Google Analytics 4

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On this course we'll cover…

1. Introduction to GA4
2. Overview of the NEW GA4 Dashboard
3. Reports Snapshot & Real-time Data
4. Life Cycle Reporting
5. Explorations
6. Advertising Performance
7. Configure
8. Supporting tools: Campaign URL Builder, Google Search Console

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Section 1

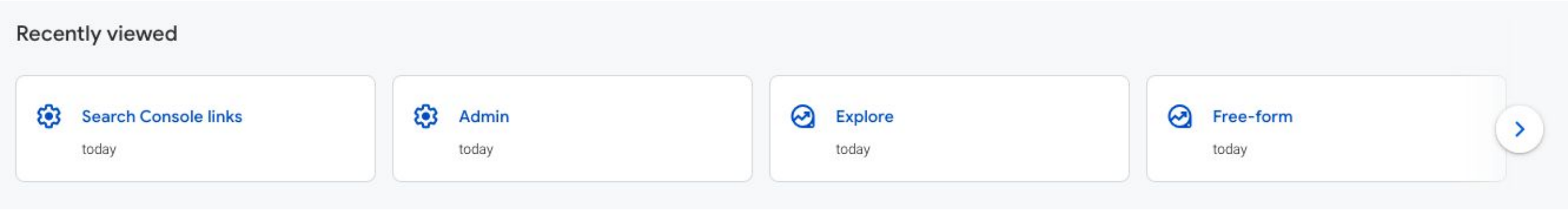
Introduction

What's changed?

- GA4 uses a very different data structure intended to make it more flexible and better able to predict behaviour.
- Everything is now built around **Users** (visitors) and **Events** (interactions) on your site, rather than sessions.
  For example, **Bounce Rate** is replace with **Engaged Sessions** that:
    - Lasts longer than 10 seconds
    - Contains more than one page view
    - Contains at least one conversion event

What’s changed?

- New features also include **Recently Viewed** areas to help you navigate back to areas of interest more easily.

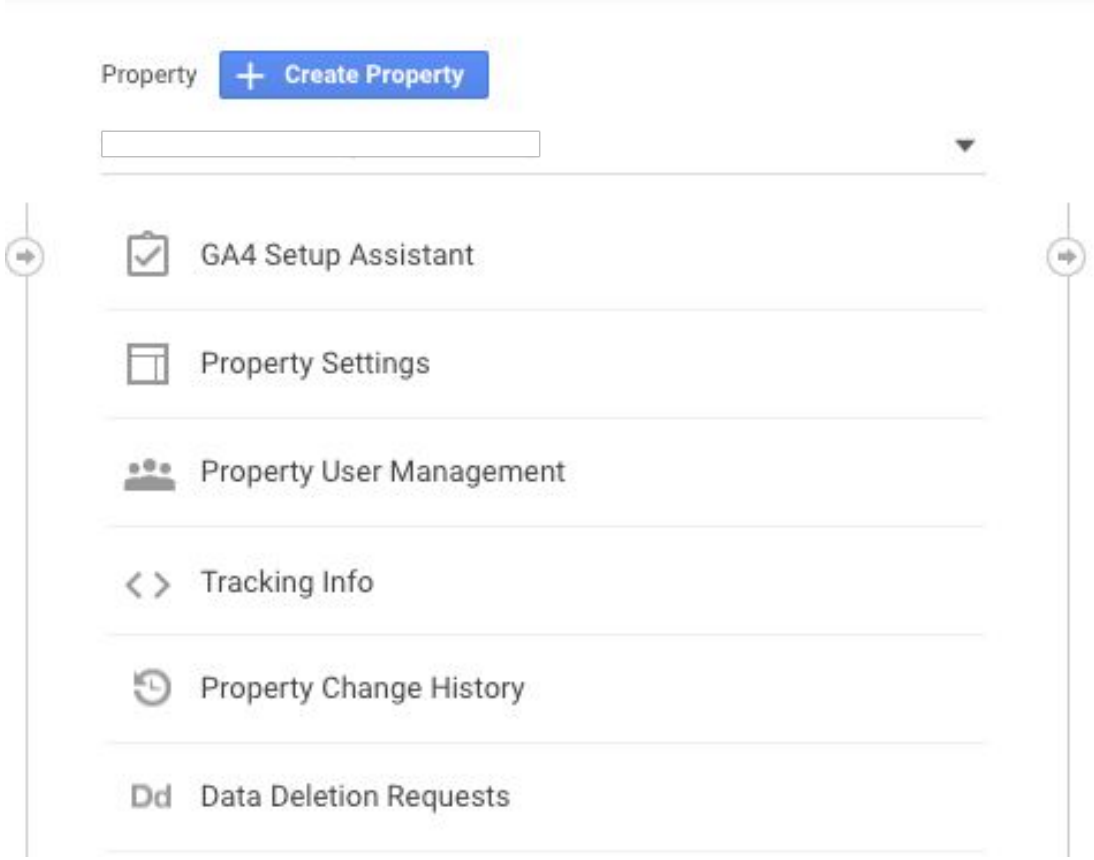


When can I make the switch to GA4?

- The deadline is **1 July 2023** when Universal Analytics will cease gathering new data.
- You can run both both GA4 and Universal Analytics in parallel until the deadline, provided you maintain both tracking cookies.
- Historical Universal Analytics data will be available for a period of time after 1 July 2023.

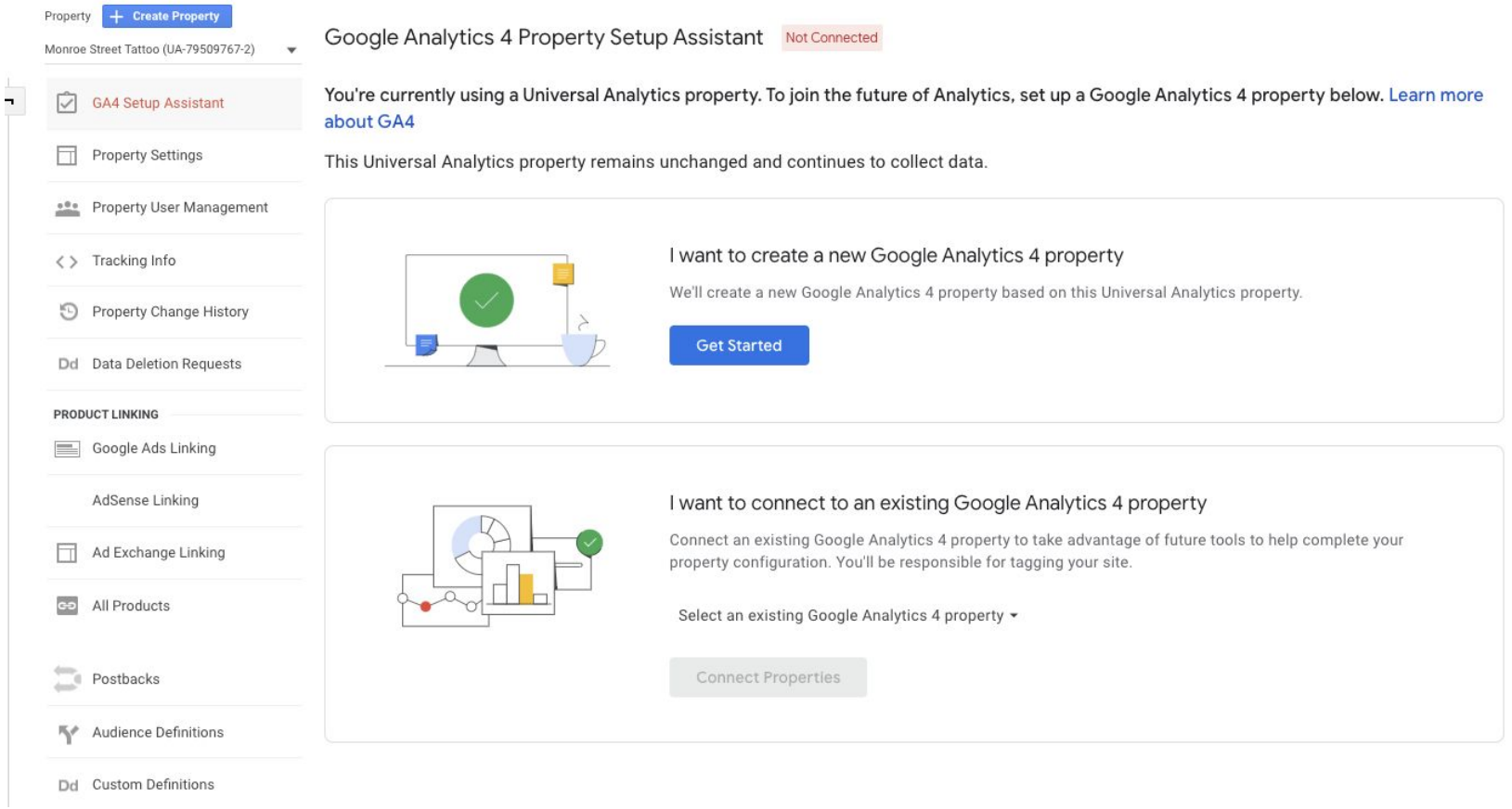
How do I make the switch to GA4?

- Login to your Google Analytics Account.
- Click on ‘Admin’ (Gear icon, bottom left navigation).
- Confirm that your desired account is selected.
- Confirm the desired property is selected.
- Click **GA4 Setup Assistant**, the first option in the **Property** column.



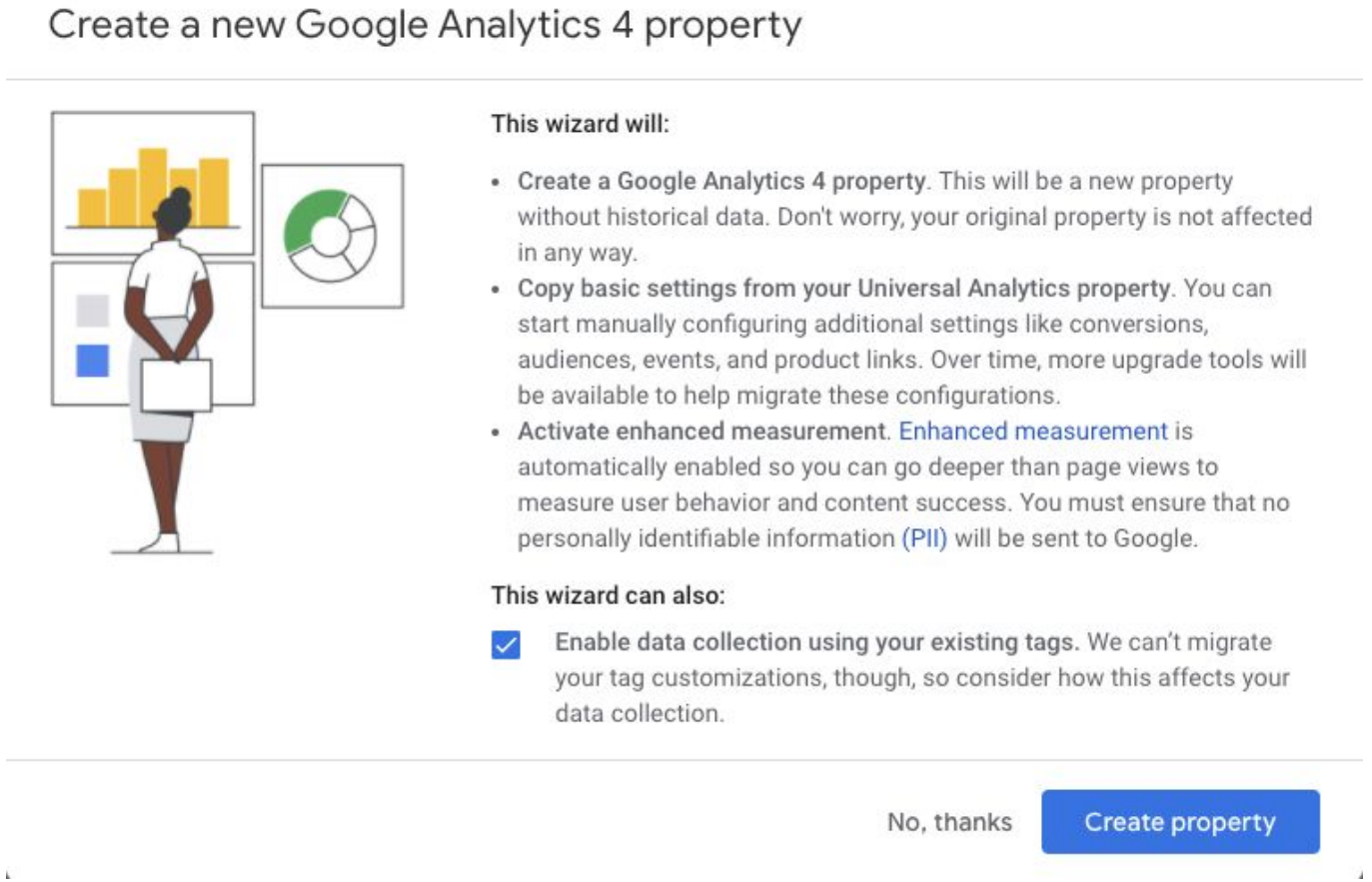
How do I make the switch to GA4?

- Click the blue **Get Started** button



How do I make the switch to GA4?

- Click the blue **Create Property** button
- The GA4 setup assistant works automatically with gtag.js.
- If you use a website platform such as WordPress, Wix, etc., you will need to add the new Analytics tag yourself.



What are the benefits of GA4?

- Users (visitors) move across multiple platforms and devices – getting a complete data picture is challenging!
- GA4 uses machine learning techniques to help fill in the missing data gaps and create a single user journey.
- The simpler, clutter-free, GA4 dashboard presents summary cards that you click on for more depth.
- The GA4 dashboard enables you to more easily spot key trends and irregularities in data.

What information can’t GA4 provide?

- Data remains non-personal and anonymous so cannot indicate the behaviour of specific individuals.

Remember: You can get familiar with GA4 before switching by using the Google Analytics Demo:
https://support.google.com/analytics/answer/10993011?hl=en

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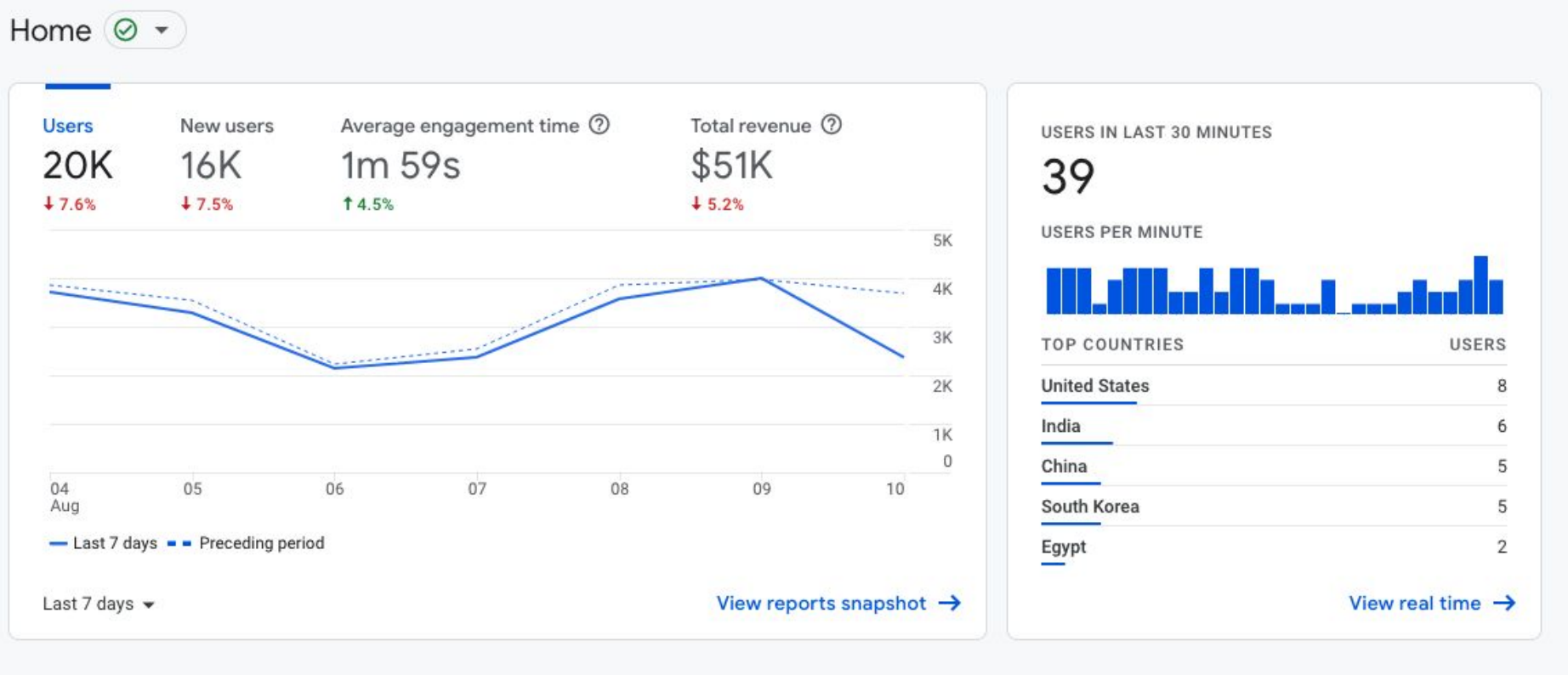
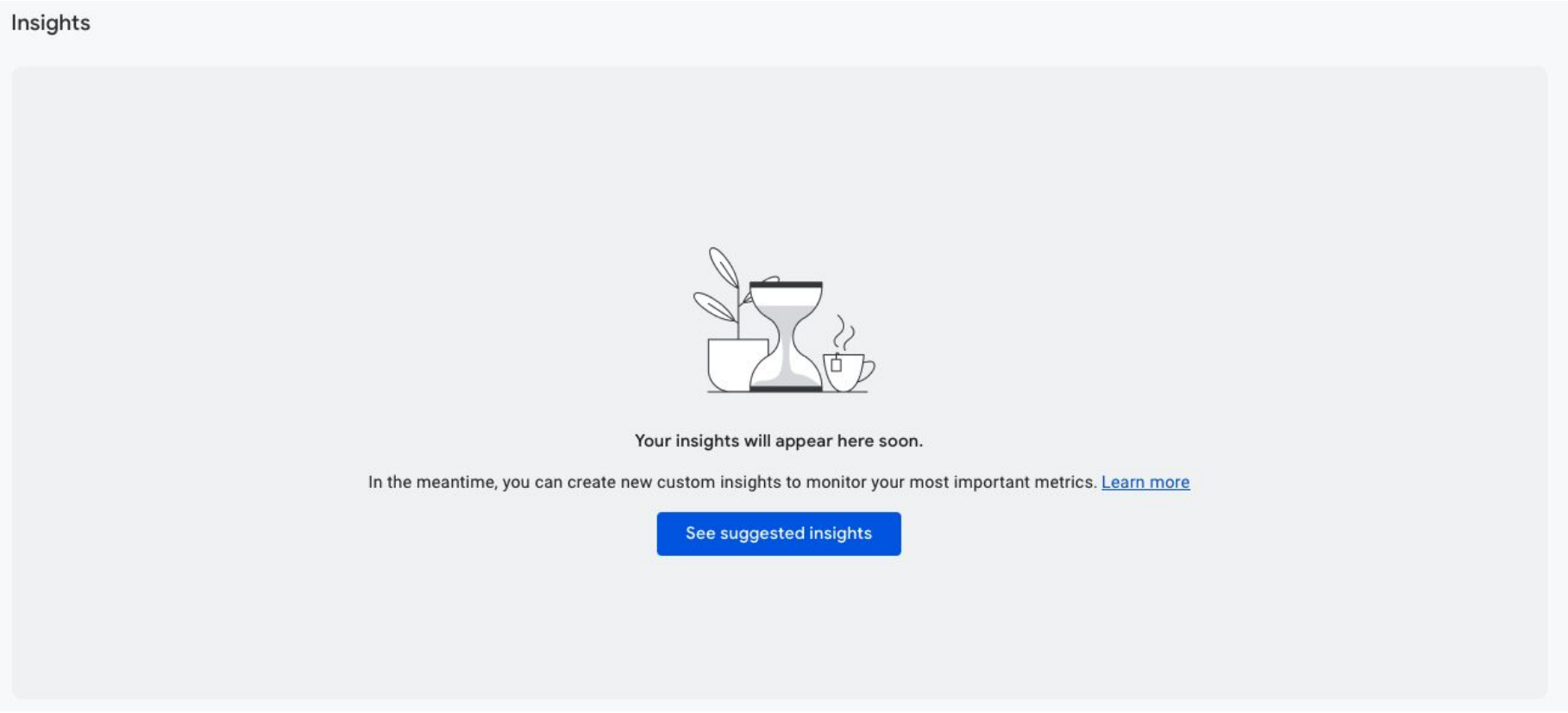
Section 2

The New GA4 Dashboard

The New GA4 Dashboard: Home



The New GA4 Dashboard: Insights



The New GA4 Dashboard: Insights

The New GA4 Dashboard: Insights

Creating & Adding Custom Insights

- On the Insights card, click View all insights.
- Click Create.
- To use one of the suggested custom insights: ...
- To create your own insight, under Start from scratch, click Create new.
- Set the condition that generates the insight: ...
- Enter a name for the insight.
- Manage notifications.

Create Custom Insight

Custom Insights let you automatically monitor performance of your property. All users in this property will see insights in the Insights dashboard when the conditions are triggered. Users can also subscribe to receive these insights via email.

Set Conditions

Evaluation frequency

Daily

Segment

All Users Change

Metric

Condition

Has anomaly

Choose insight name

This is the name you'll see in the notifications, so use a descriptive name.

For example 'daily – revenue is

0/100

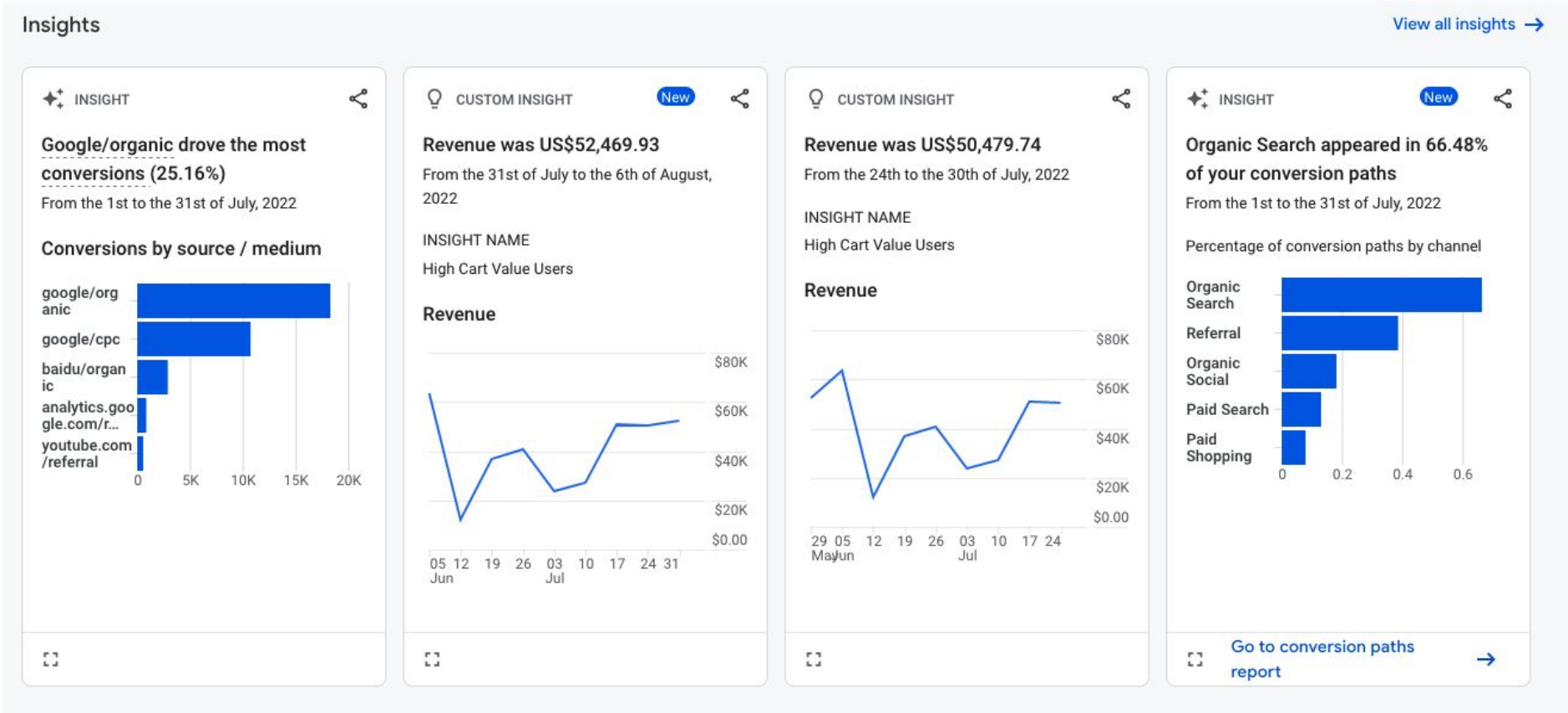
Manage notifications

When this insight is triggered, all users on this property can see it in the Insights dashboard. Users you list below will also receive an email notification, if they have access to the property.

Send email notifications to (separate emails by commas)

your email address

The New GA4 Dashboard: Insights



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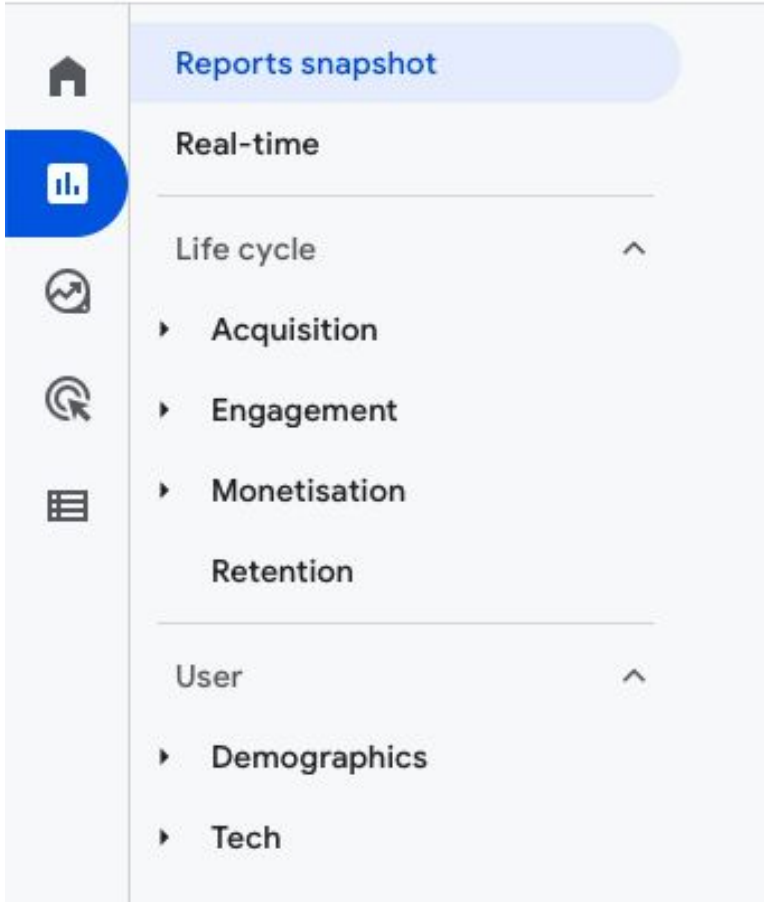
Section 3

Reports Snapshot & Real-time Data

Reports Snapshot

This first **Reports** tab is where you'll find a lot of essential information including:

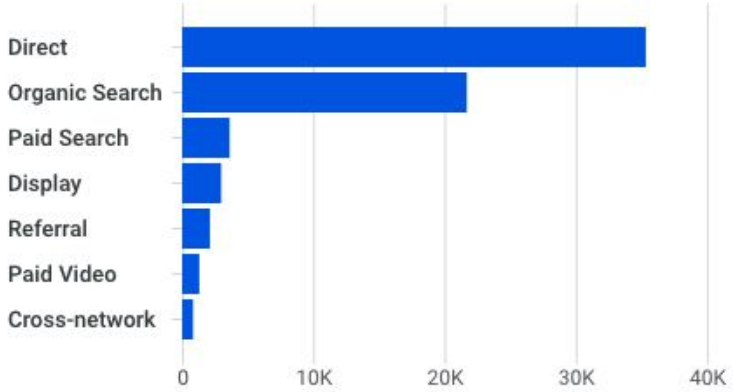
- What source do new users come from?
- Which countries do users come from?
- What are your top-performing campaigns?
- Which pages and screens get the most views?
- How well do you retain users?



Reports Snapshot

WHERE DO YOUR NEW USERS COME FROM?

New users by First user default channel grouping



View user acquisition →

WHAT ARE YOUR TOP CAMPAIGNS?

Sessions by Session medium

SESSION MEDIUM	SESSIONS
(none)	53K
organic	36K
cpc	11K
referral	10K
affiliate	206
email	138

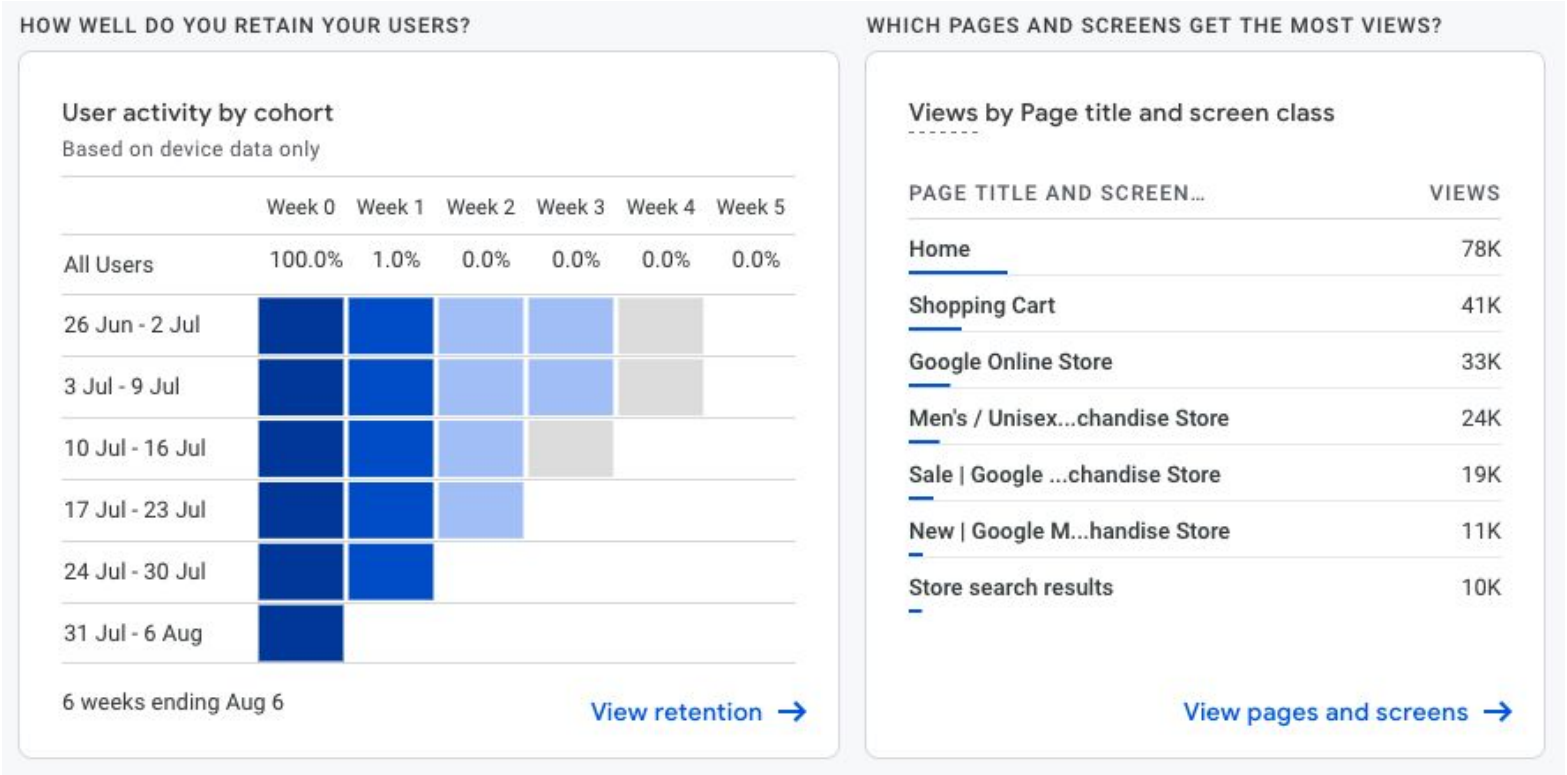
View traffic acquisition →

Users by Country

COUNTRY	USERS
United States	39K
China	14K
India	6.1K
Canada	3.5K
Japan	2.1K
Taiwan	1.3K
Hong Kong	1.3K

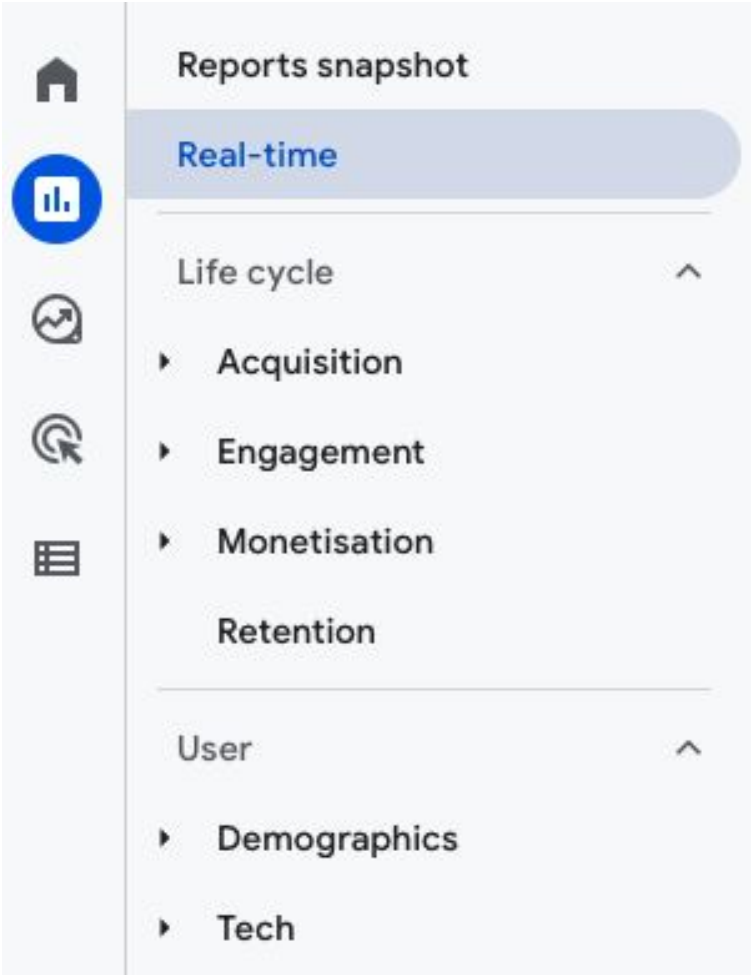
View countries →

Reports Snapshot



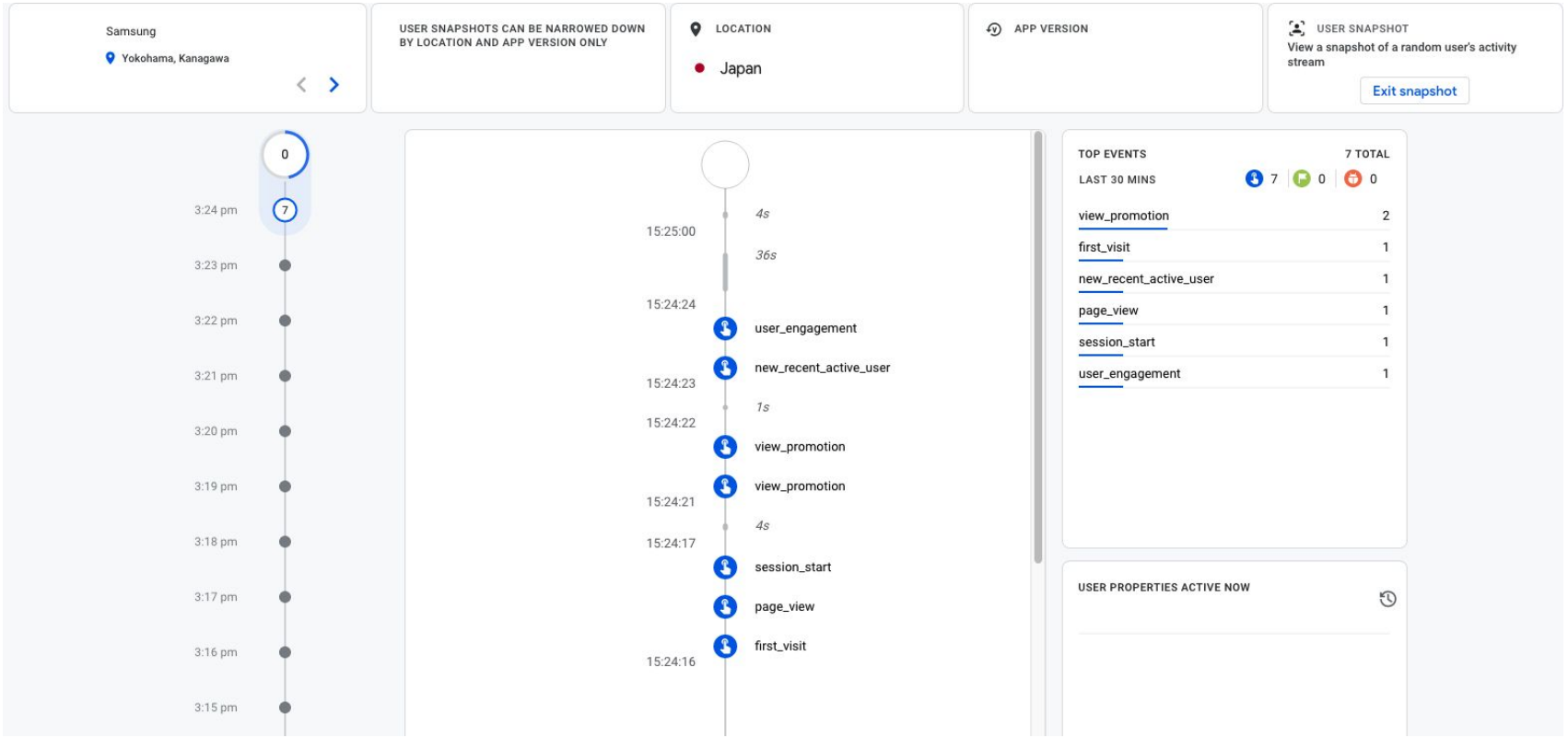
Realtime Report

- Realtime report is the next default report in the left navigation, and it shows events that happened within the past 30 minutes.
- Use it to check your tracking cookie is working!
- Click **View user snapshot** in the top right corner of the Realtime report to see a snapshot for a single user, including device, location, and real-time engagement with the site (or app) through events triggered.



Realtime Report: Overview

Realtime Report: Snapshot



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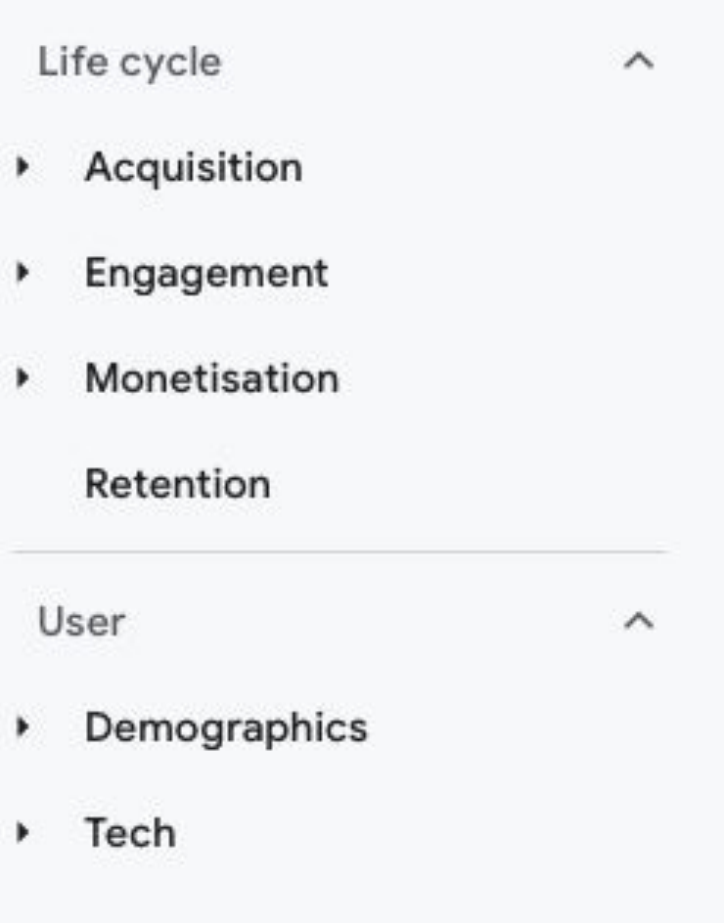
Section 4

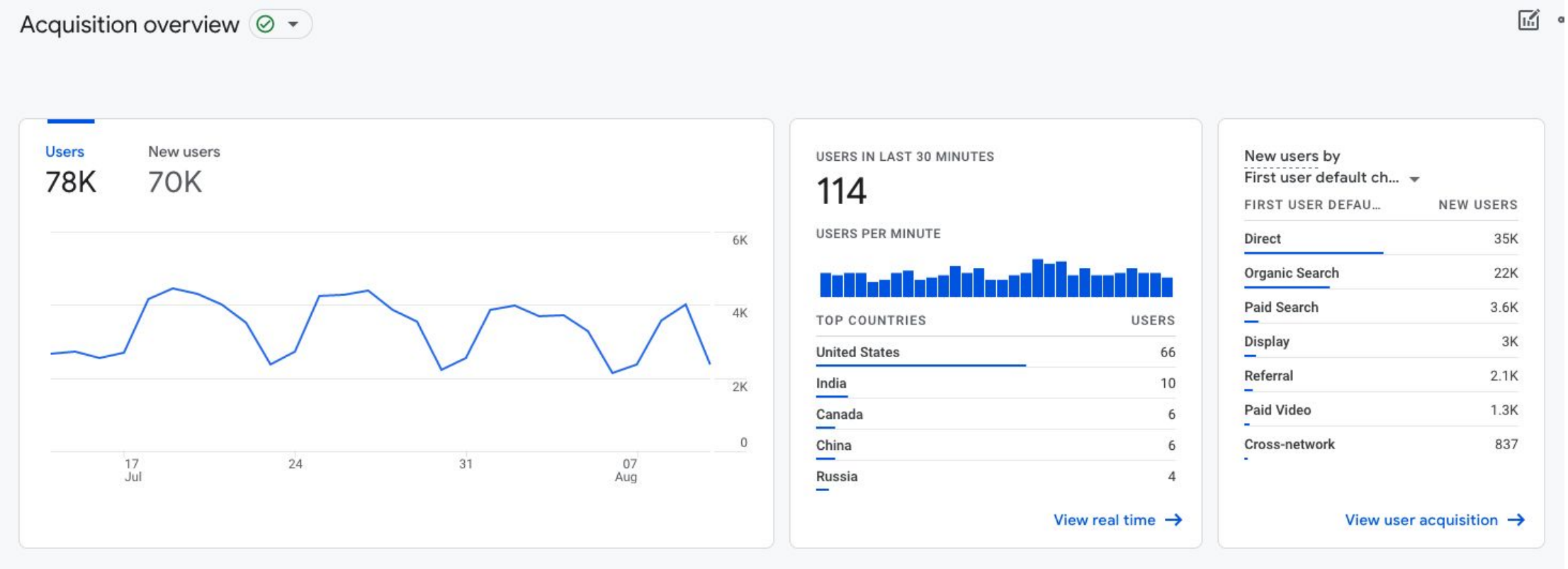
Lifecycle Reporting

Life Cycle Reporting

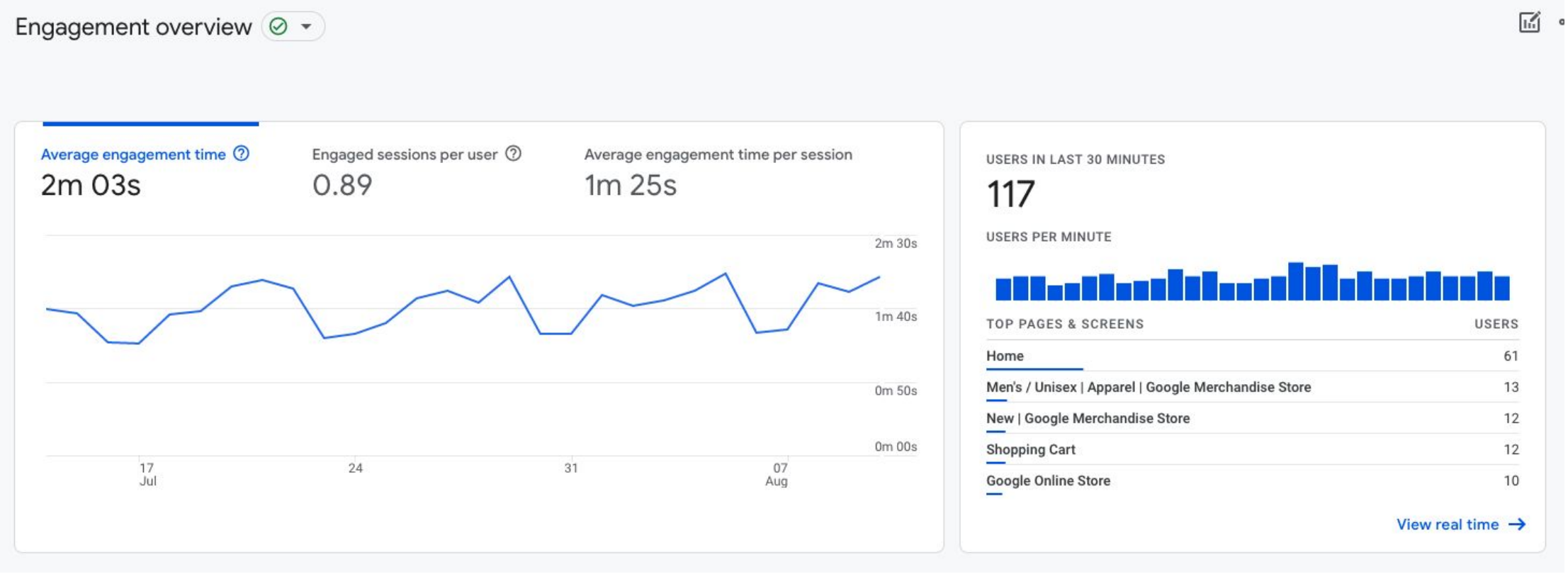
- Follows the funnel of **acquiring**, **engaging**, **monetising** and **retaining** users.
- Analyse how users enter the conversion funnel and how they behave once they're in the funnel.
- Life Cycle Reports will quickly answer:
  - How do users enter the conversion funnel?
  - How do users behave once they're in the funnel?
- GA4 also includes user reports on demographics and technology, as well as events and conversions.



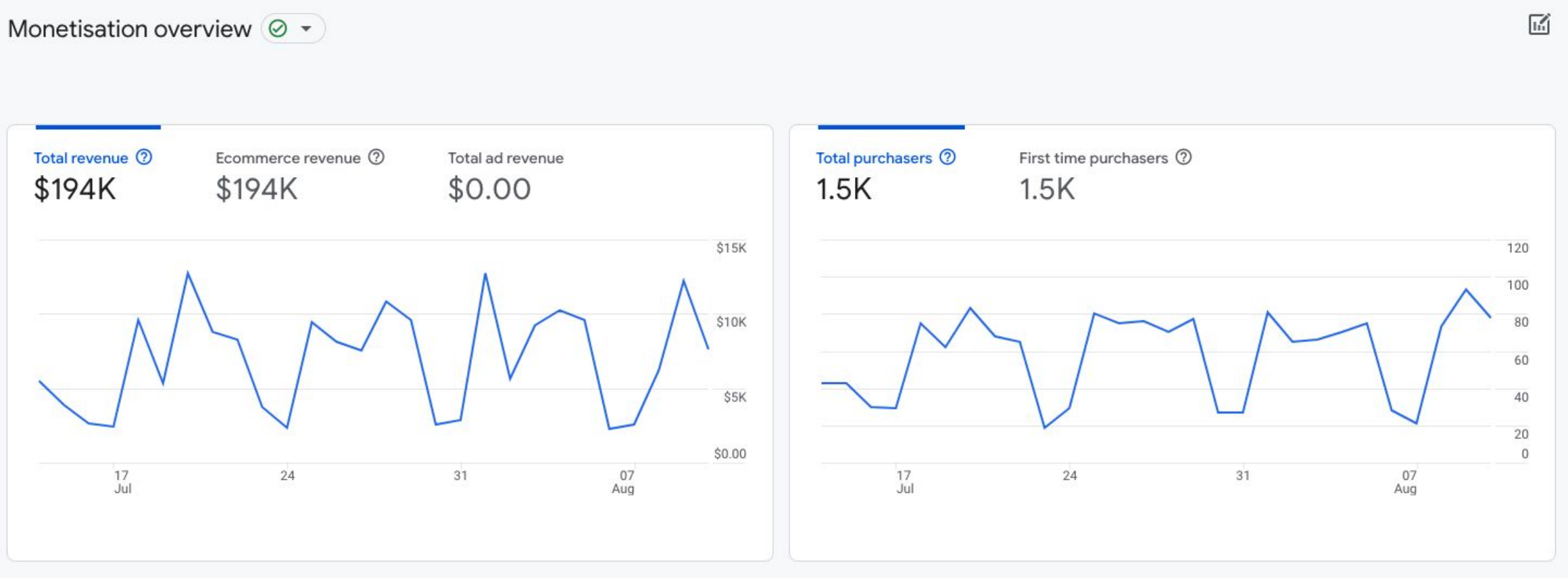
Life Cycle Reporting: Acquisition



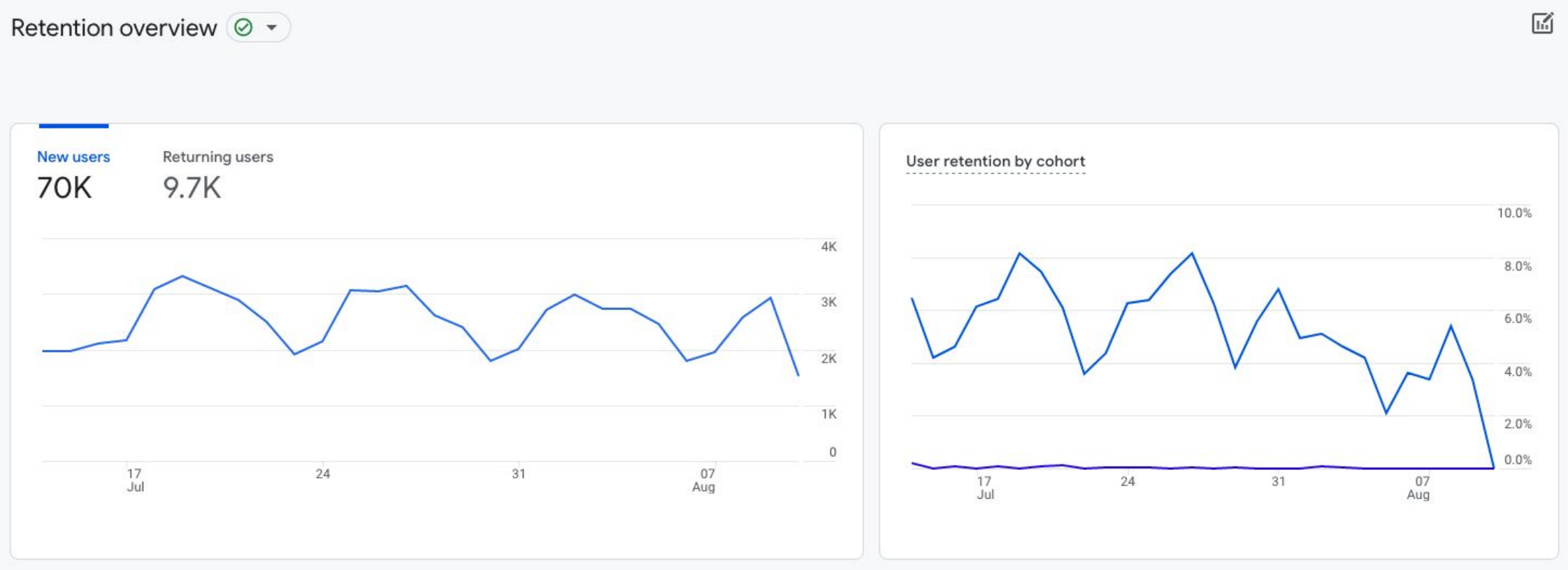
Life Cycle Reporting: Engagement



Life Cycle Reporting: Monetisation



Life Cycle Reporting: Retention



Demographics Overview

Demographics overview

Users by Country

COUNTRY	USERS
United States	40K
China	13K
India	6K
Canada	3.5K
Japan	2K
Taiwan	1.4K
Hong Kong	1.3K

View countries →

USERS IN LAST 30 MINUTES

42

USERS PER MINUTE

TOP COUNTRIES	USERS
United States	13
India	11
South Korea	4
China	3
Russia	3

View real time →

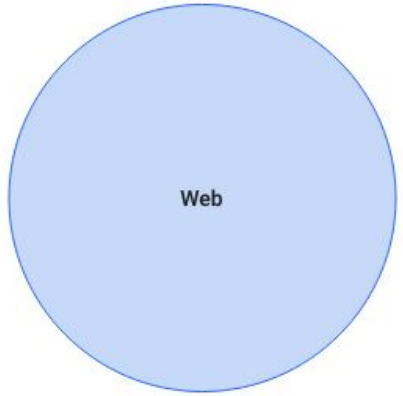
Users by Town/City

TOWN/CITY	USERS
New York	4.3K
Mountain View	2.4K
Los Angeles	2.2K
Sunnyvale	1.8K
Chicago	1.7K
San Jose	1.7K
San Francisco	1.5K

View cities →

Tech Overview

Users by Platform

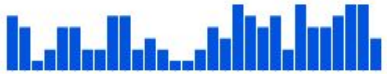


WEB
100.0%

View platforms →

USERS IN LAST 30 MINUTES
41

USERS PER MINUTE



TOP PLATFORMS	USERS
web	41

View real time →

Users by Operating system

OPERATING SYSTE...	USERS
Android	27K
Macintosh	20K
Windows	16K
iOS	11K
Chrome OS	4.3K
Linux	1.3K
Windows Phone	20

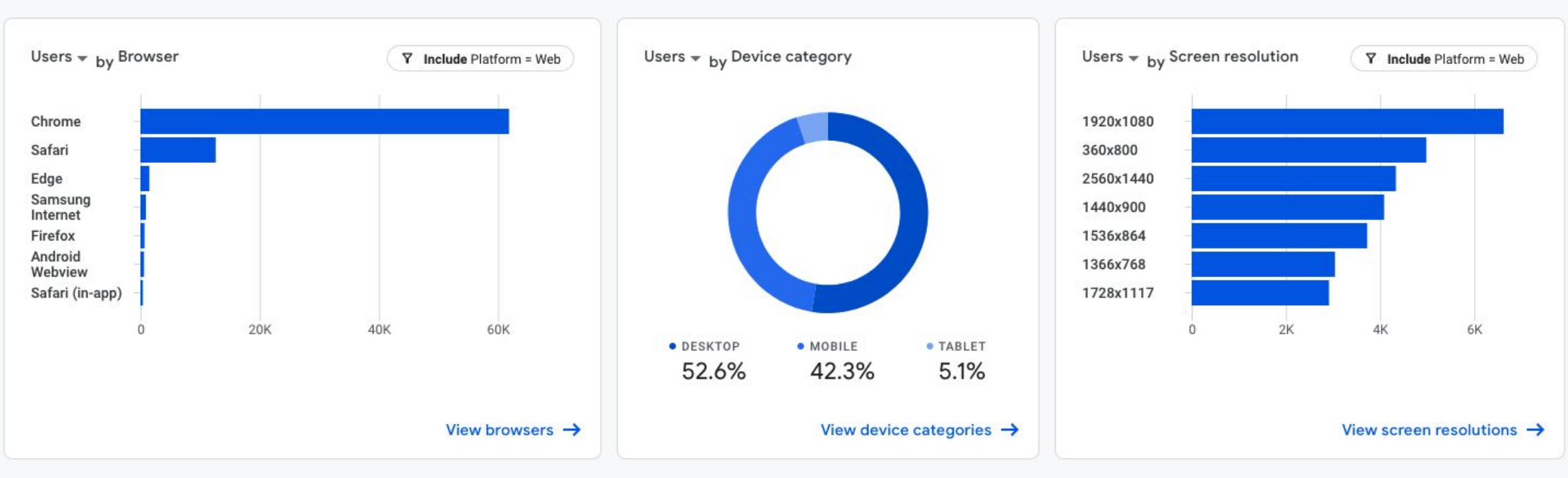
View operating systems →

Users by Platform/Device categ...

PLATFORM/DEVIC...	USERS
web / desktop	41K
web / mobile	33K
web / tablet	4K
web / smart tv	6

View platform devices →

Tech Overview



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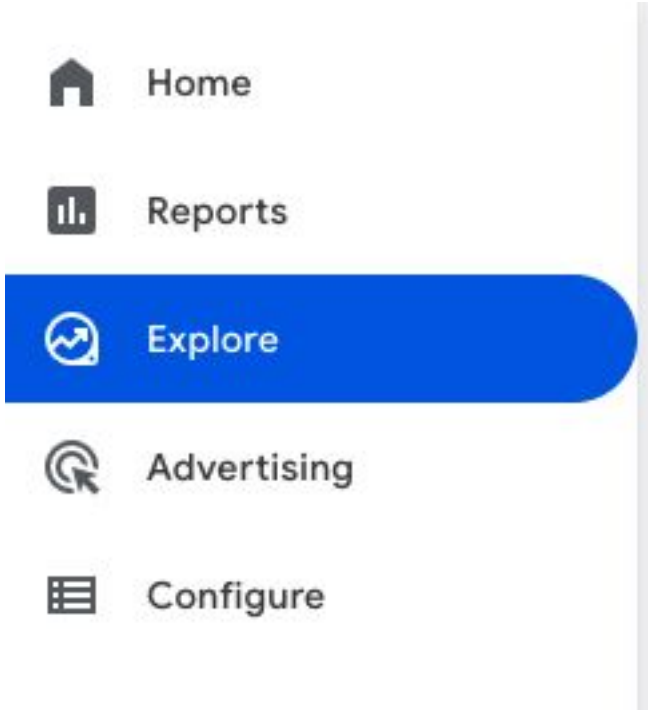
Section 5

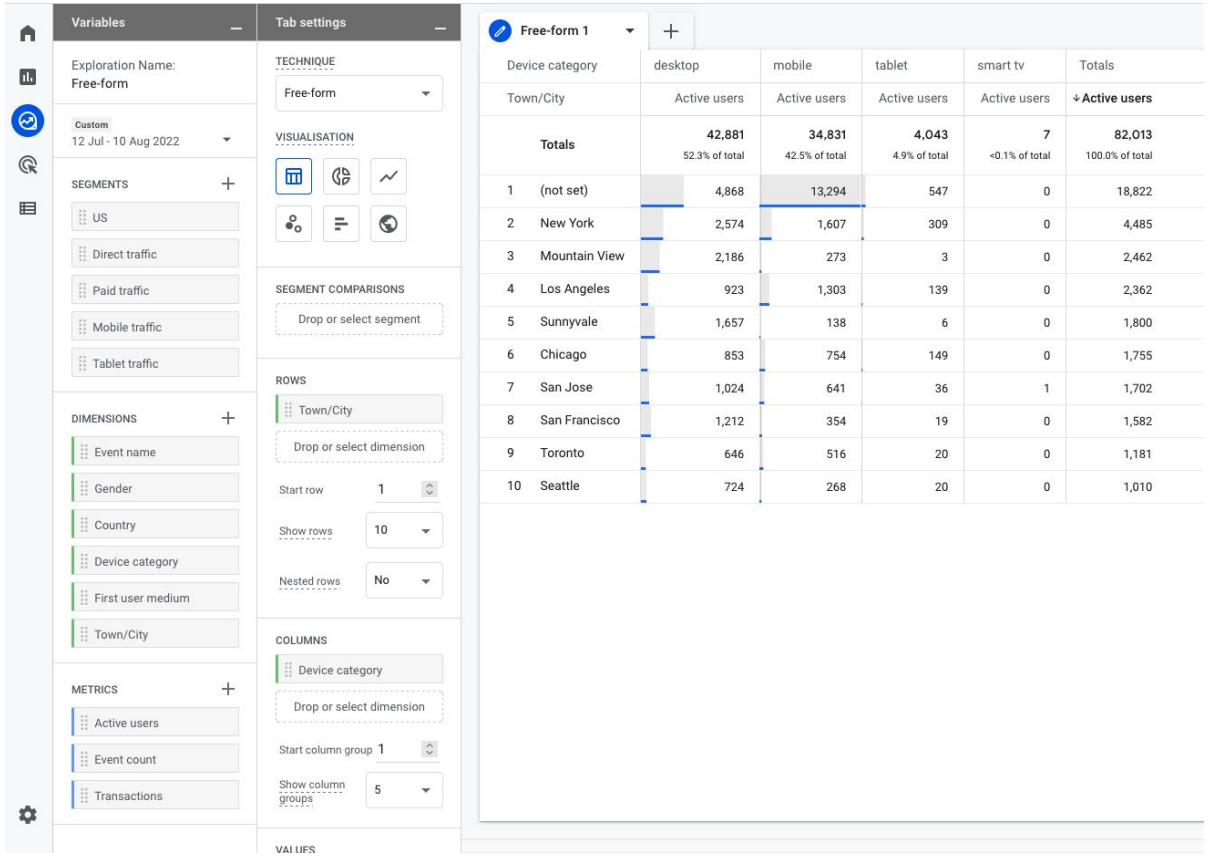
Explorations

Explorations

- What insights can you uncover with **custom charts and tables**?
- What user journeys can you analyse, segment and breakdown with **multi-step funnels**?
- What user journeys can you uncover with **tree graphs**?
- What do **intersections of your segments** of users tell you about their behaviour?
- What insights can you get from your **user cohorts behaviour** over time?
- What can you learn by analysing the entire **lifetime of your users**?

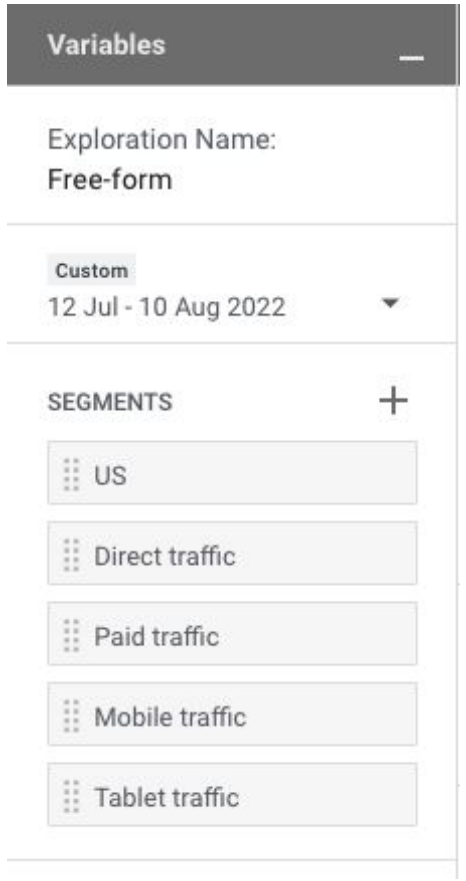
Free-form Explorations





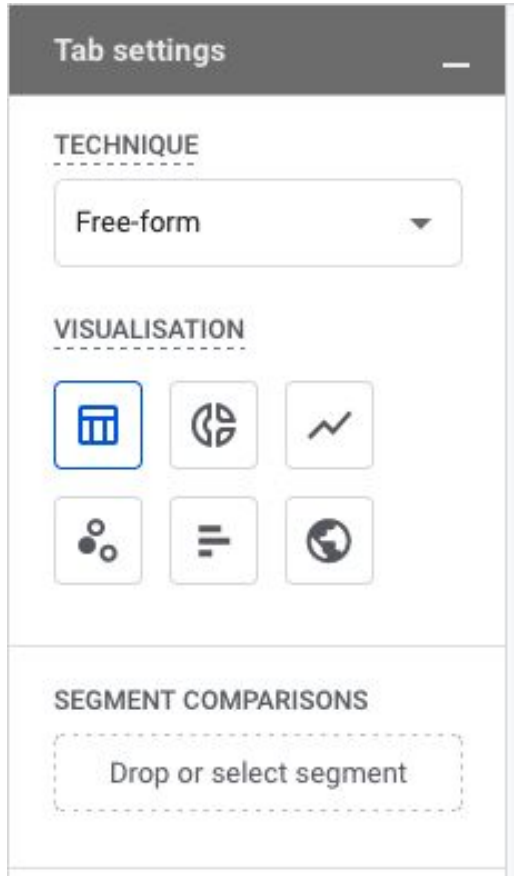
Explorations Guide: Variables Column

- The variables column is where you select the data you want to use in your analysis:
  - Date range
  - Segments
  - Dimensions
  - Metrics



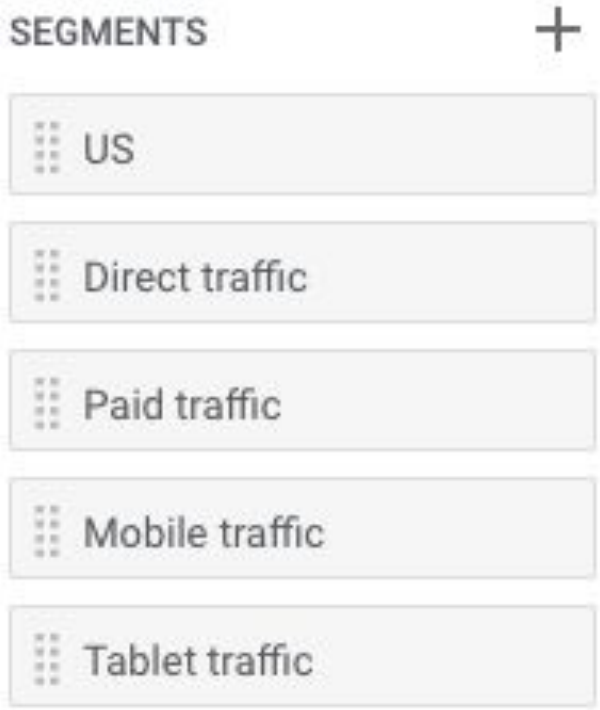
Explorations Guide: Tab Settings Column

- The tab settings column is where you specify the analysis technique, add dimensions, metrics and apply segments.



Explorations Guide: Segments

- Segments are different groups of users.
- Drag and drop different groups of users to your report to compare and contrast how they are behaving.
- If you don’t see the segment you want to use, add your own by clicking on the plus icon.

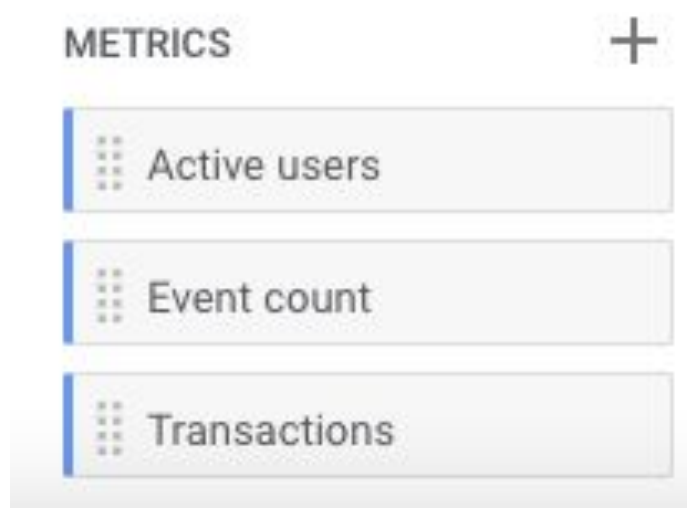


Explorations Guide: Dimensions

- Dimensions are the things you want to analyse. For example, event count, active users, transactions, etc.
- Drag and drop dimensions as rows or columns in the Tab Settings area.

Explorations Guide: Metrics

- Metrics provide the numbers in your analysis.
- Add metrics to the Values area in Tab Settings.

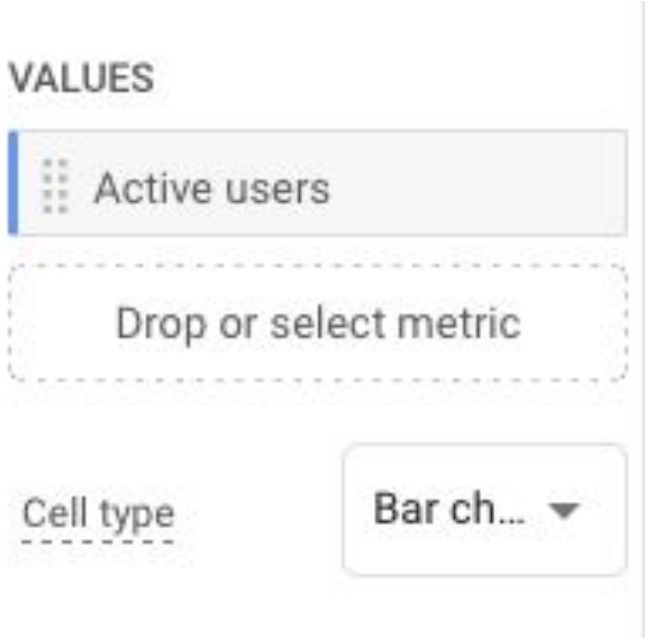


Explorations Guide: Visualization

- Choose what the report will look like.
- Exploration options include table, pie chart, line graph and more.

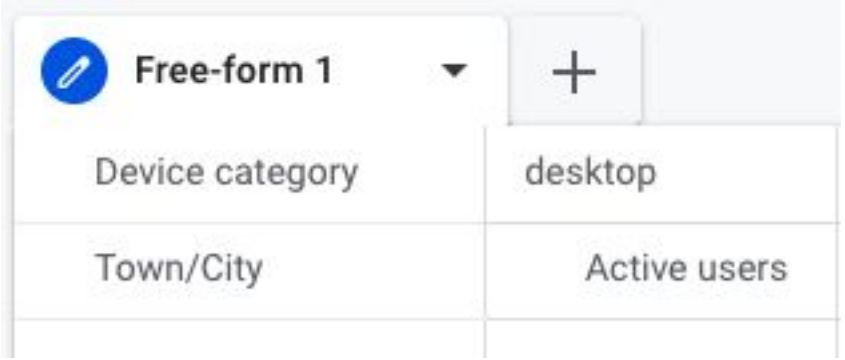
Explorations Guide: Values

- Drag the metrics that you want to display as columns in the report.
- Cell type can be displayed as a bar chart, plain text or heat map.



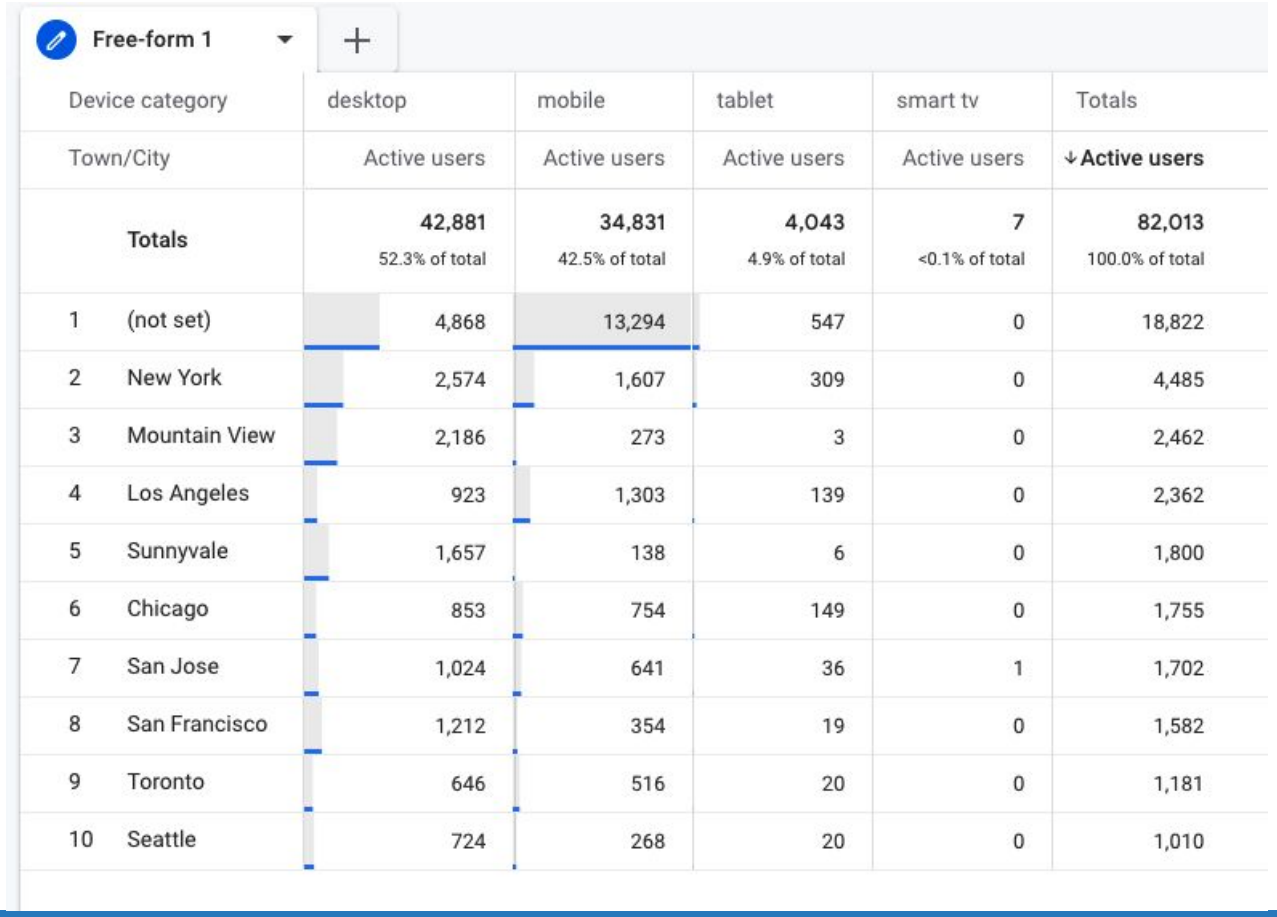
Explorations Guide: Tabs

- Tabs display your visualizations.
- An analysis can contain up to 10 tabs.
- To add a new tab, click the plus icon.



Explorations Guide: Display

- Interact with the data by right-clicking a data point in the visualization.



Free-form 1

Device category		desktop	mobile	tablet	smart tv	Totals
Town/City		Active users	Active users	Active users	Active users	↓Active users
	Totals	**42,881** 52.3% of total	**34,831** 42.5% of total	**4,043** 4.9% of total	**7** <0.1% of total	**82,013** 100.0% of total
1	(not set)	4,868	13,294	547	0	18,822
2	New York	2,574	1,607	309	0	4,485
3	Mountain View	2,186	273	3	0	2,462
4	Los Angeles	923	1,303	139	0	2,362
5	Sunnyvale	1,657	138	6	0	1,800
6	Chicago	853	754	149	0	1,755
7	San Jose	1,024	641	36	1	1,702
8	San Francisco	1,212	354	19	0	1,582
9	Toronto	646	516	20	0	1,181
10	Seattle	724	268	20	0	1,010

Other Explorations

Explorations

Start a new exploration

Template gallery NEW

Free-form

What insights can you uncover with custom charts and tables?

Funnel exploration

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

Path exploration

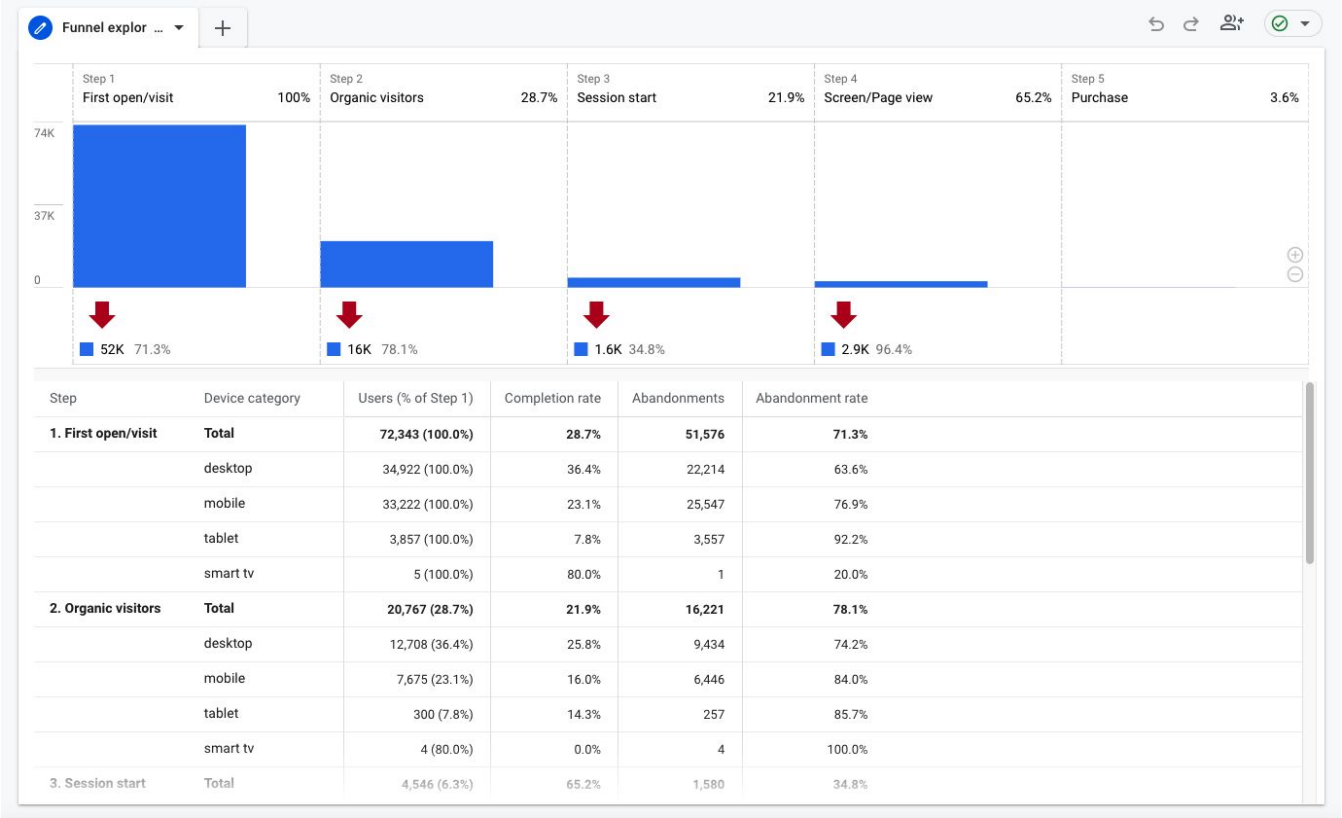
What user journeys can you uncover with tree graphs?

Segment overlap

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

Funnel Exploration

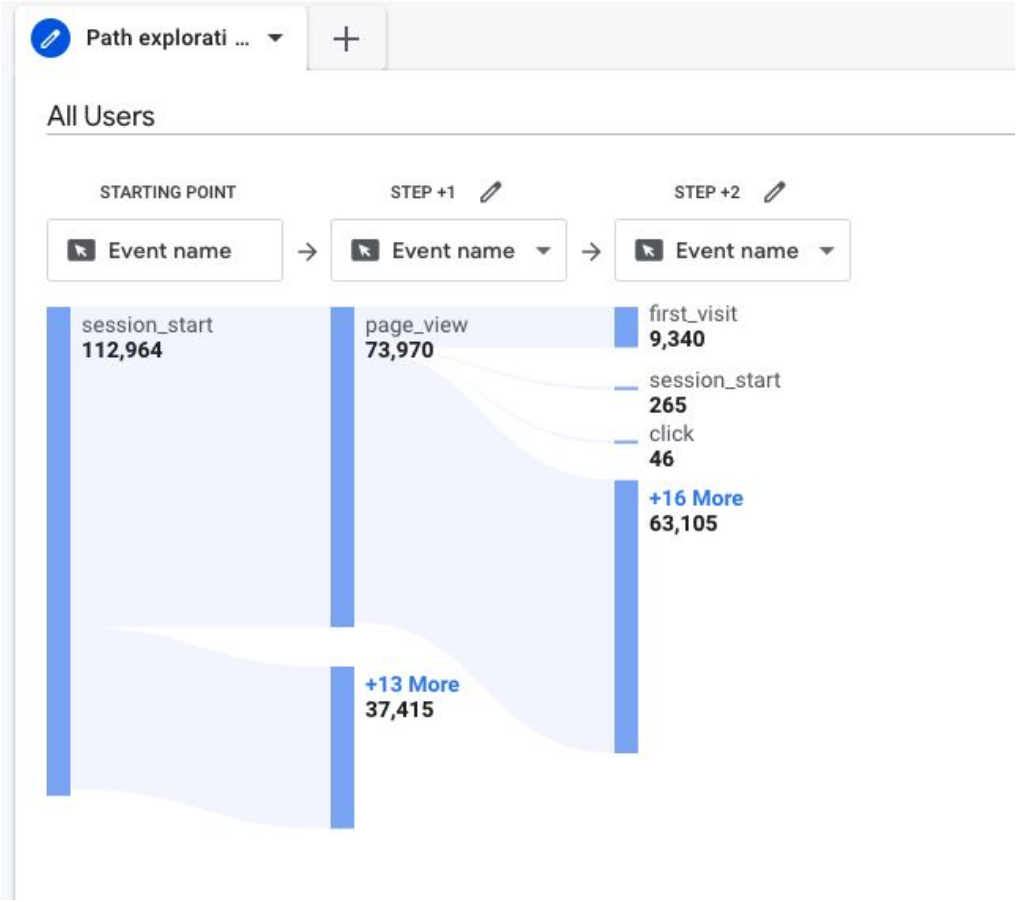
- How do website visitors become one-time shoppers and then how do one-time shoppers become repeat customers?
- Here, you can visualise the steps shoppers take to complete an event and see how well they are succeeding or failing at each step.



Step	Device category	Users (% of Step 1)	Completion rate	Abandonments	Abandonment rate
1. First open/visit	**Total**	**72,343 (100.0%)**	**28.7%**	**51,576**	**71.3%**
	desktop	34,922 (100.0%)	36.4%	22,214	63.6%
	mobile	33,222 (100.0%)	23.1%	25,547	76.9%
	tablet	3,857 (100.0%)	7.8%	3,557	92.2%
	smart tv	5 (100.0%)	80.0%	1	20.0%
2. Organic visitors	**Total**	**20,767 (28.7%)**	**21.9%**	**16,221**	**78.1%**
	desktop	12,708 (36.4%)	25.8%	9,434	74.2%
	mobile	7,675 (23.1%)	16.0%	6,446	84.0%
	tablet	300 (7.8%)	14.3%	257	85.7%
	smart tv	4 (80.0%)	0.0%	4	100.0%
3. Session start	Total	4,546 (6.3%)	65.2%	1,580	34.8%

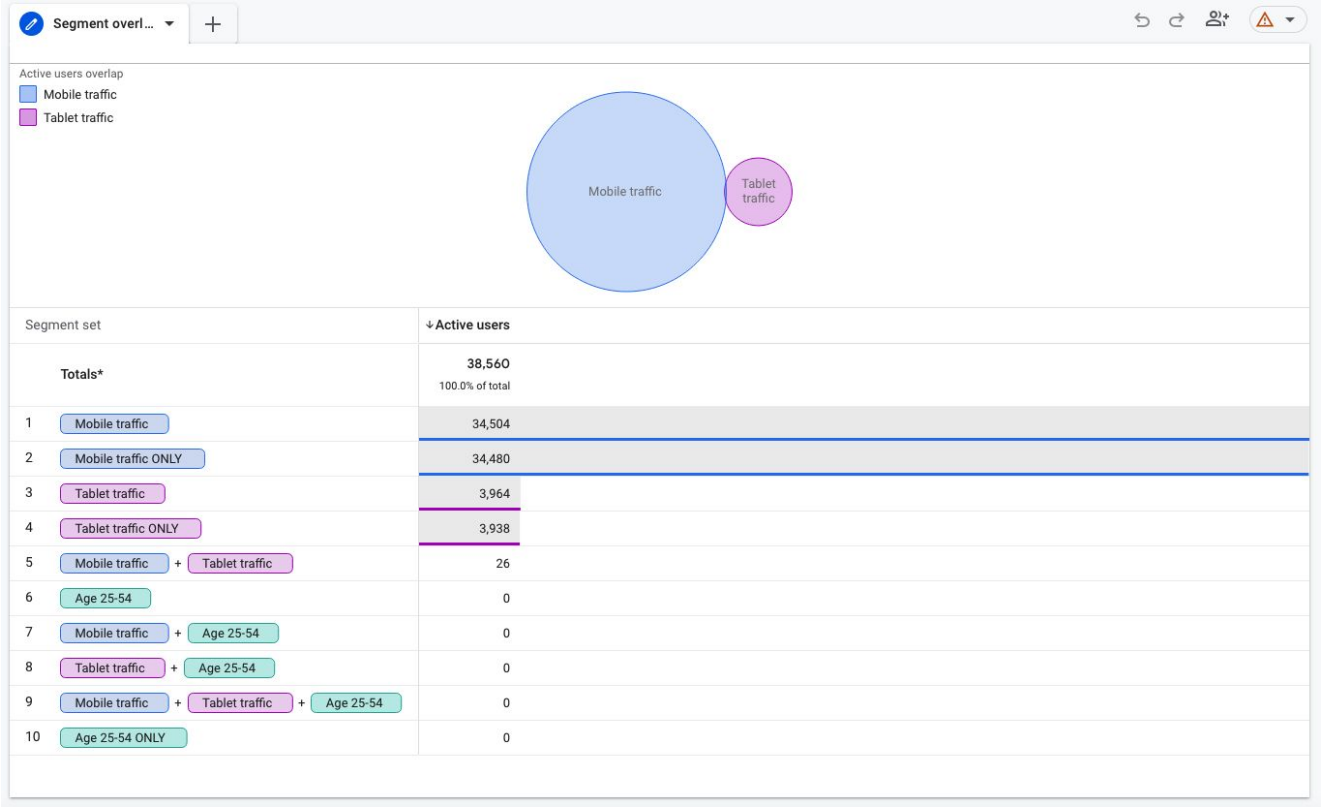
Path Exploration

- Path analysis visualizes the event stream in what is known as a “tree graph.”
- An event stream is the series of events users triggered along their path.
- The path analysis technique helps you uncover looping behaviour which may indicate users getting stuck.



Segment Overlap

- In GA4, segments can be used as user events or sessions.
- You can build segments containing multiple conditions and arrange those into a “condition group.”
- Think of a segment as a specific group of your site users. For example, a segment may be users from a specific city, those who visited a specific page, or users who took a specific action such as purchasing from a particular product category.

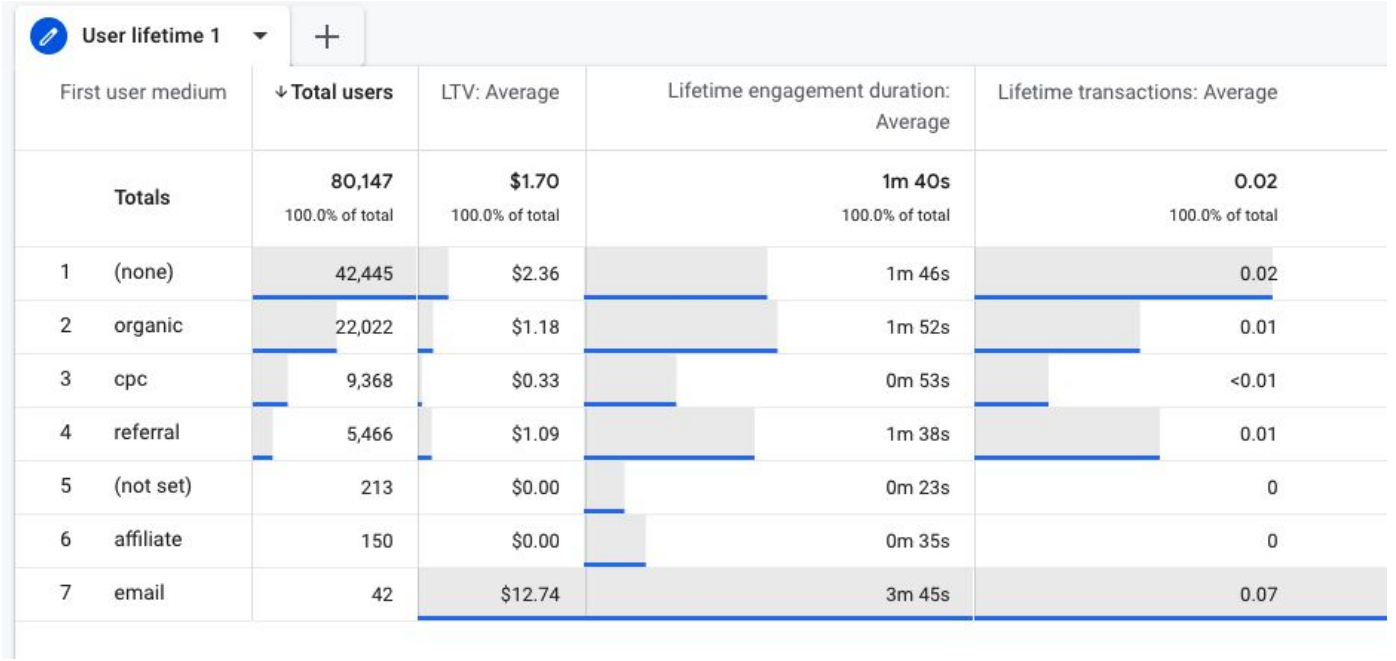


Cohort Exploration

- A cohort is a group of users with a common characteristic, such as the same acquisition date, event or conversion.
- For example, you can create a cohort report to see how long it takes people to convert in relation to a specific marketing tactic.

User Lifetime

- The user lifetime report is extremely powerful because it lets you create reports that visualize which source is driving users with the highest lifetime revenue — not just revenue for a selected month.
- With GA4, you can uncover the marketing campaigns that are acquiring the most valuable users, with the highest purchase probability and lowest churn probability.



User lifetime 1

	First user medium	↓ Total users	LTV: Average	Lifetime engagement duration: Average	Lifetime transactions: Average
	Totals	**80,147** 100.0% of total	**$1.70** 100.0% of total	**1m 40s** 100.0% of total	**0.02** 100.0% of total
1	(none)	42,445	$2.36	1m 46s	0.02
2	organic	22,022	$1.18	1m 52s	0.01
3	cpc	9,368	$0.33	0m 53s	<0.01
4	referral	5,466	$1.09	1m 38s	0.01
5	(not set)	213	$0.00	0m 23s	0
6	affiliate	150	$0.00	0m 35s	0
7	email	42	$12.74	3m 45s	0.07

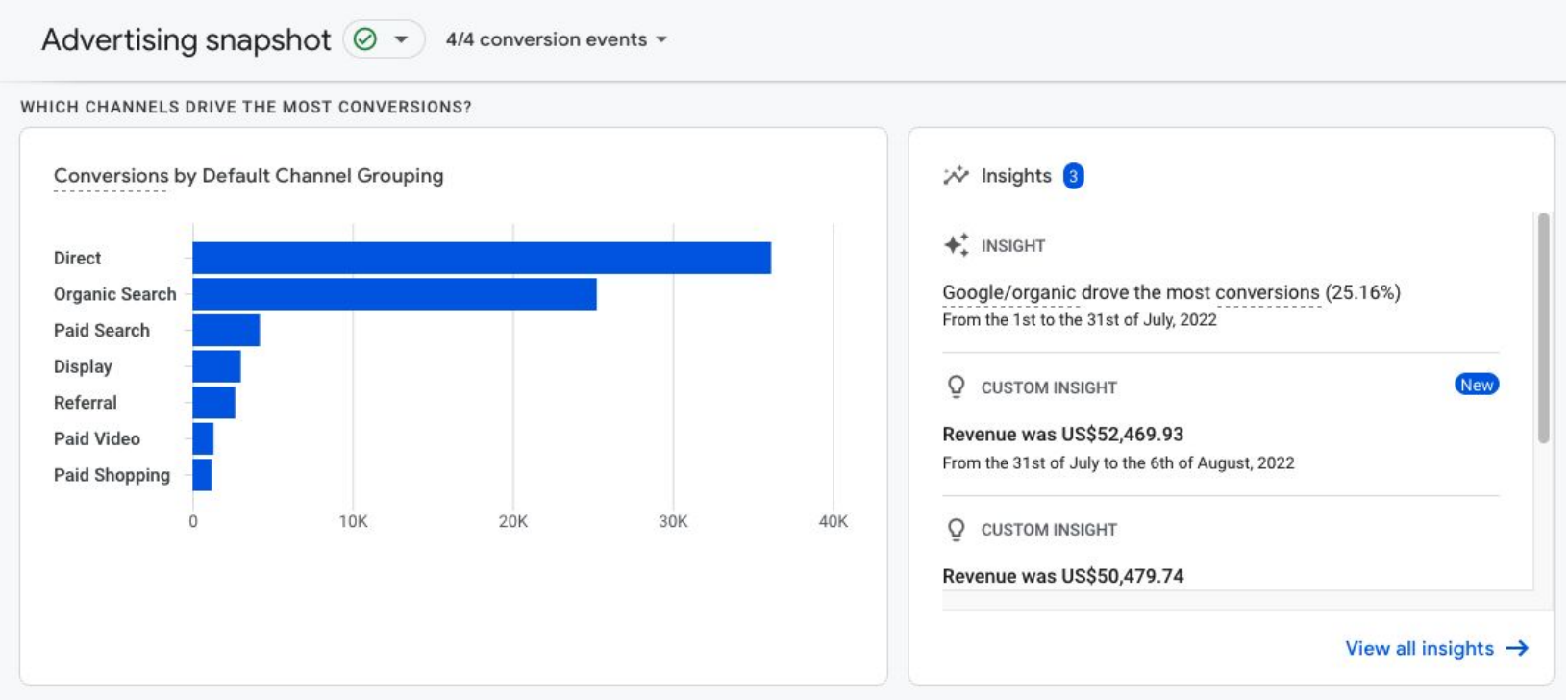
Google Analytics 4

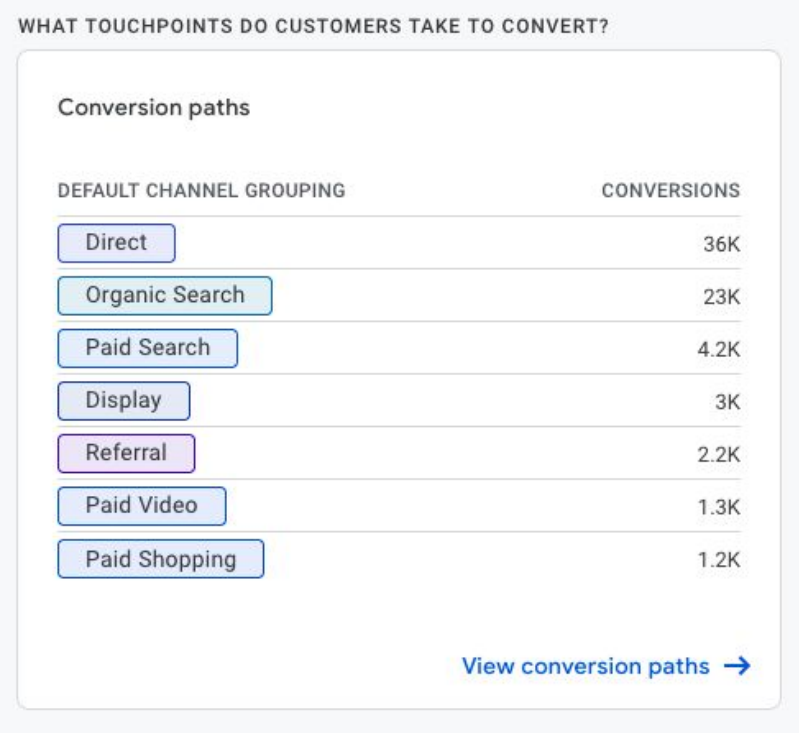
Section 6
Advertising Performance

Advertising Performance

- Which channels drive the most **conversions**?
- What **touchpoints** do customers take to convert?
- How do you **attribute** channels to conversions?

Advertising Performance





Advertising Performance

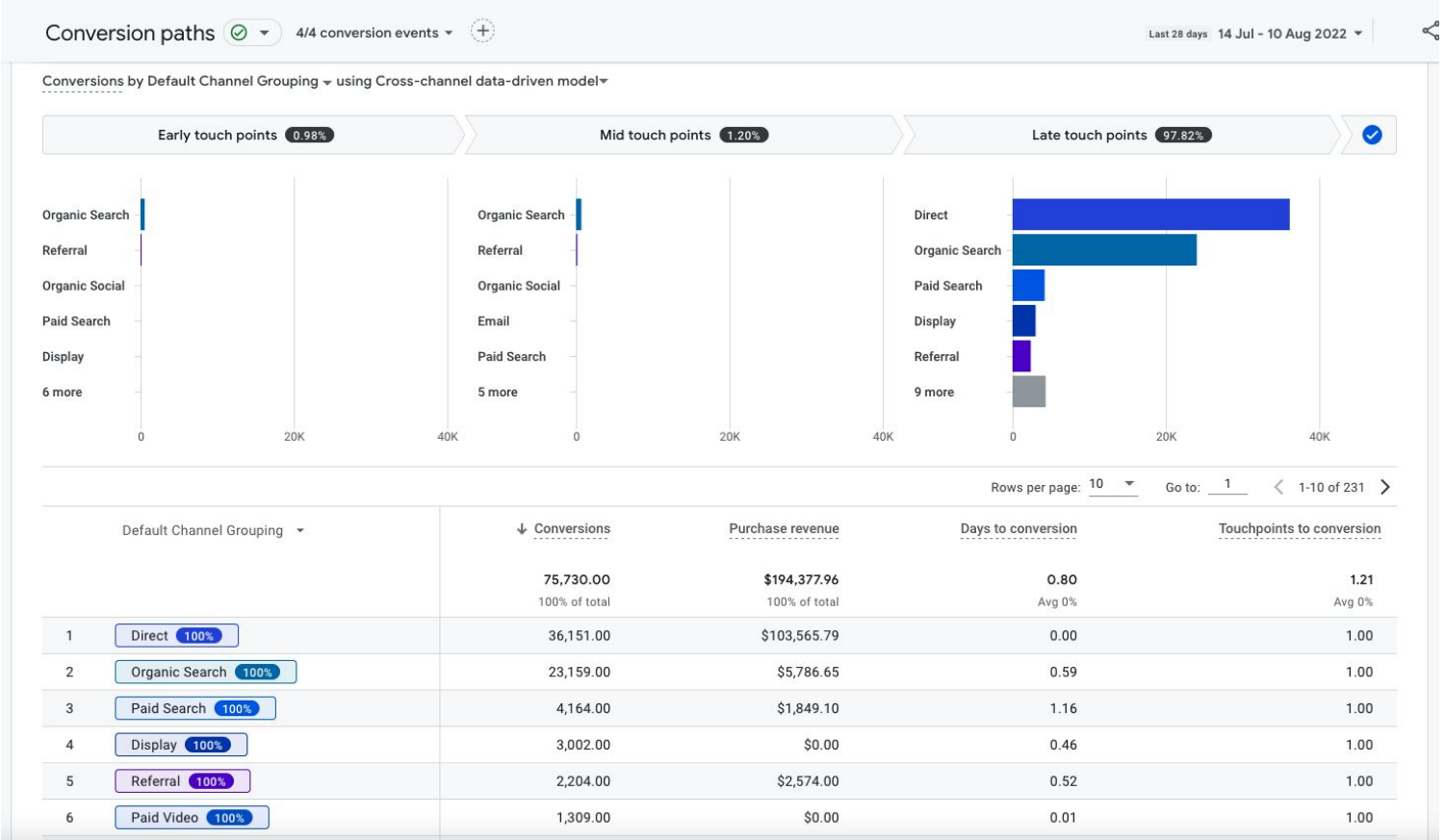
Model comparison

Search...

Rows per page: 10 Go to: 1 1-10 of 14

	Default Channel Grouping	Attribution model (non-direct) Cross-channel last click model: Conversions	Revenue	Attribution model (non-direct) Cross-channel data-driven model: Conversions	Revenue	% Change: Conversions	Revenue
		75,730 100% of total	$194,377.96 100% of total	75,730.00 100% of total	$194,377.96 100% of total	0%	>-0.01%
1	Direct	36,151	$103,565.79	36,151.00	$103,565.79	0%	0%
2	Organic Search	25,258	$68,943.88	25,260.74	$69,324.67	0.01%	0.55%
3	Paid Search	4,209	$3,154.30	4,210.63	$3,191.51	0.04%	1.18%
4	Display	3,016	$0.00	3,016.00	$0.00	0%	0%
5	Referral	2,675	$12,515.24	2,668.19	$11,212.56	-0.25%	-10.41%
6	Paid Video	1,312	$0.00	1,312.00	$0.00	0%	0%
7	Paid Shopping	1,200	$1,151.25	1,198.49	$992.52	-0.13%	-13.79%
8	Organic Video	707	$0.00	707.00	$0.00	<0.01%	0%
9	Organic Social	671	$4,238.70	666.89	$4,284.82	-0.61%	1.09%
10	Unassigned	201	$0.00	201.00	$0.00	0%	0%

Advertising Performance



	Default Channel Grouping	Conversions	Purchase revenue	Days to conversion	Touchpoints to conversion
		75,730.00 100% of total	$194,377.96 100% of total	0.80 Avg 0%	1.21 Avg 0%
1	Direct 100%	36,151.00	$103,565.79	0.00	1.00
2	Organic Search 100%	23,159.00	$5,786.65	0.59	1.00
3	Paid Search 100%	4,164.00	$1,849.10	1.16	1.00
4	Display 100%	3,002.00	$0.00	0.46	1.00
5	Referral 100%	2,204.00	$2,574.00	0.52	1.00
6	Paid Video 100%	1,309.00	$0.00	0.01	1.00

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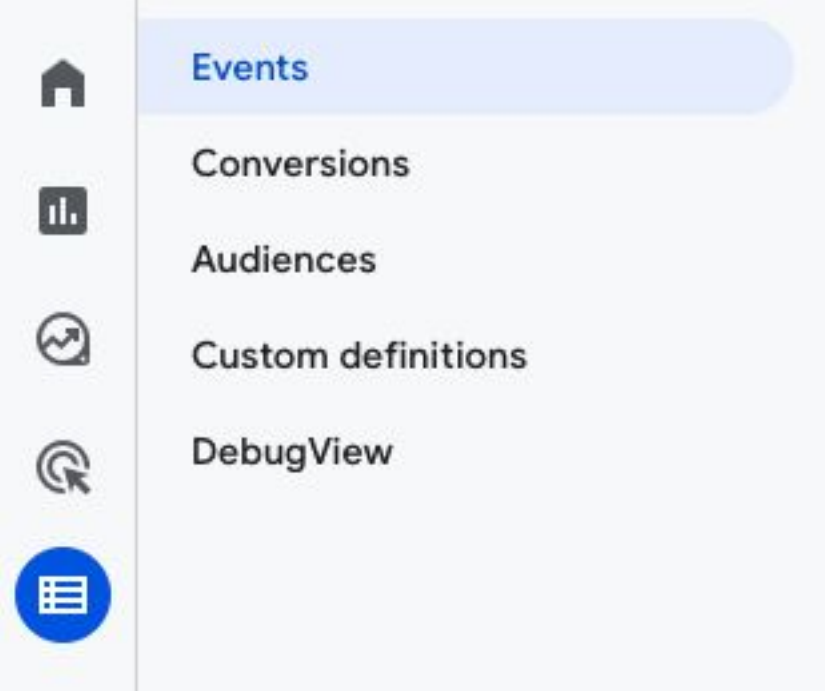
Section 6

Configure

Configure: Events

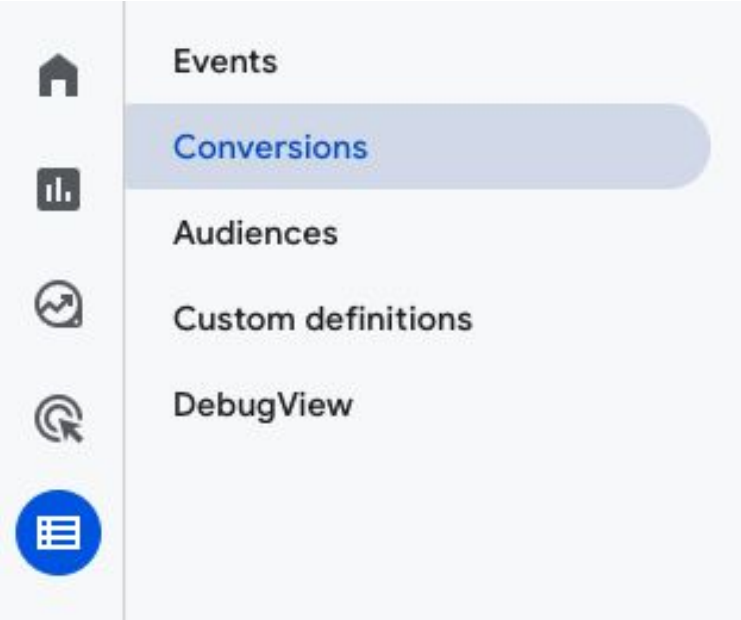


Modify event | Create event

Existing events

Event name	Count	% change	Users	% change	Mark as conversion
add_payment_info	5,425	63.4%	2,590	52.6%	
add_shipping_info	6,451	55.9%	3,054	46.4%	
add_to_cart	22,825	56.1%	6,493	46.8%	
android_lovers	1,256	63.5%	1,256	64.0%	
begin_checkout	4,407	99.3%	2,279	85.0%	
campus_collection_user	1,154	81.7%	1,154	82.3%	
click	11,559	70.2%	5,192	54.4%	
data_import_success	5	25.0%	5	25.0%	
discount_value	1,680	78.0%	1,498	82.9%	
errors	3,519	44.8%	1,348	33.6%	
experiment_impression	99,572	16.1%	19,685	11.0%	

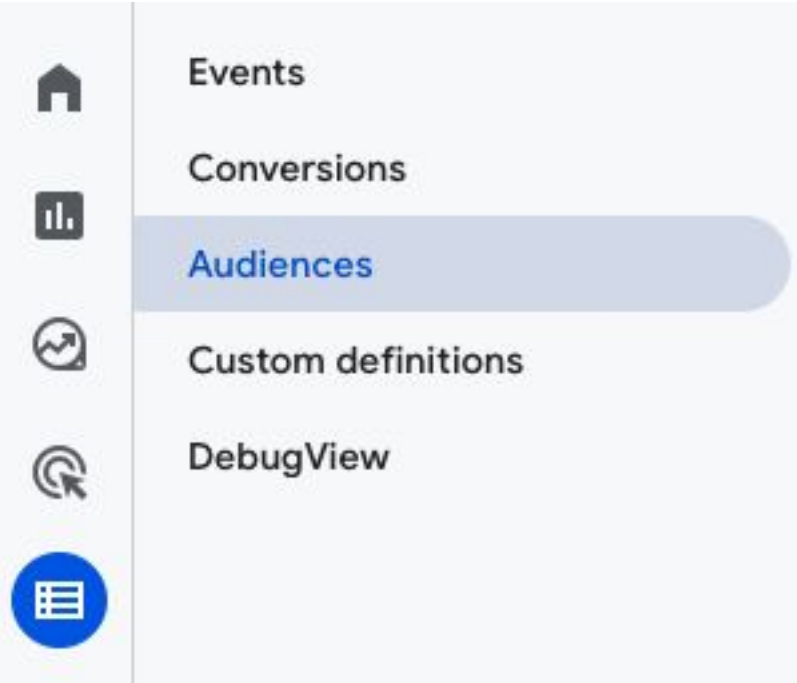
Configure: Conversions



Conversion Events | Network Settings

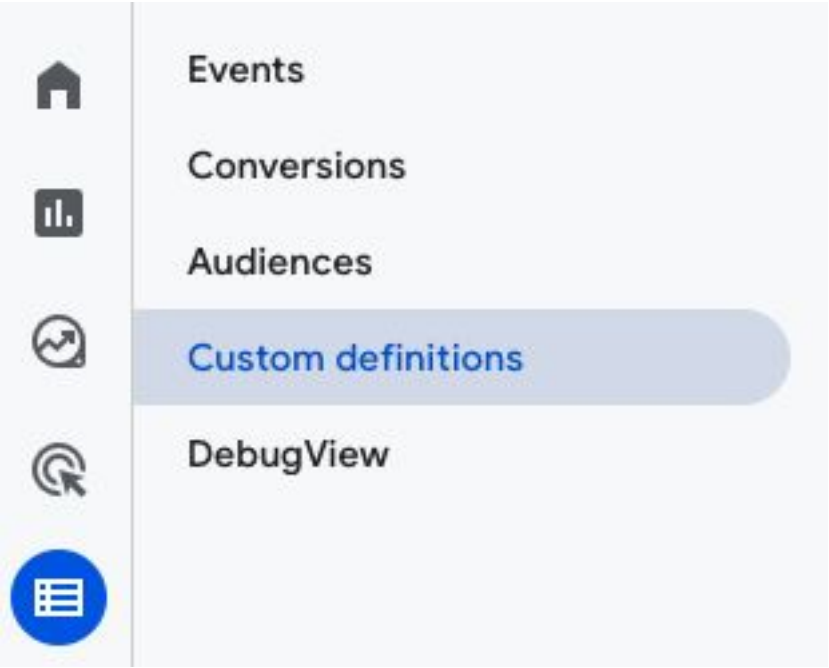
Conversion name	Count	% change	Value	% change	Mark as conversion
begin_checkout	4,407	↑ 99.3%	-		
first_visit	69,619	↑ 37.4%	-		
purchase	1,704	↑ 78.4%	$194,377.96	↑ 66.5%	
Test_GD_1	0	0%	0	0%	

Configure: Audiences



Audience name	Description	Users	% change	Created on
Credit Card Page >>> Selected Card		10,604	-	27 Jul 2022
Non-purchasers	Users that have not made a purchase	56,073	-	22 Jul 2022
Organic Users >$20		279	↑4,550.0%	12 Jul 2022
Organic Users		21,306	↑ 39.6%	8 Jun 2022
Likely 7-day churning users1	Active users who are likely to not visit your property in the next...	208	↑118.9%	7 Jun 2022
Organic Search Audience		23,171	↑ 40.6%	20 May 2022
First open/visit AND Last device cate...		35,478	↑ 39.3%	19 May 2022
7 pro Device users		198	↑ 26.9%	18 May 2022
[New] Predicted 28-day top spenders	Users who are predicted to generate the most revenue in the n...	4,553	↑ 68.4%	13 May 2022
Gold Member Level Data Import		5	↑ 25.0%	27 Apr 2022

Configure: Definitions



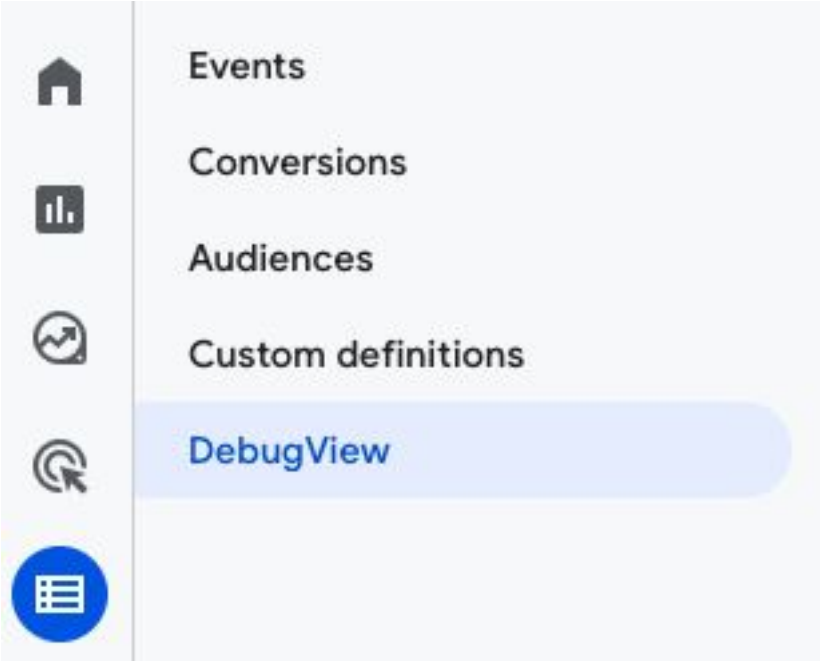
Custom definitions

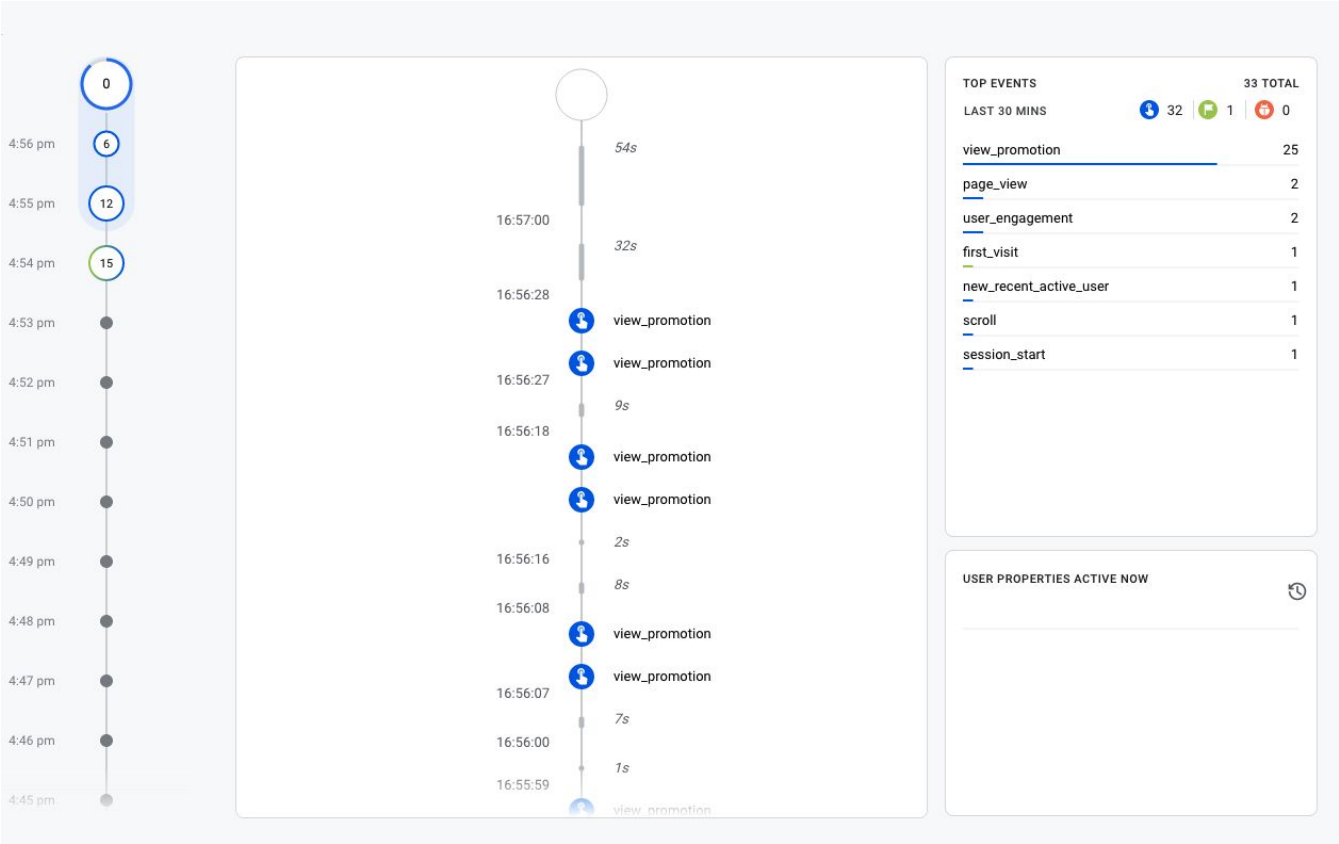
Quota information

Custom dimensions | Custom metrics

Dimension name	Description	Scope	User Property/Parameter	Last changed
Coupon	if a user used a coupon to make a purchase	Event	coupon	24 Aug 2021
member	If member logs in and views site	User	member	29 Jan 2021
member_level	Gold, Silver or Bronze level is assigned to members.	User	member_level	29 Jan 2021
page_click		Event	page_view	28 Jun 2022
page_location		Event	page_location	29 Jan 2021
page_referrer		Event	page_referrer	29 Jan 2021
page_title		Event	page_title	29 Jan 2021

Configure: Debug View





Google Analytics 4

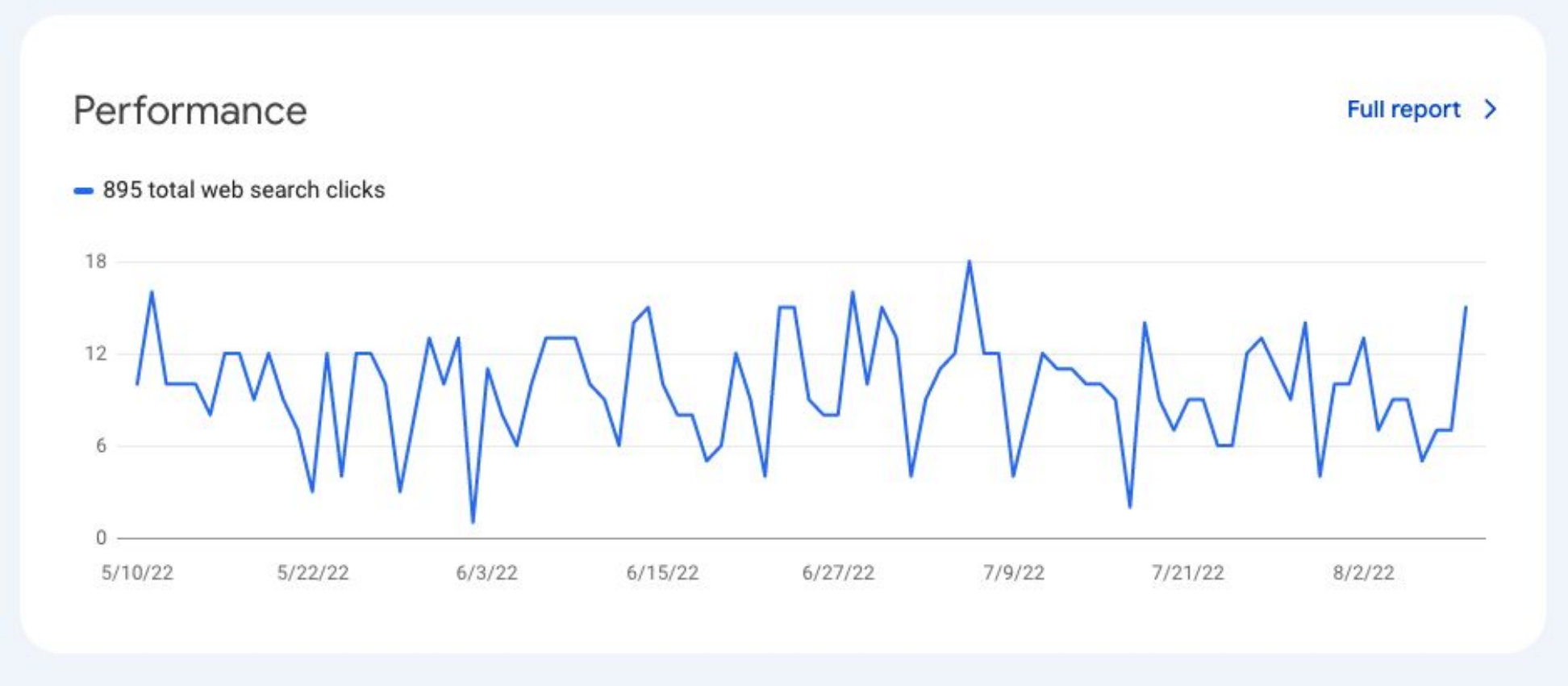
Section 7
Supporting Tools

Google Search Console

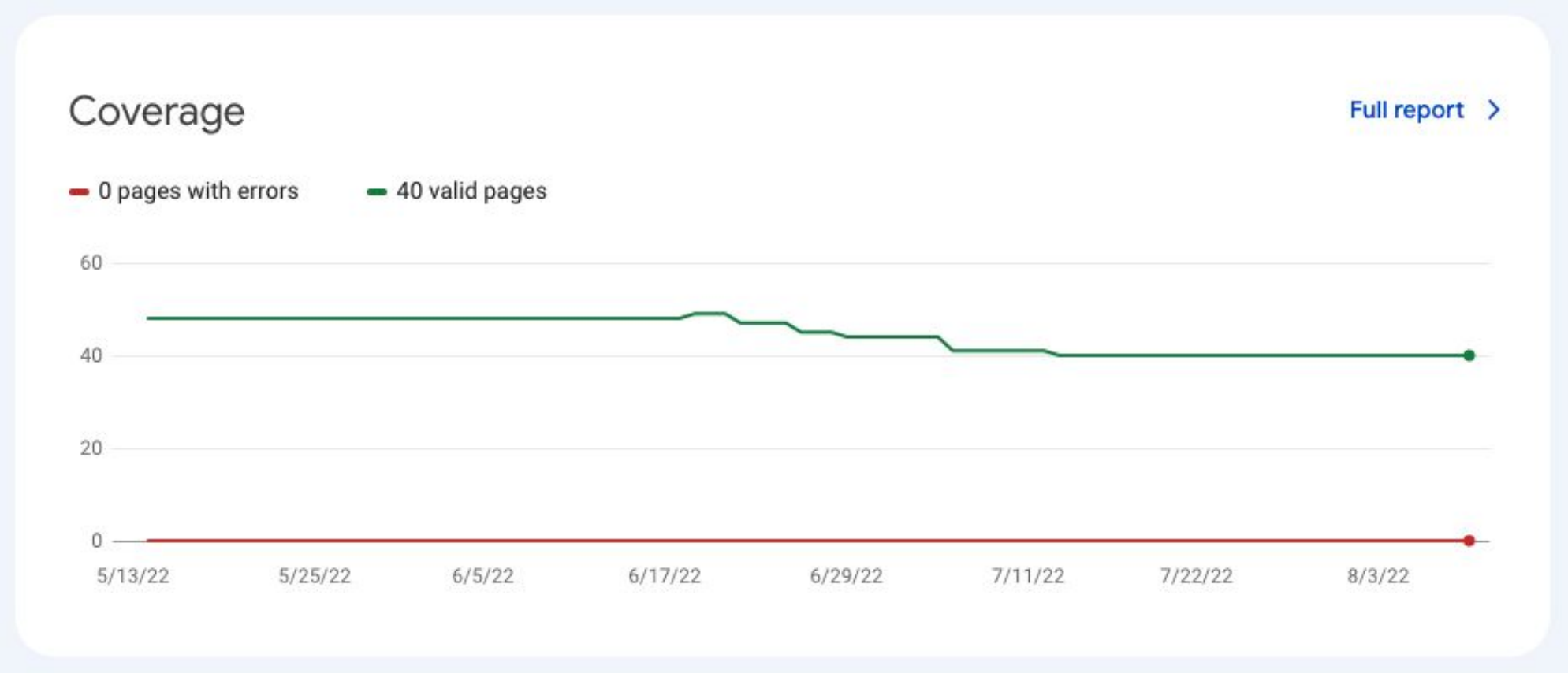
An invaluable GA4 supporting tool to help you understand:

- The **health** and **performance** of your site.
- The **search** terms used to deliver traffic to you site.
- The **Impressions** and **clicks** of your site page links in **Organic Search**.

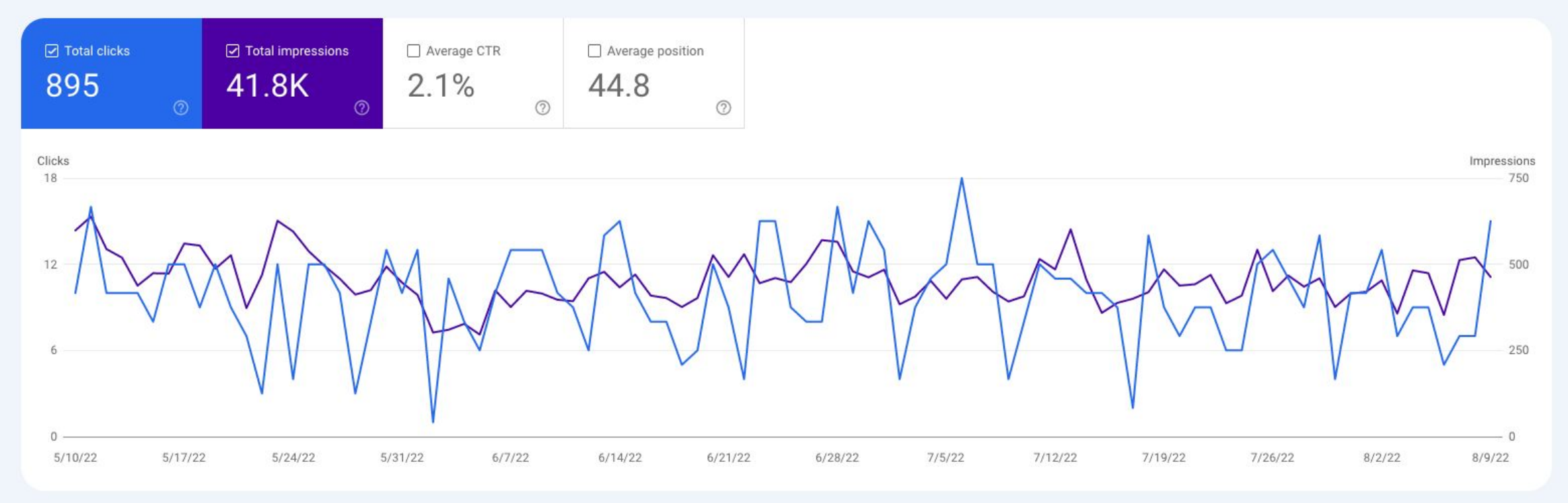
Google Search Console: Overview



Google Search Console: Overview



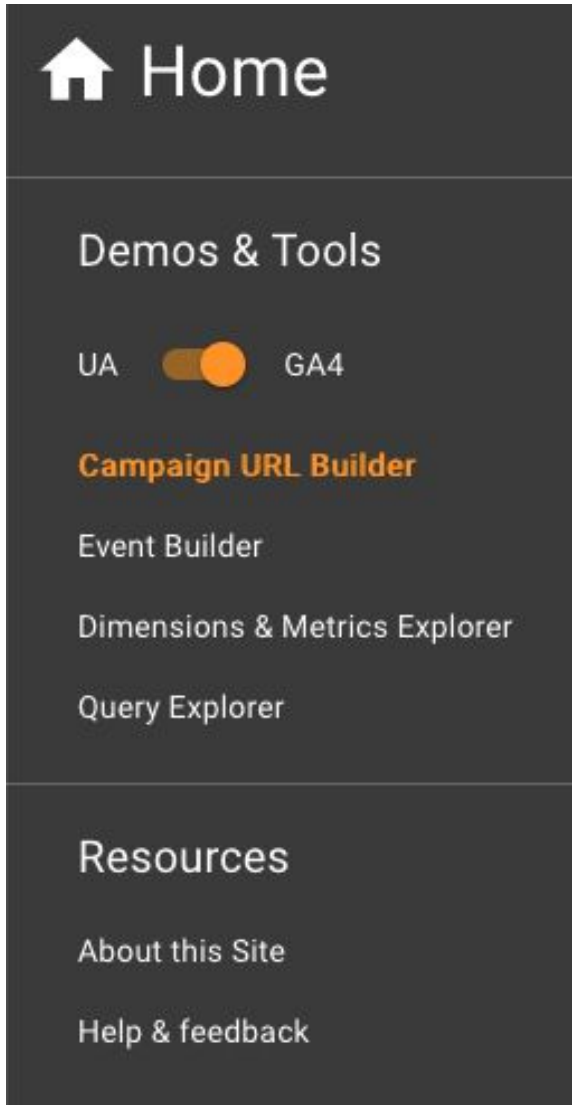
Google Search Console: Performance

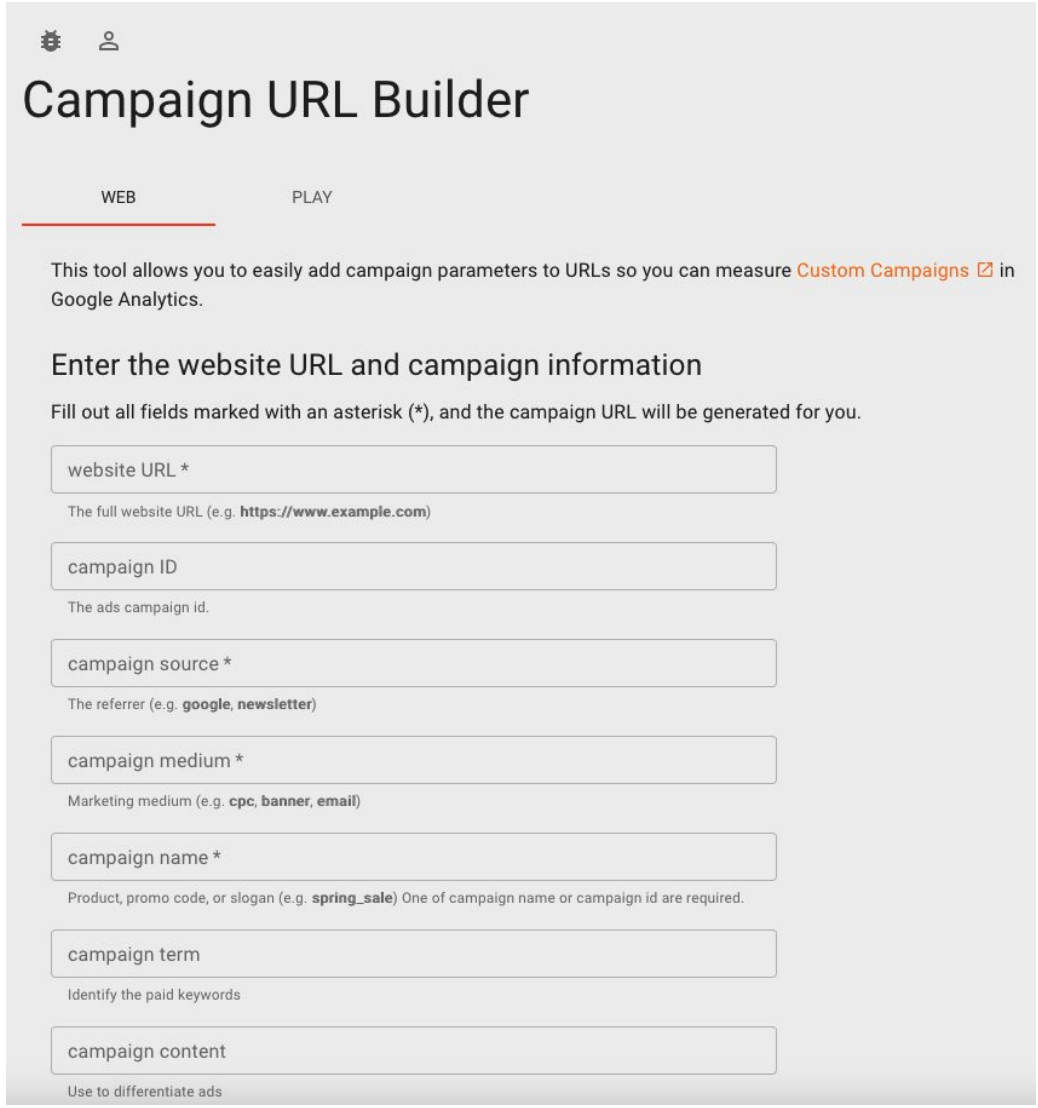


URL Builder

This tool allows you to easily add campaign parameters to URLs so you can measure **Custom Campaigns** in Google Analytics.

https://ga-dev-tools.web.app/ga4/campaign-url-builder/





OXFORD LEARNING LAB

Thank You

Nick Day

Digital Marketing Trainer