_list 45
session_start 34

Life cycle: Acquisition

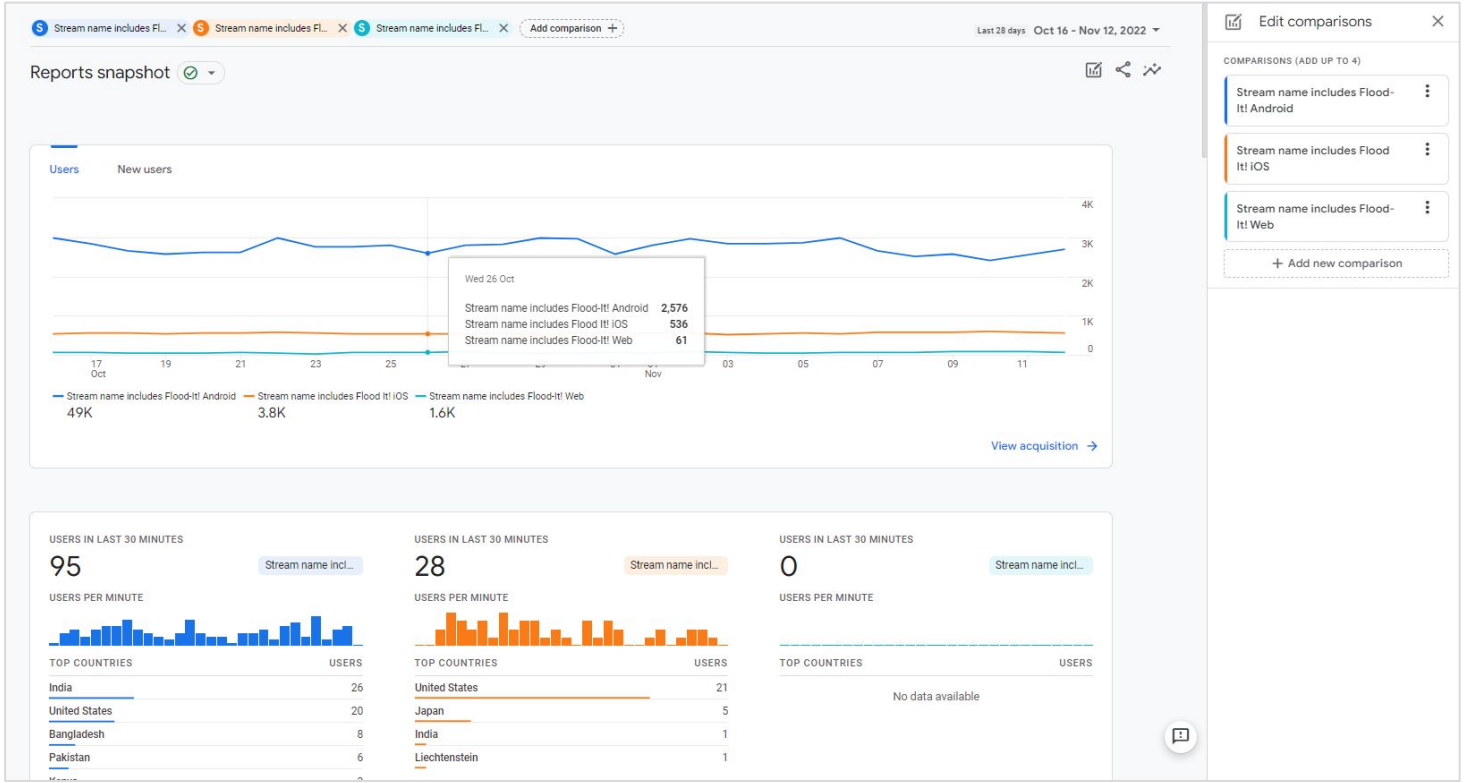


Interface Tour!

Comparison

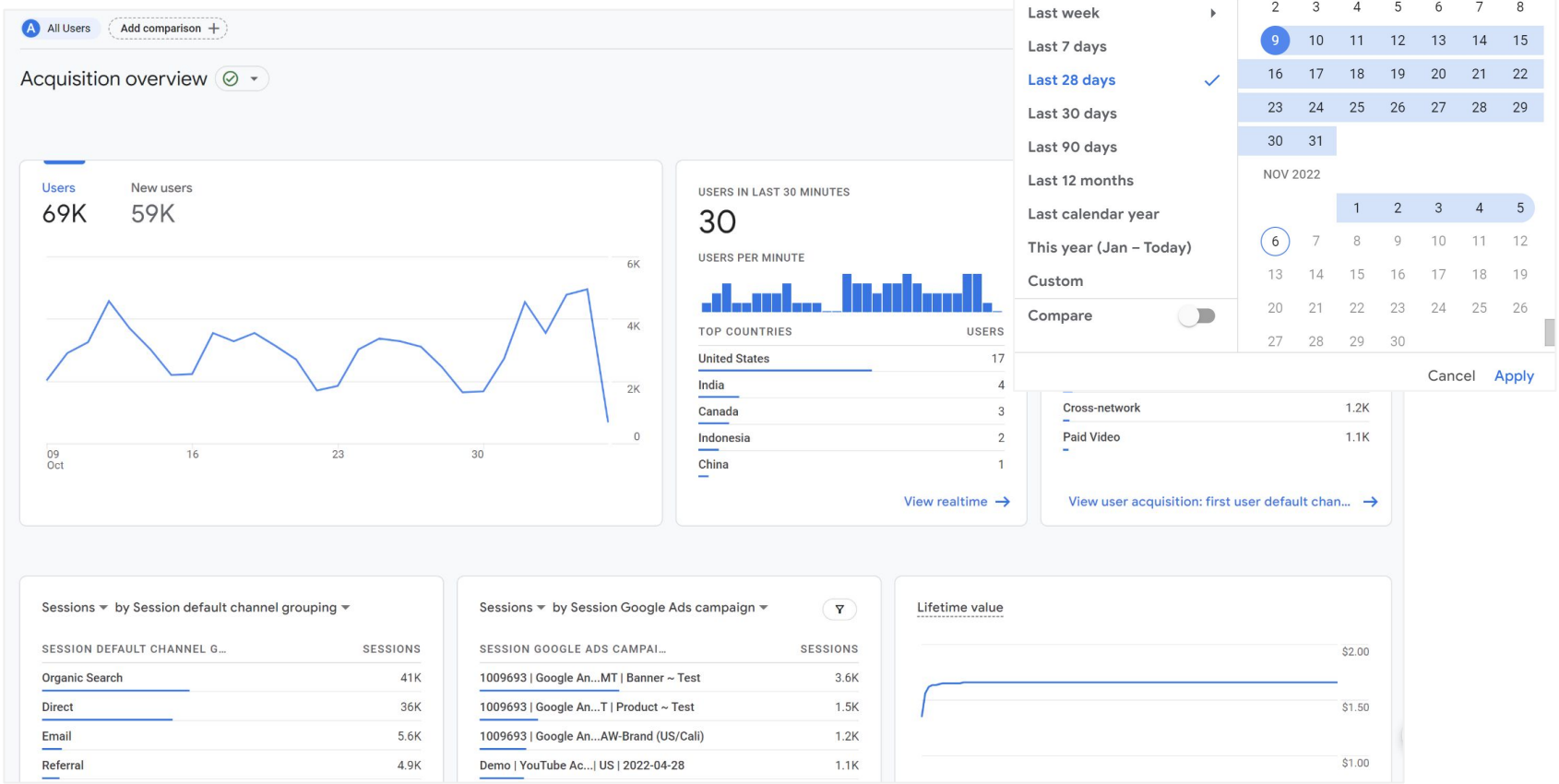
Property A

- **Data Stream Web**
- **Data Stream iOS**
- **Data Stream Android**

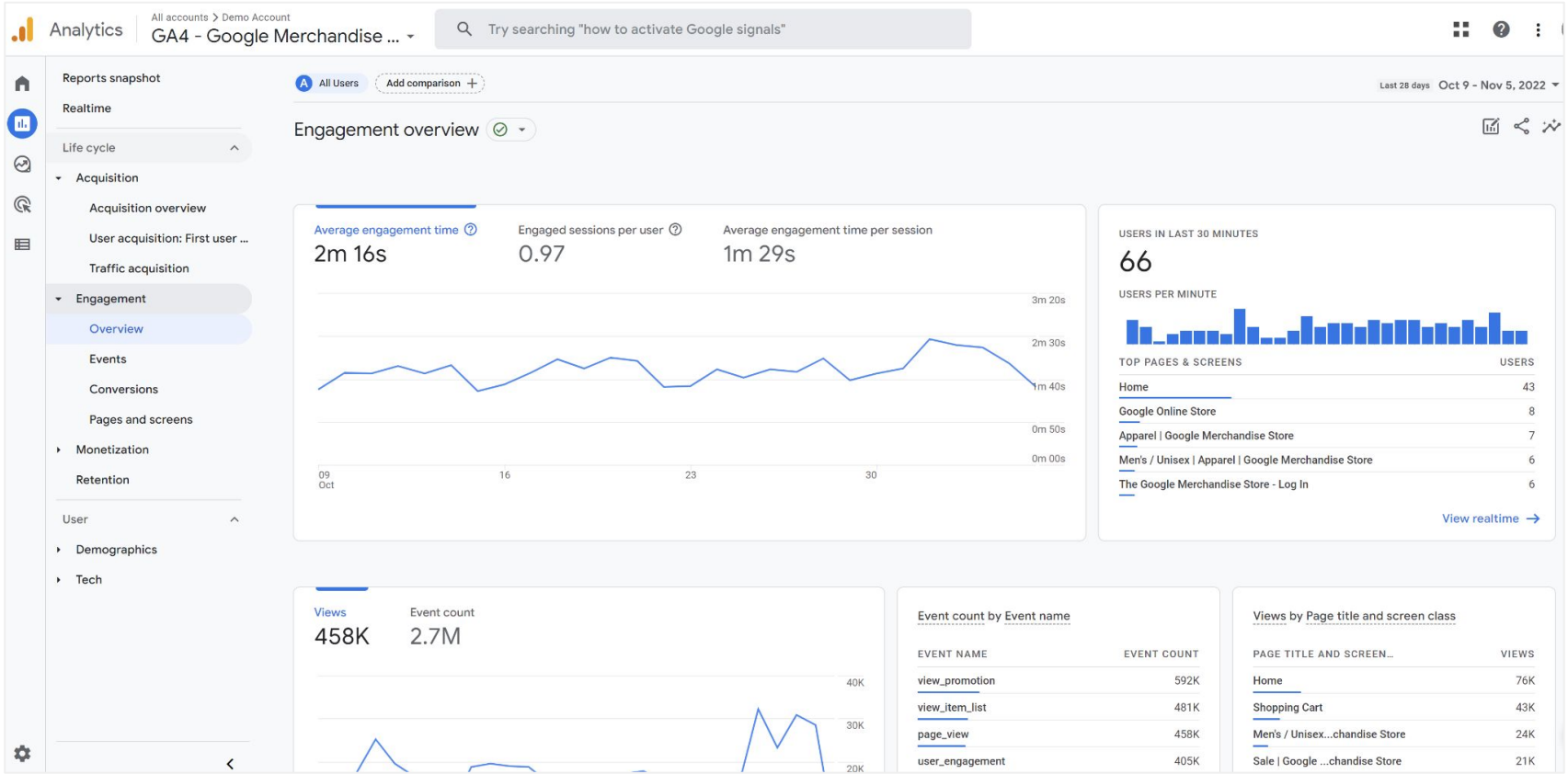


Life cycle: Acquisition

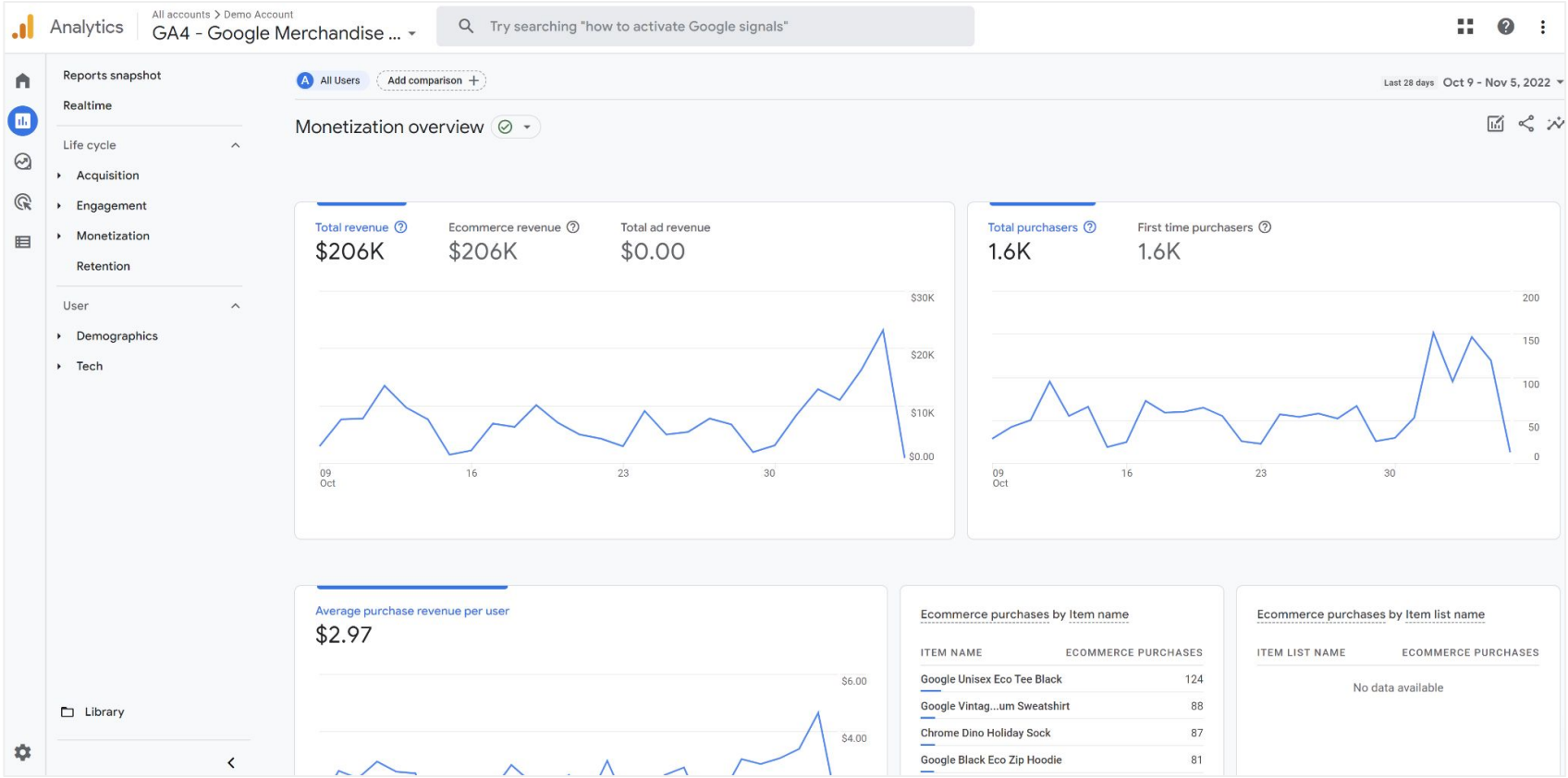
Keep in mind



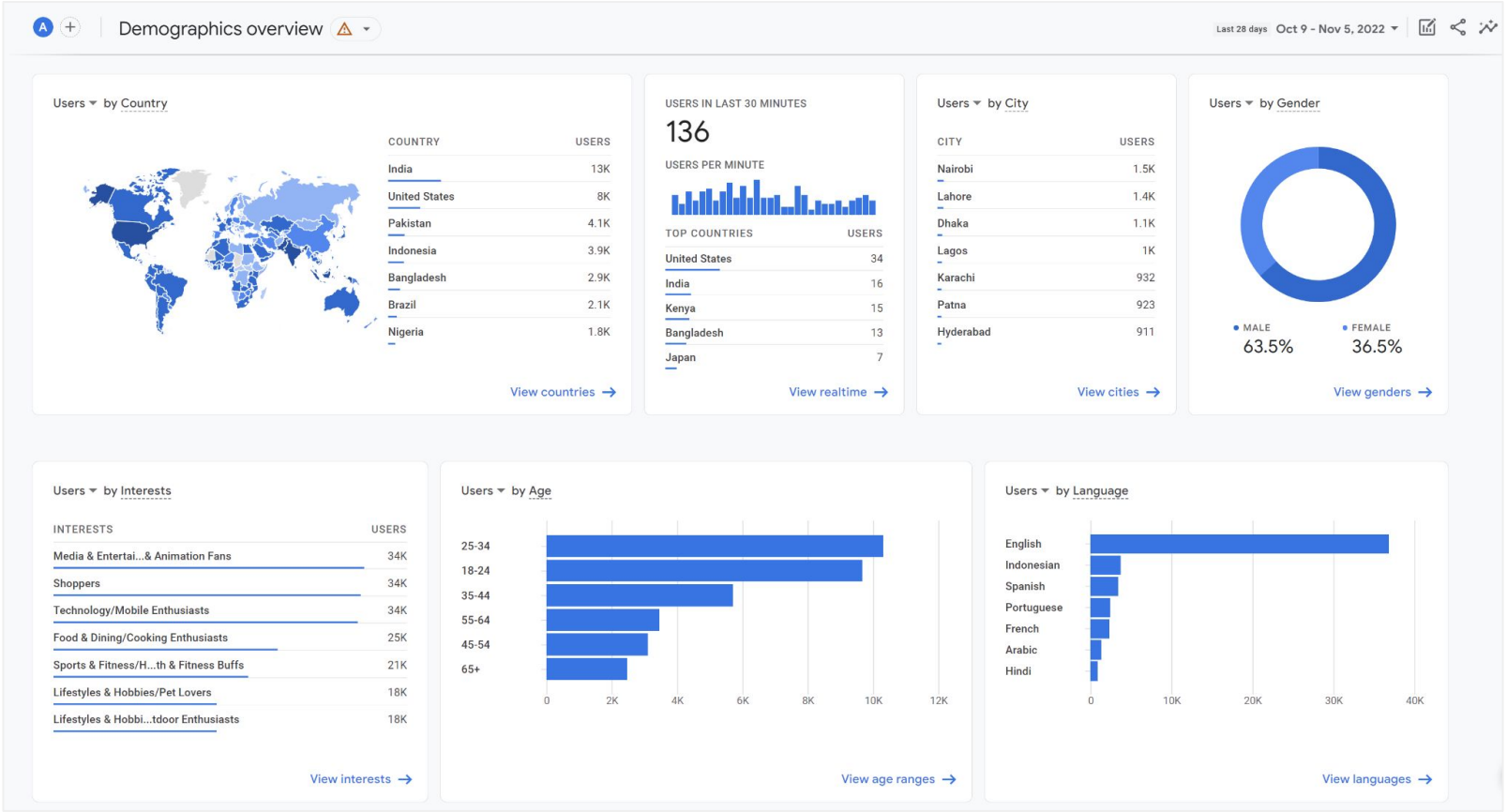
Life cycle: Engagement



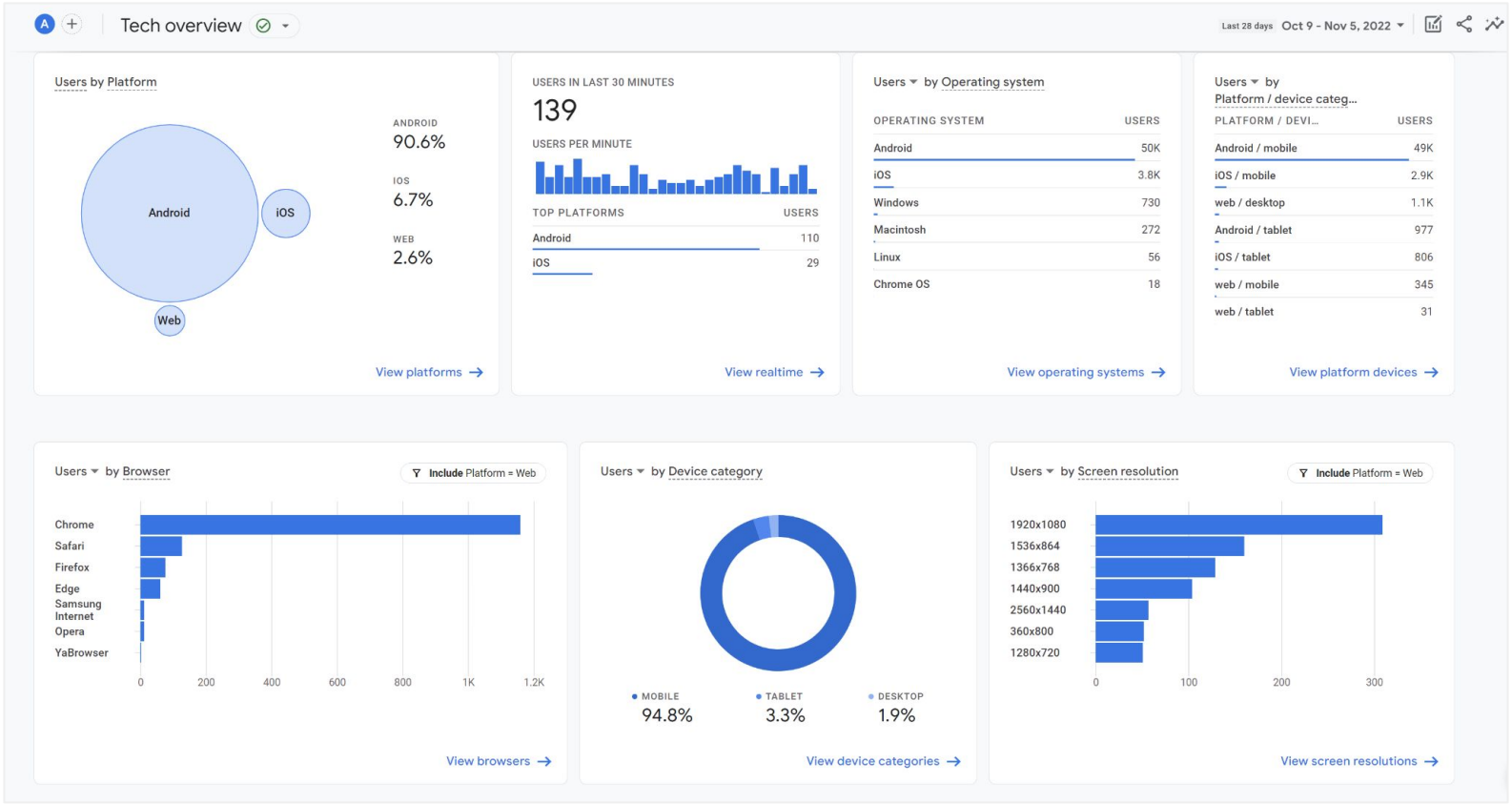
Life cycle: Monetization



User: Demographics



User: Tech


Tech overview
Last 28 days Oct 9 - Nov 5, 2022
Users by Platform
Android
iOS
Web
ANDROID
90.6%
IOS
6.7%
WEB
2.6%
View platforms
USERS IN LAST 30 MINUTES
139
USERS PER MINUTE
TOP PLATFORMS USERS
Android 110
iOS 29
View realtime
Users by Operating system
OPERATING SYSTEM USERS
Android 50K
iOS 3.8K
Windows 730
Macintosh 272
Linux 56
Chrome OS 18
View operating systems
Users by Platform / device categ...
PLATFORM / DEVI... USERS
Android / mobile 49K
iOS / mobile 2.9K
web / desktop 1.1K
Android / tablet 977
iOS / tablet 806
web / mobile 345
web / tablet 31
View platform devices
Users by Browser
Include Platform = Web
Chrome
Safari
Firefox
Edge
Samsung Internet
Opera
YaBrowser
0 200 400 600 800 1K 1.2K
View browsers
Users by Device category
MOBILE 94.8%
TABLET 3.3%
DESKTOP 1.9%
View device categories
Users by Screen resolution
Include Platform = Web
1920x1080
1536x864
1366x768
1440x900
2560x1440
360x800
1280x720
0 100 200 300
View screen resolutions

Events

Events

For example, loading a page, clicking a link, and completing a purchase are all interactions you can measure with events.

Types of events

1. Auto

- Automatically collected events
- Enhance measurement events

2. Need Implement

- Recommended events
- Custom events

1. Auto

Automatically collected events

Automatically collected events are triggered by basic interactions with your app and/or site.

You don't need to write any additional code to collect these events.

Example events:

- first_open (app)
- page_view (web)
- screen_view (app)
- app_update (app)
- session_start (app, web)

https://support.google.com/analytics/answer/9234069?hl=en&ref_topic=9756175

Enhance measurement events

Lets you measure interactions with your content by enabling options (events) in the Google Analytics interface.

No code changes are required.

Example events:

- scroll
- video engagement
  - video_start
  - video_progress
  - video_complete
- file_download

https://support.google.com/analytics/answer/9216061?hl=en&ref_topic=9756175

2. Need Implement

Recommended events

Adding these events to your website or mobile app helps you measure additional features and behavior as well as generate more useful reports.

Example events:

- ad_impression
- earn_virtual_currency
- join_group
- login
- purchase
- refund
- search
- select_content
- share
- sign_up
- spend_virtual_currency
- tutorial_begin
- tutorial_complete

https://support.google.com/analytics/answer/9267735?hl=en&ref_topic=9756175

Custom events

A custom event is an event with a name and set of parameters that you define so you can collect information that's specific to your business.

Review other events first!

Interface Tour!

Dimension & Metric

Dimension

“Attributes of data.”

Metric

“Quantitative measurements.”

Dimension

“Attributes of data.”

- ➔ Page
- ➔ Landing Page
- ➔ Source/Medium
- ➔ UTM Parameters
- ➔ Default Channel Group

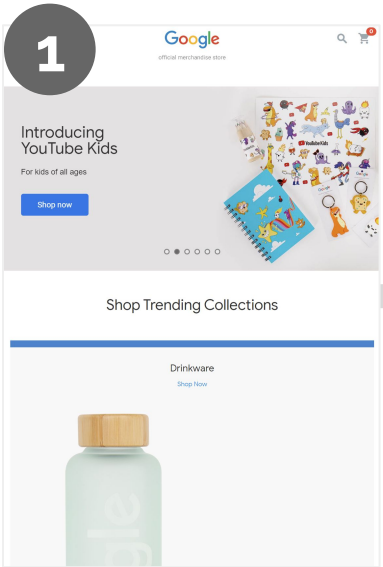
Metric

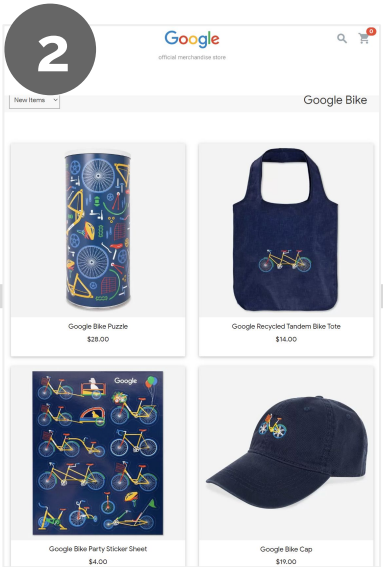
“Quantitative measurements.”

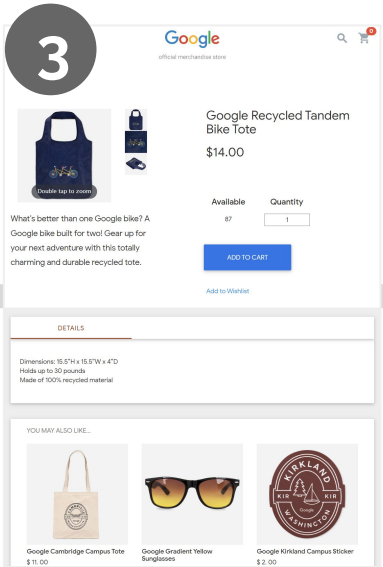
Dimension: Page & Landing Page

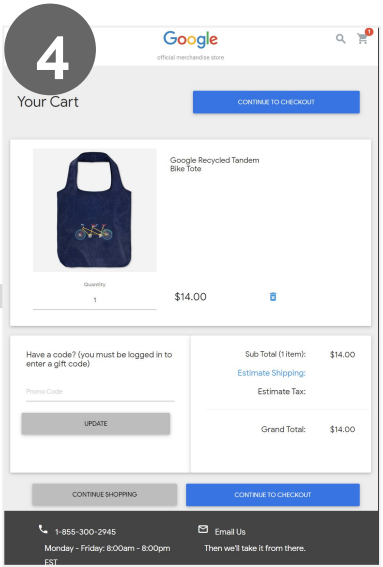
Page: **ทุกเพจ** ที่ Users เข้ามาบน Website

Landing Page: เพจแรก ที่ Users เข้ามาบน Website

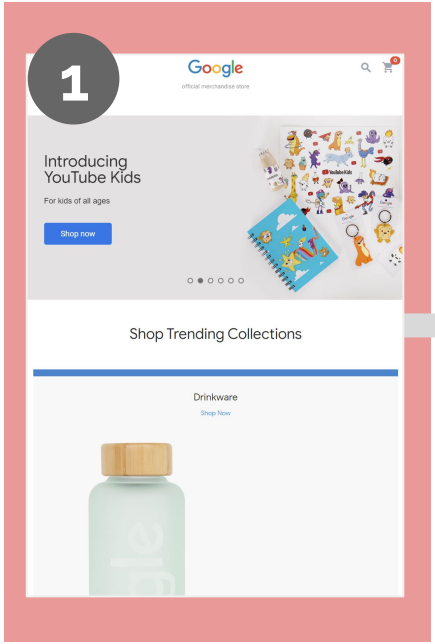

1
Google
official merchandise store
Introducing YouTube Kids
For kids of all ages
Shop now
Shop Trending Collections
Drinkware
Shop Now

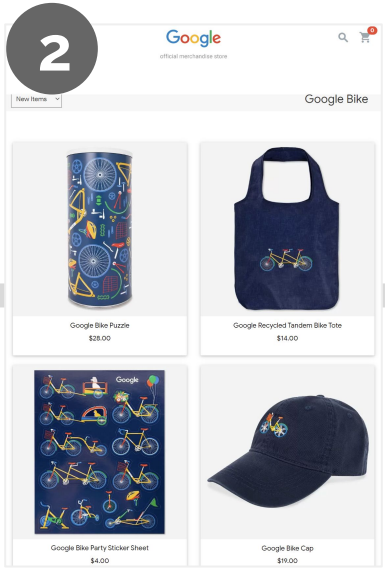

2
Google
official merchandise store
New Items
Google Bike
Google Bike Puzzle
$28.00
Google Recycled Tandem Bike Tote
$14.00
Google Bike Party Sticker Sheet
$4.00
Google Bike Cap
$19.00

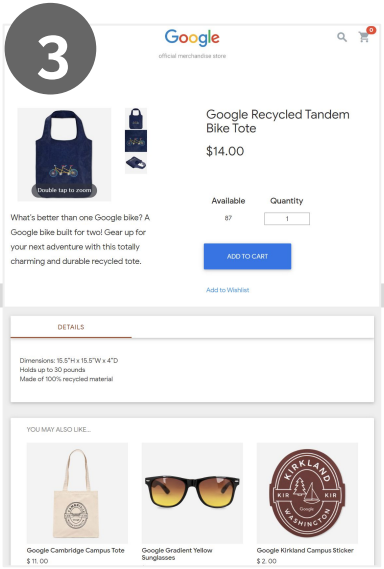

3
Google
official merchandise store
Google Recycled Tandem Bike Tote
$14.00
Double tap to zoom
What's better than one Google bike? A Google bike built for two! Gear up for your next adventure with this totally charming and durable recycled tote.
Available
Quantity
87
1
ADD TO CART
Add to Wishlist
DETAILS
Dimensions: 15.5"H x 15.5"W x 4"D
Holds up to 30 pounds
Made of 100% recycled material
YOU MAY ALSO LIKE...
Google Cambridge Campus Tote
$ 11.00
Google Gradient Yellow Sunglasses
Google Kirkland Campus Sticker
$ 2.00

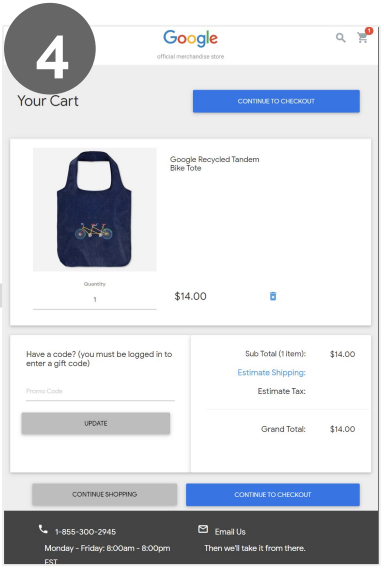

4
Google
official merchandise store
Your Cart
CONTINUE TO CHECKOUT
Google Recycled Tandem Bike Tote
Quantity
1
$14.00
Have a code? (you must be logged in to enter a gift code)
Promo Code
UPDATE
Sub Total (1 item):
$14.00
Estimate Shipping:
Estimate Tax:
Grand Total:
$14.00
CONTINUE SHOPPING
CONTINUE TO CHECKOUT
1-855-300-2945
Monday - Friday: 8:00am - 8:00pm EST
Email Us
Then we'll take it from there.

Landing Page



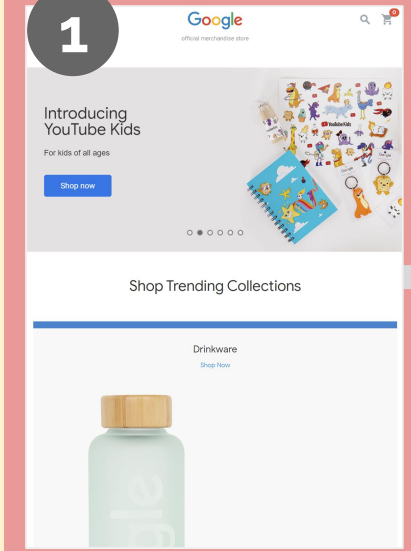


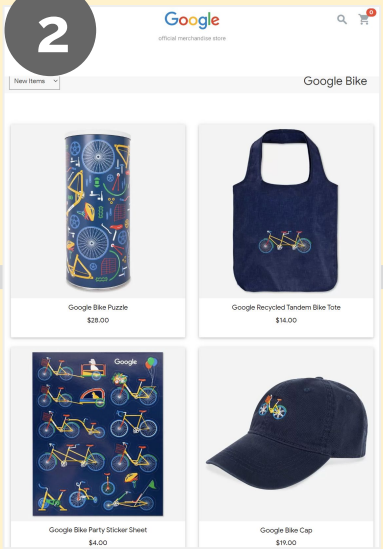


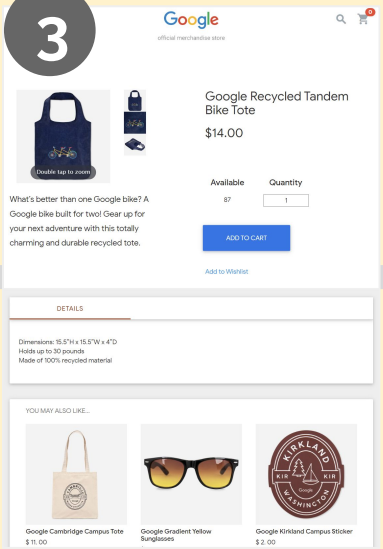


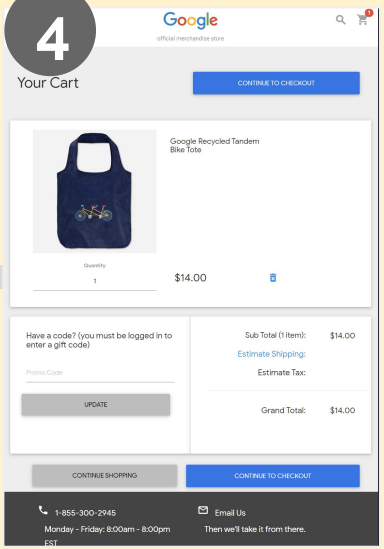
Landing Page

Page









City	Sessions	Pageviews
San Francisco	5,000	9,500
Berlin	4,000	6,800

Dimension	Metric	
City	Sessions	Pageviews
San Francisco	5,000	9,500
Berlin	4,000	6,800

Dimension: Source/Medium

Source: The origin of your traffic

Medium: The general category

Dimension: Source/Medium

Source	Medium	Source/Medium
google	organic	google/organic
google	cpc	google/cpc
facebook	linkpostphoto	facebook/linkpostphoto

Interface Tour!

UTM Parameters

Urchin Tracking Module (**UTM**)

are **five variants of URL parameters** used by marketers to track the effectiveness of online marketing campaigns

UTM Parameters

	Source*	Medium*	Campaign*	Term	Content
Parameter URL	utm_source	utm_medium	utm_campaign	utm_term	utm_content
Dimension	Source	Medium	Campaign	Keyword	Ad Content

UTM Parameters

	Source*	Medium*	Campaign*	Term	Content
Parameter URL	utm_source	utm_medium	utm_campaign	utm_term	utm_content
Dimension	Source	Medium	Campaign	Keyword	Ad Content

https://www.centralthe1card.com/th/central-the1-REDZ-limited.html?active=5&dealercode=OSEM&**utm_source=google**&**utm_medium=social**&**utm_campaign=applyonlineacq-REDZ-202302**&**utm_term=generic**&**utm_content=acq**&gclid=Cj0KCQiAgOefBhDgARIsAMhqXA7lOIKWd1BG8VzTkCetH_yahqiKZHzKwzMnnWEdnwWrtRsZC4v2mF0aAnnkEALw_wcB#applyform

UTM Parameters

	Source*	Medium*	Campaign*	Term	Content
Parameter URL	utm_source	utm_medium	utm_campaign	utm_term	utm_content
Dimension	Source	Medium	Campaign	Keyword	Ad Content
Value	google	social	applyonlineacq-REDZ-202302	generic	acq

https://www.central the1card.com/th/central-the1-REDZ-limited.html?active=5&dealercode=OSEM&**utm_source=google**&**utm_medium=social**&**utm_campaign=applyonlineacq-REDZ-202302**&**utm_term=generic**&**utm_content=acq**&gclid=Cj0KCQiAgOefBhDgARIsAMhqXA7lOIKWd1BG8VzTkCetH_yahqiKZHzKwzMnnWEdnwWrtRsZC4v2mF0aAnnkEALw_wcB#applyform

Dimension: Default channel group

Channel groupings are rule-based definitions of your traffic sources.

- Direct
- Organic Search
- Paid Social
- Organic Social
- Email
- Affiliates
- Referral
- Paid Search
- Video
- Display

Dimension: Default channel group

Channel groupings are rule-based definitions of your traffic sources.

- Direct
- Organic Search
- Paid Social
- Organic Social
- Email
- Affiliates
- Referral
- Paid Search
- Video
- Display

Source matches a list of search sites

OR

Medium exactly matches organic

Source matches a list of search sites

AND

Medium matches regex ^(.*cp.*|ppc|paid.*)$

Dimension: Scope

User-scoped

- First user campaign
- First user campaign ID
- First user default channel group
- First user manual ad content
- First user manual term
- First user medium
- First user source
- First user source / medium
- First user source platform

Session-scoped

- Session campaign
- Session campaign ID
- Session default channel group
- Session manual ad content
- Session manual term
- Session medium
- Session source
- Session source / medium
- Session source platform

And etc..

Dimension

“Attributes of data.”

- ➔ Event count
- ➔ Event count per user
- ➔ Views
- ➔ Sessions
- ➔ Engaged sessions
- ➔ Engagement rate
- ➔ Bounce rate

Metric

“Quantitative measurements.”

Metric: Event Count

The number of times users triggered an event.

Event Name	Event Count
session_start	10,000
scroll	10,000
page_view	10,000

Metric: Event count per user

The average number of events triggered per user.

Event Name	Event count per user
session_start	16.5
scroll	32.5
page_view	100

Metric: Views

The number of mobile app screens or web pages your users saw. Repeated views of a single screen or page are counted.
*(Event name: **screen_view** + Event name: **page_view**)*

Page Title	Views
Home	1,000,000
Shopping Cart	50,000
DataRockie Blog	10,000

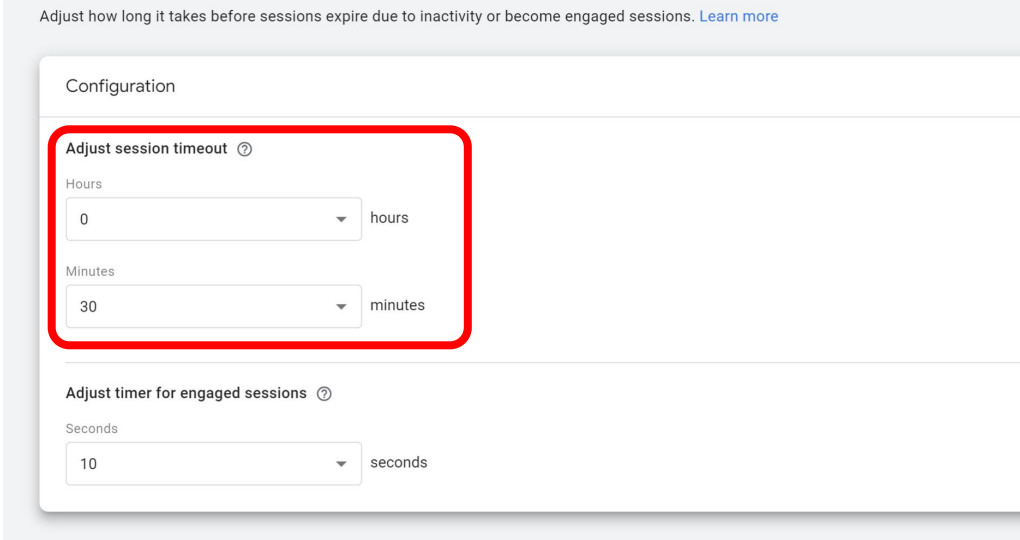
Metric: Session

The number of sessions that began on your website or application.

A session initiates when a user either

- Opens your app in the foreground.
- Views a page or screen and no session is currently active（
  e.g. their previous session has timed out)

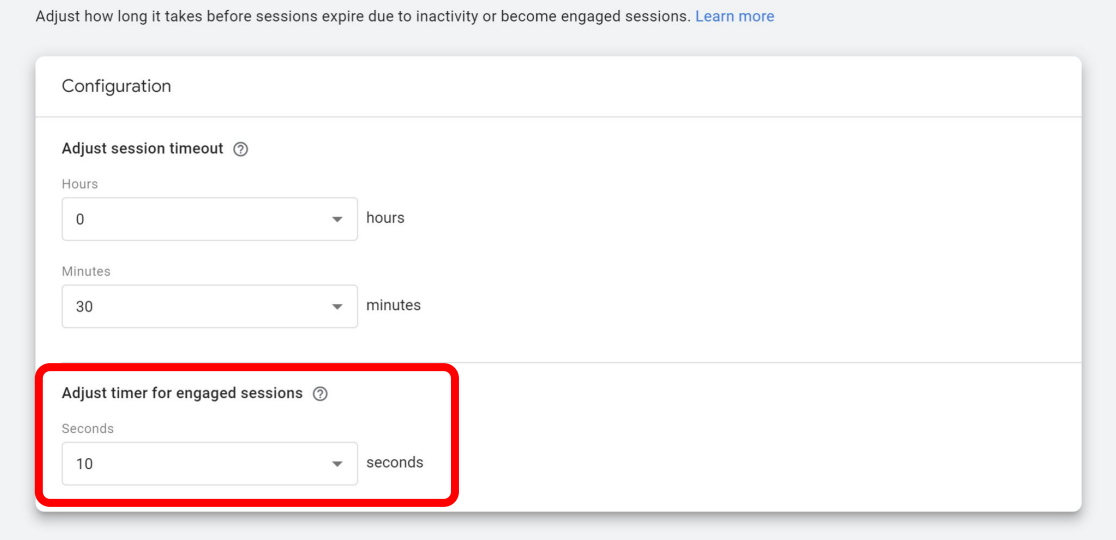
By default, a session ends (times out)
after 30 minutes of user inactivity.
There is no limit to how long a session can last.



Metric: Engaged Session

The number of sessions that

- lasted 10 seconds or longer
- had 1 or more conversion events
- had 2 or more page or screen views.



Metric: Engagement Rate

The percentage of engaged sessions

$$\frac{\text{Engaged Sessions}}{\text{Sessions}}$$

Source	Session	Engaged Session	Engagement Rate
google	1,000	800	80%
facebook	10,000	1,000	10%

Metric: Bounce Rate

The Bounce rate metric shows you the percentage of sessions that were not engaged sessions. **Bounce rate is the inverse of Engagement rate.**

Source	Session	Engaged Session	Engagement Rate	Bounce Rate
google	1,000	800	80%	20%
facebook	10,000	1,000	10%	90%

Metric: User conversion rate

User ที่สร้าง Conversion Events

The percentage of users who converted.

$$\frac{\text{Converted users}}{\text{Total Users}}$$

Page Title	Total Users	Converted Users	User Conversion Rate
Add cart	1,000	800	80%
Purchase	800	200	25%

Metric: Session conversion rate

Session ที่สร้าง Conversion Events

The percentage of sessions that converted.

$$\frac{\text{Converted sessions}}{\text{Total Sessions}}$$

Page Title	Total Sessions	Converted Sessions	Session Conversion Rate
Add to cart	1,000	800	80%
Purchase	800	200	25%

Metric: Conversions

Page Title	Total Users	Total Sessions	Users generated conversion event	Session generated conversion event	User Conversion Rate	Session Conversion Rate
Add to cart	1,000	10,000	87	450	8.7%	4.5%
Purchase	800	7,500	350	1,000	43.7%	13.3%

Metric: Conversions

Page Title	Total Users	Total Sessions	Users generated conversion event	Session generated conversion event	User Conversion Rate	Session Conversion Rate
Add to cart	1,000	10,000	87	450	8.7%	4.5%
Purchase	800	7,500	350	1,000	43.7%	13.3%

Exercise

Exercise 1:

ในช่วงเวลา 1-31 Jan 2023

User ที่มาจากประเทศและเมืองใด ที่มี Engaged Session มากที่สุดเป็นอันดับที่ 5 และมีจำนวนเท่าไหร่

Exercise 2:

ในช่วงเวลา 1-31 Dec 2022

โทรศัพท์มือถือยี่ห้อใดมี Users มากที่สุดเป็นอันดับ 2 และมีจำนวนเท่าไหร่

Exercise 3:

ในช่วงเวลา 1-15 Feb 2023

Page title และ Event Name ที่มีจำนวน Event count มากที่สุดเป็นอันดับที่ 4
คือ Page title และ Event Name อะไร

Exercise 4:

ในช่วงเวลา 1 Jan 2023 - 15 Feb 2023

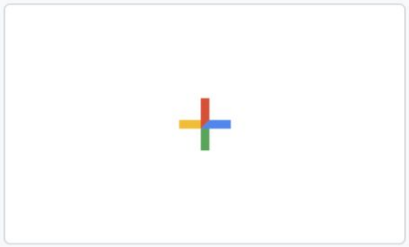
สินค้าที่ลูกค้าจากประเทศ US ซื้อเป็นจำนวนมากที่สุด (Quantity) คือสินค้าชื่อว่าอะไร และซื้อจำนวนเท่าไหร่

Explore

Explorations

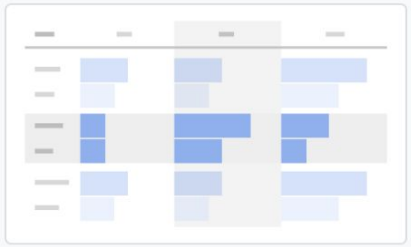
Start a new exploration

Template gallery



Blank

Create a new exploration



Free form

What insights can you uncover with custom charts and tables?

Funnel exploration

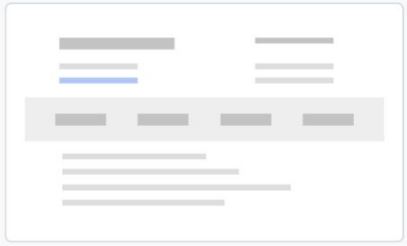
What user journeys can you analyze, segment, and breakdown with multi-step funnels?

Path exploration

What user journeys can you uncover with tree graphs?

Segment overlap

What do intersections of your segments of users tell you about their behavior?

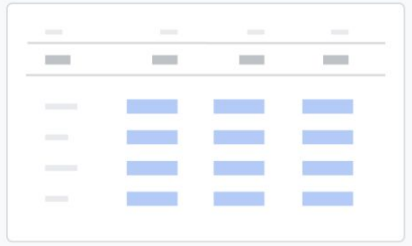


User explorer

What individual behaviors can you uncover by drilling into individual user activities?

Cohort exploration

What insights can you get from your user cohorts behavior over time?



User lifetime

What can you learn by analyzing the entire lifetime of your users?

Thank You