



Google Analytics 4

Getting Prepared for the Sunset of Universal Analytics

Today's agenda

01

Why GA4?

02

Key differences in data collection

03

Building reports in GA4

04

Implementation: a hybrid approach

05

Roadmap to July 2023

Why GA4?

GA4 IS HERE

What's it all about? Privacy laws and cookies.

Less cookies, more machines.

- » Privacy laws requiring consent triggered the need for reduced reliance on cookies.
- » GA4 relies less on cookies to record events across platforms/devices.
- » Introduction of machine learning makes GA4 more stable to industry changes
- » Built to scale and grow in the future

5 Benefits of Machine Learning

- » Fill in data gaps
- » Automated insights
- » Detect anomalies
- » Generate predictions
- » See trends



Benefits of Google Analytics 4

**One website
and mobile
app
platform**

**Increased
focus on the
user journey**

**User-centric
interface**

**Predictive
analytics
capabilities**

**Advanced
analysis
reports**

**Enhanced
data
reporting**

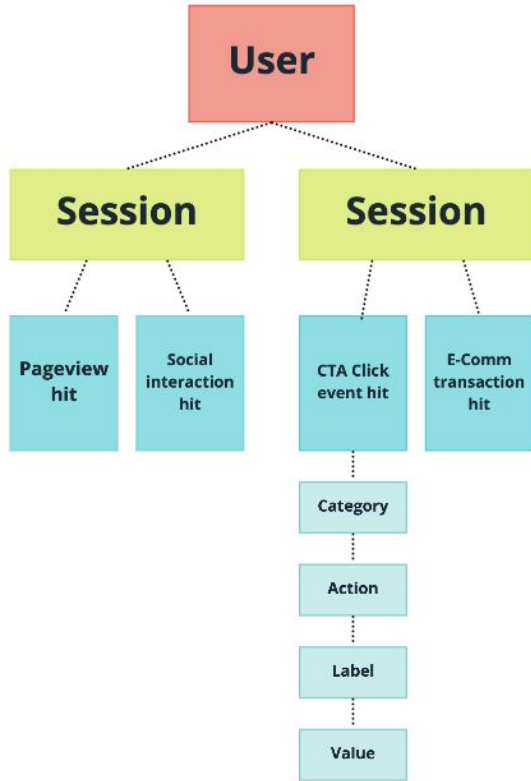
**Integration
with
BigQuery**

Key differences in data collection

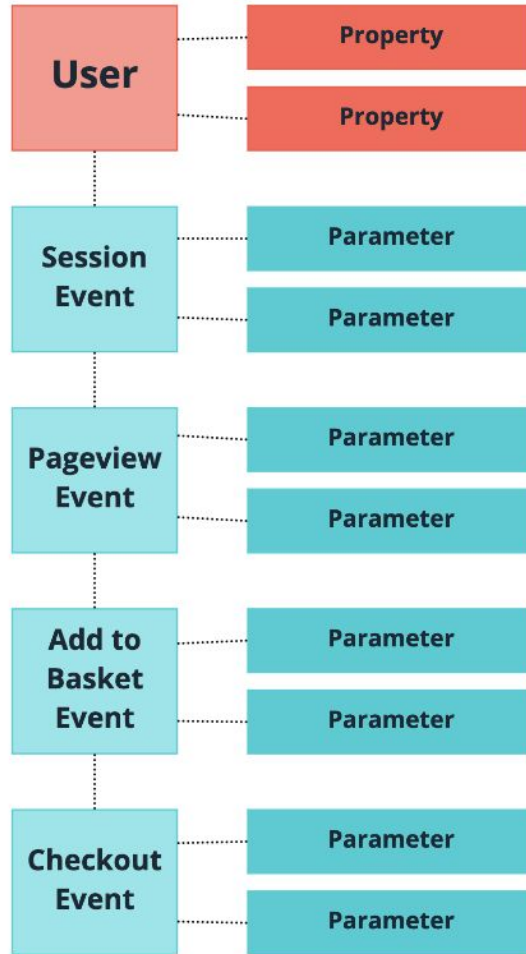
Goodbye pageviews and
sessions

Hello events and parameters

Universal Analytics



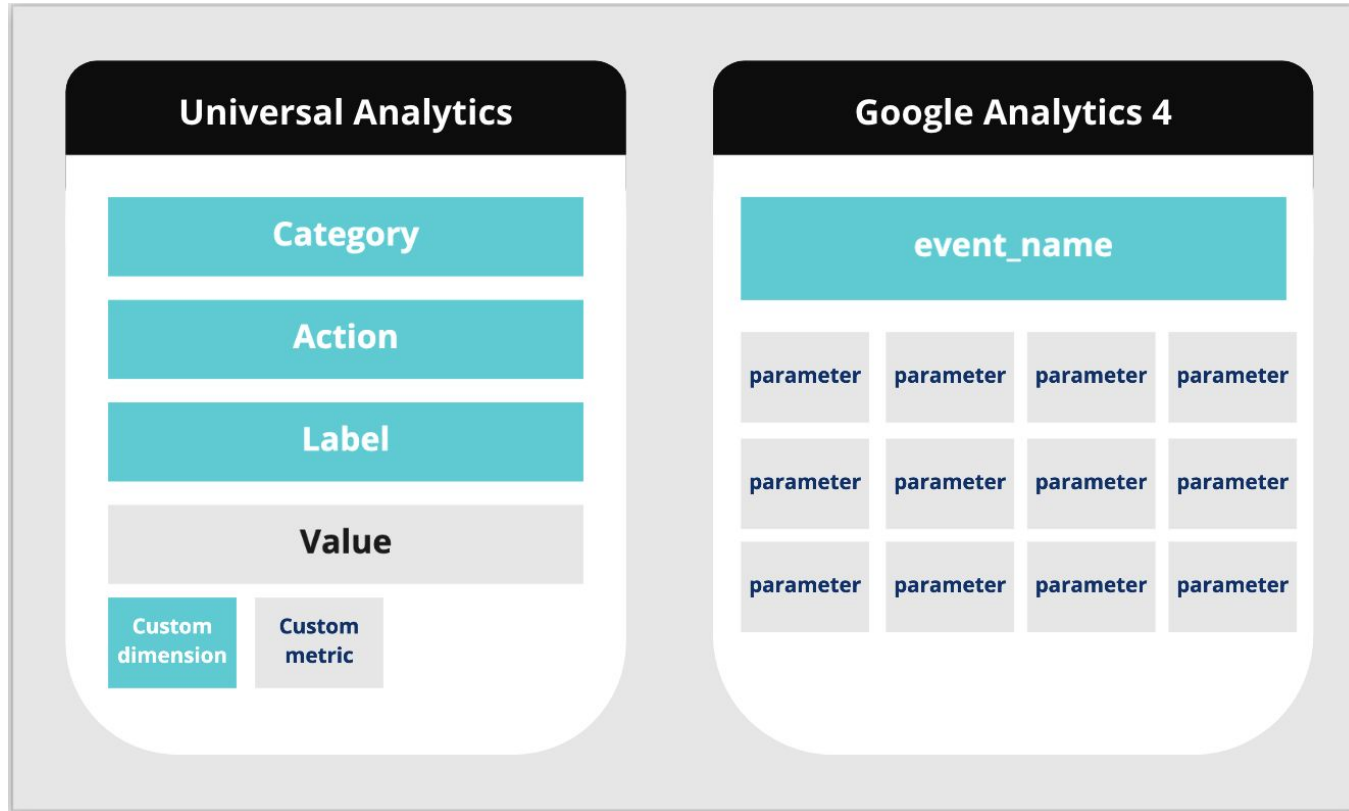
Google Analytics 4



- » In Universal Analytics, a user can have multiple sessions and pageviews. In GA4, a session and pageview are distinct events. This allows you to track the user journey more effectively.
- » Properties describe user attributes. Property examples: language, location
- » Parameters describe event attributes. Parameter examples: author_name, page_title

UA vs GA4 data collection: events

Granular event names provide greater flexibility



4 categories of events in GA4

- » Automatically collected events
- » Enhanced measurement events
- » Recommended events
- » Custom events



Automatically collected events

Automatically collected events

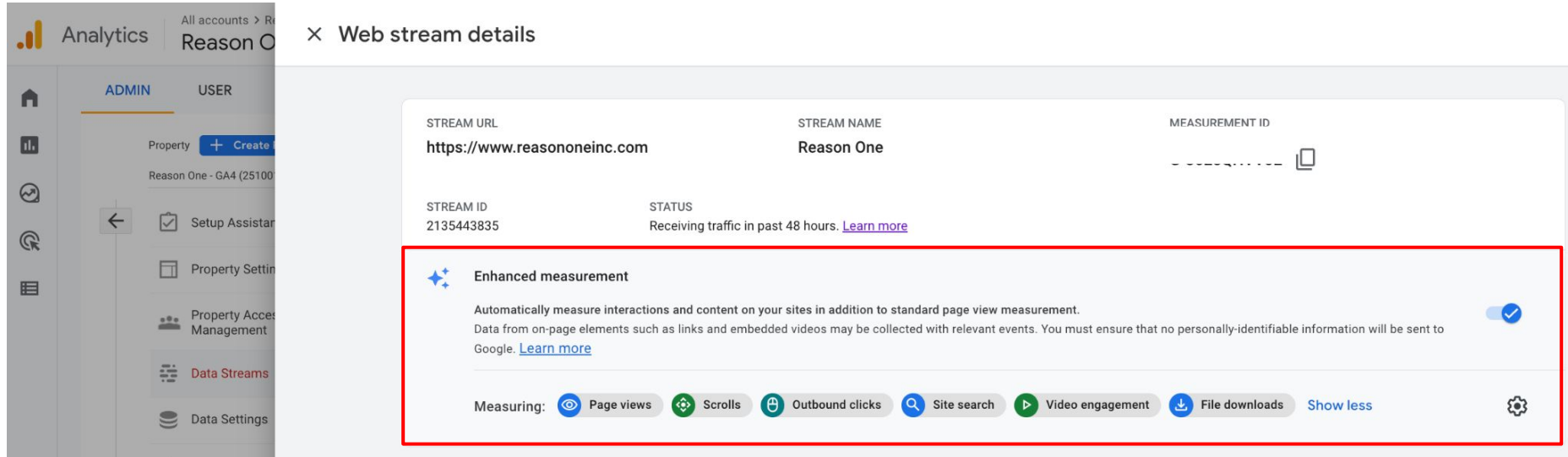
3 website events are automatically collected and recorded within GA:

- » **session_start**
- » **first_visit**
- » **user_engagement**



Enhanced measurement events

What is enhanced measurement in GA4?



The screenshot displays the Google Analytics 4 Admin interface. On the left, the 'ADMIN' sidebar is visible with 'Data Streams' selected. The main content area shows 'Web stream details' for 'Reason One'. The stream URL is 'https://www.reasononeinc.com' and the stream ID is '2135443835'. The status is 'Receiving traffic in past 48 hours'. The 'Enhanced measurement' toggle is turned on, and the following events are listed as being measured: Page views, Scrolls, Outbound clicks, Site search, Video engagement, and File downloads.

STREAM URL	STREAM NAME	MEASUREMENT ID
https://www.reasononeinc.com	Reason One	-----

STREAM ID	STATUS
2135443835	Receiving traffic in past 48 hours. Learn more

Enhanced measurement

Automatically measure interactions and content on your sites in addition to standard page view measurement. Data from on-page elements such as links and embedded videos may be collected with relevant events. You must ensure that no personally-identifiable information will be sent to Google. [Learn more](#)

Measuring: Page views Scrolls Outbound clicks Site search Video engagement File downloads [Show less](#)

- » Access Enhanced Measurement Events by going to Admin → Data Streams
- » Select your web data stream to view details

Enhanced measurement events

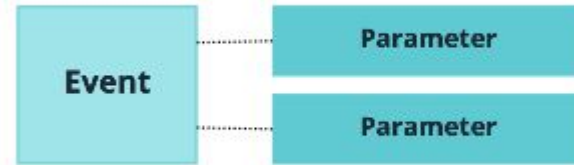
- » **page_view**
- » **scroll**
- » **click**
- » **view_search_results**
- » **video_start, video_progress, video_complete**
- » **file_download**



Recommended events

RECOMMENDED EVENTS

Generate more useful reports



- » Adding recommended events helps you measure additional features and behaviors
- » They require additional context to be meaningful, and should be sent with their prescribed parameters.

3 categories of recommended events

- » For all properties
- » For online sales
- » For games



Recommended events – for all properties

Event	Trigger when
ad_impression	a user sees an ad impression, for app only
earn_virtual_currency	a user earns virtual currency (coins, gems, tokens, etc.)
join_group	a user joins a group to measure the popularity of each group
login	a user logs in
purchase	a user completes a purchase
refund	a user receives a refund
search	a user searches your content
select_content	a user selects content
share	a user shares content
sign_up	a user signs up to measure the popularity of each sign-up method
spend_virtual_currency	a user spends virtual currency (coins, gems, tokens, etc.)
tutorial_begin	a user begins a tutorial
tutorial_complete	a user completes a tutorial

Recommended events – for online sales

Event	Trigger when
add_payment_info	a user submits their payment information
add_shipping_info	a user submits their shipping information
add_to_cart	a user adds items to cart
add_to_wishlist	a user adds items to a wishlist
begin_checkout	a user begins checkout
generate_lead	a user submits a form or a request for information
purchase	a user completes a purchase
refund	a user receives a refund
remove_from_cart	a user removes items from a cart
select_item	a user selects an item from a list
select_promotion	a user selects a promotion
view_cart	a user views their cart
view_item	a user views an item
view_item_list	a user sees a list of items/offerings
view_promotion	a user sees a promotion

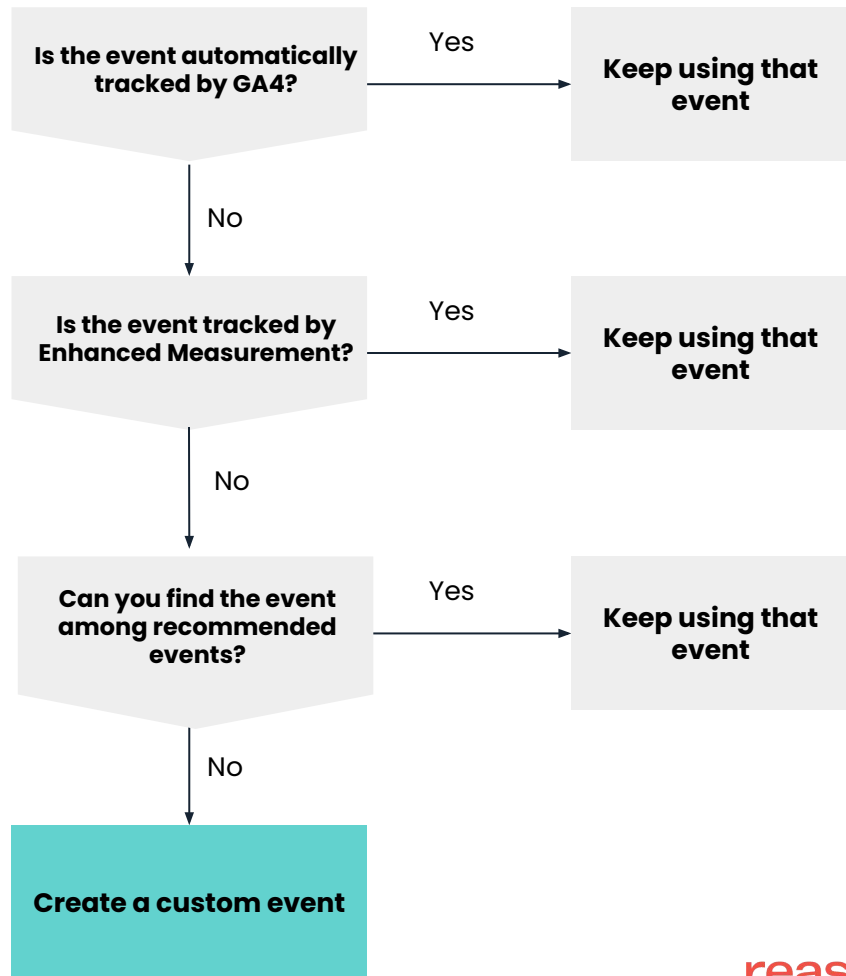
Recommended events – for games

Event	Trigger when
earn_virtual_currency	a user earns virtual currency (coins, gems, tokens, etc.)
join_group	a user joins a group to measure the popularity of each group
level_end	a user completes a level in the game
level_start	a user starts a new level in the game
level_up	a user levels-up in the game
post_score	a user posts their score
select_content	a user selects content
spend_virtual_currency	a user spends virtual currency (coins, gems, tokens, etc.)
tutorial_begin	a user begins a tutorial
tutorial_complete	a user completes a tutorial
unlock_achievement	a user unlocks an achievement

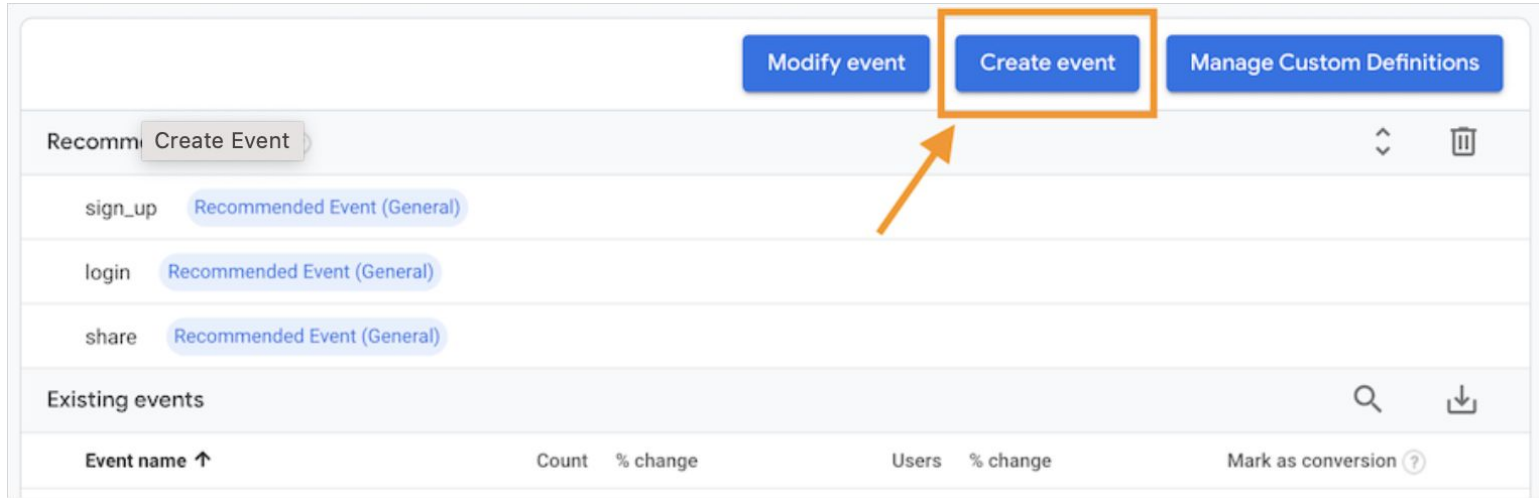
Custom events

CUSTOM EVENTS

The bottom of the event decision tree



Custom events – Step 1: create event



The screenshot displays the 'Custom events' management interface. At the top, there are three blue buttons: 'Modify event', 'Create event', and 'Manage Custom Definitions'. The 'Create event' button is highlighted with an orange border, and an orange arrow points to it from below. Below the buttons is a table of events. The first row is a header for 'Recommended Event (General)' with a 'Create Event' dropdown menu. The subsequent rows list events: 'sign_up', 'login', and 'share', each with a 'Recommended Event (General)' label. Below this is a section for 'Existing events' with a search icon and a download icon. At the bottom, a table header is visible with columns: 'Event name ↑', 'Count', '% change', 'Users', '% change', and 'Mark as conversion ?'.

Recommended Event (General)					
sign_up	Recommended Event (General)				
login	Recommended Event (General)				
share	Recommended Event (General)				

Existing events					
Event name ↑	Count	% change	Users	% change	Mark as conversion ?

Custom events – Step 2: configure and name your event

Configuration

Custom event name ⓘ

page_view_services

Matching conditions

Create a custom event when another event matches ALL of the following conditions

Parameter	Operator	Value
event_name	equals	page_view
page_location	contains	/services

Parameter configuration

✓ Copy parameters from the source event

Modify parameters ⓘ

No modifications defined

UA vs GA4 data collection: conversions

GOALS: A THING OF THE PAST

**Goals don't exist
in GA4.
Conversion events
do.**

In Universal Analytics, a conversion is counted only once per user session.

- » User downloads file two times. This counts as only one event and conversion goal.

1

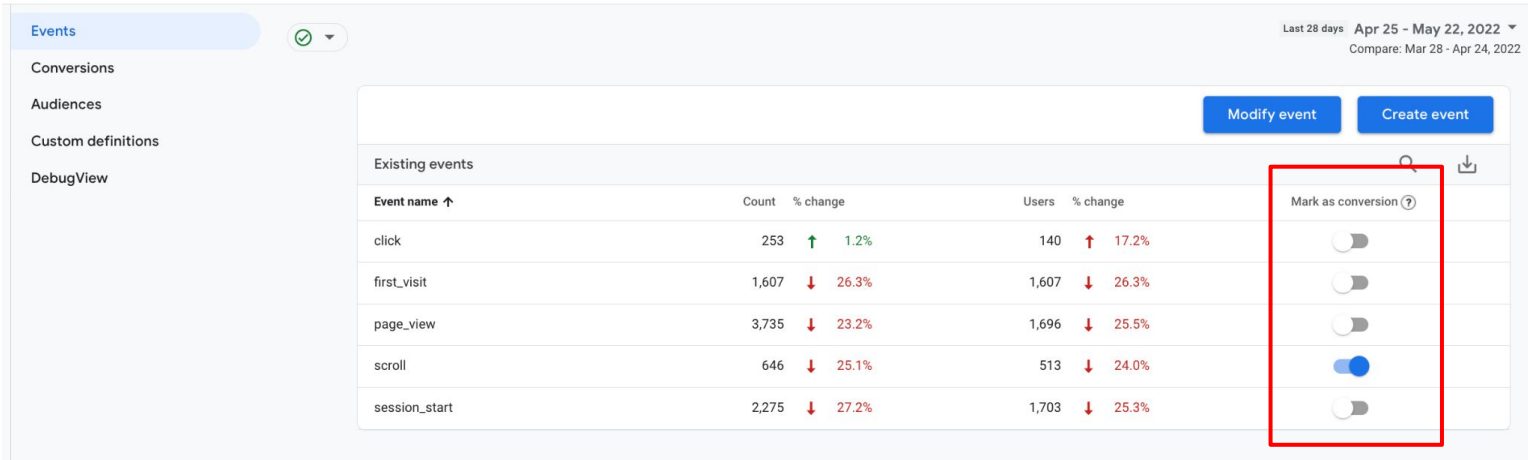
WK 12 |

In GA4, a conversion can be counted multiple times per user session.

- » User downloads file two times. This counts as two events and conversions.

2

Marking an event as a conversion



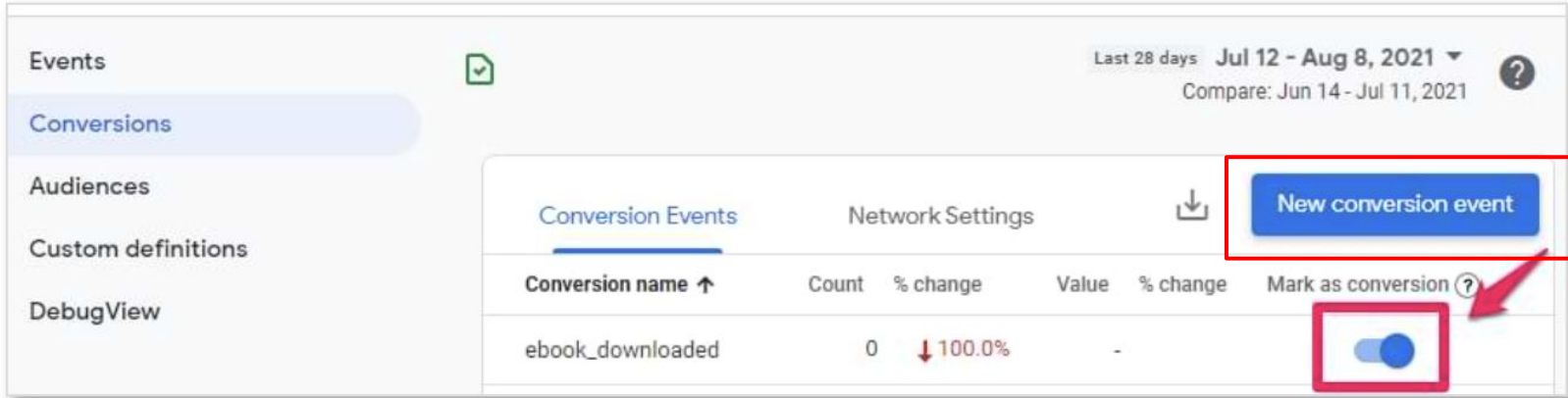
The screenshot shows the Google Analytics interface for managing events. On the left is a navigation menu with 'Events' selected. The main area displays a table of existing events. A red box highlights the 'Mark as conversion' toggle for the 'click' event, which is currently turned on (blue).

Existing events

Event name ↑	Count	% change	Users	% change	Mark as conversion (?)
click	253	↑ 1.2%	140	↑ 17.2%	<input checked="" type="checkbox"/>
first_visit	1,607	↓ 26.3%	1,607	↓ 26.3%	<input type="checkbox"/>
page_view	3,735	↓ 23.2%	1,696	↓ 25.5%	<input type="checkbox"/>
scroll	646	↓ 25.1%	513	↓ 24.0%	<input type="checkbox"/>
session_start	2,275	↓ 27.2%	1,703	↓ 25.3%	<input type="checkbox"/>

- » Navigate to the list of events in your GA4 account
- » Turn on the toggle to mark event as a conversion.

Marking an event as a conversion



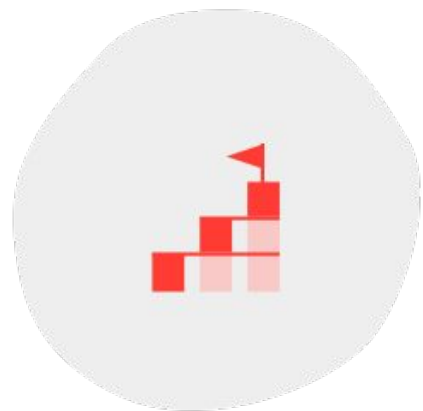
The screenshot shows the Google Analytics interface. On the left, there is a navigation menu with 'Events' selected. The main content area shows the 'Conversions' section. At the top right, it displays 'Last 28 days Jul 12 - Aug 8, 2021' and 'Compare: Jun 14 - Jul 11, 2021'. Below this, there are tabs for 'Conversion Events' and 'Network Settings'. A blue button labeled 'New conversion event' is highlighted with a red box. Below the tabs is a table with columns: 'Conversion name ↑', 'Count', '% change', 'Value', '% change', and 'Mark as conversion ?'. The table has one row for 'ebook_downloaded' with a count of 0 and a % change of 100.0%. The 'Mark as conversion' toggle switch for this event is highlighted with a red box and a red arrow points to it.

Conversion name ↑	Count	% change	Value	% change	Mark as conversion ?
ebook_downloaded	0	↓ 100.0%	-	-	<input checked="" type="checkbox"/>

- » Alternatively, navigate to Conversions screen
- » Click 'New Conversion Event'
- » Add the event name that has been created within 'Events'

More about GA4 conversions

- » Limit of 30 conversions
- » Any event can be a conversion
- » Can create conversion events using parameters and other events
- » Defined directly in the reporting interface



Building reports in GA4

STANDARD GA4 REPORTS

» Lifecycle

» Acquisition

» Engagement

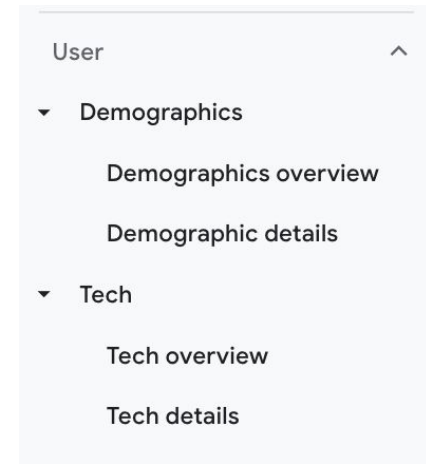
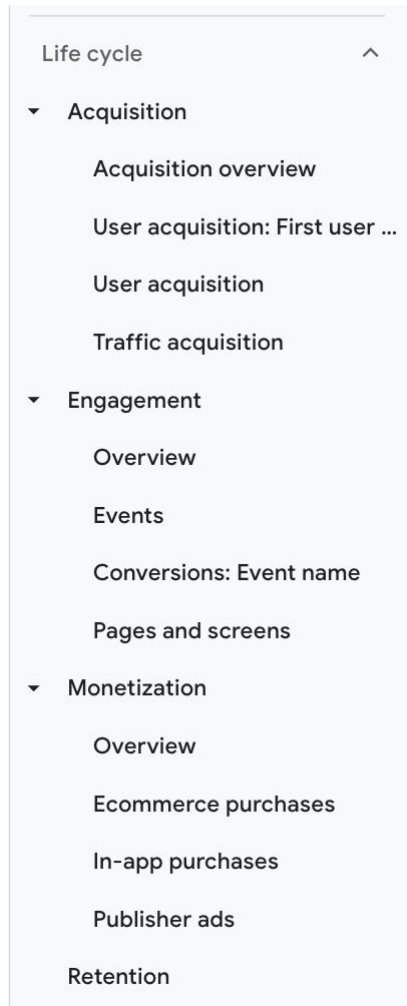
» Monetization

» Retention

» User

» Demographics

» Tech



**GA4 custom reports can be
created in Data Studio and
Explorations**

Option 1: Google Data Studio

GA4 & DATA STUDIO

You may notice
things look a little
different

- » Connect to GA4 as a Property
- » The data schema may seem unfamiliar to you
- » Dimensions and metrics are different
- » **Note:** connecting your GA4 property to Data Studio is still in beta version and is a lab feature

Mapping data to GA4: Universal Analytics - Audiences

Universal Analytics	Google Analytics 4
Users	Total Users
New Users	New Users
Sessions	Sessions
Number of Sessions per User	Sessions per User
Pageviews	Views
Pages / Session	<i>Calculate as Views / Sessions</i>
Avg. Session Duration	<i>Calculate Avg. Engagement Time as: User Engagement / Sessions</i>
Bounce Rate	Engagement Rate

Mapping data to GA4: Universal Analytics - Acquisition

Universal Analytics	Google Analytics 4
Default Channel Grouping	Session Default Channel Grouping
Campaign	Session Campaign
Medium	Session Medium
Source	Session Source

Mapping data to GA4: Universal Analytics – Behavior

Universal Analytics	Google Analytics 4
Page Title Screen Name	Page Title and Screen Name
Pageviews Screenviews	Views
Event Category Event Action Event Label	Event Name <i>Custom Dimensions</i>
Total Events	Event Count

Mapping data to GA4: Universal Analytics – Conversions

Universal Analytics	Google Analytics 4
Goal XX Completions	Conversions <i>filtered</i> by Event Name
Goal XX Conversion Rate	Use data blending to calculate: Conversions <i>filtered by</i> Event Name / Sessions

Option 2: GA4 Explorations

EXPLORATION REPORTS

Templates designed to deliver ad-hoc insights faster

- » Previously called Analysis Hub, it was an exclusive feature to Analytics 360
- » In GA4, it's a feature of the main menu
- » Report templates are pulled from specialty reports that appear in Universal Analytics
- » By grouping the ad-hoc reporting as a menu item, it streamlines the account menus and makes finding reports less overwhelming and more intuitive

Explorations – Main Dashboard

Analytics | All accounts > Demo Account | GA4 - Google Merchandise ...

Try searching "how to activate Google signals"

Explorations

Start a new exploration

Template gallery NEW

- 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?

Type	Name ↓	Owner	Last modified ↓	Property	
	Perf by Environment	Savio Costa	May 19, 2022	GA4 - Google Merchandise Store	⋮
	Campaign Engagement	Brian Park	May 2, 2022	GA4 - Google Merchandise Store	⋮
	GA360 Support	Aidan Martinez	Apr 29, 2022	GA4 - Google Merchandise Store	⋮
	Free form	Kyle Blanchette	Apr 28, 2022	GA4 - Google Merchandise Store	⋮
	Free form	Brett Sneed	Apr 15, 2022	GA4 - Google Merchandise Store	⋮
	Segment overlap	Kyle Blanchette	Mar 17, 2022	GA4 - Google Merchandise Store	⋮
	Funnel	Kyle Blanchette	Mar 17, 2022	GA4 - Google Merchandise Store	⋮

Admin

Select your report type from the template gallery, or create your own

Explorations - Free Form Report

- Variables and tab settings appear to the left of the report area.
- Variables are segments, dimensions, and metrics that can be applied to reports. .

GA4 - Google Merchandise Store

GA4 - Google Merchandise Store

Try searching "how to activate Google signals"

Free form 1

Device category	desktop	mobile	tablet	smart tv	Totals
City	Active users	Active users	Active users	Active users	Active users
Totals	62,003 59.6% of total	40,617 39.1% of total	2,097 2.0% of total	9 <0.1% of total	103,987 100.0% of total
1 (not set)	11,211	13,113	409	3	24,716
2 New York	1,859	903	35	0	2,796
3 Frankfurt	2,339	195	0	0	2,534
4 London	1,416	576	18	0	2,006
5 Mountain View	1,269	195	6	0	1,470
6 Sunnyvale	1,253	190	2	0	1,444
7 Los Angeles	635	764	25	0	1,423
8 San Jose	874	477	7	0	1,357
9 San Francisco	794	503	13	1	1,309
10 Singapore	613	418	15	0	1,041

(not set)
Right click on visualization to interact with data

Tab Settings define what appears in the report area above

Explorations - Cohort Exploration Report

GA4 - Google Merchandise Store

GA4 - Google Merchandise Store

Try searching "how to activate Google signals"

Variables

Exploration Name: Free form

Custom: Apr 23 - May 22, 2022

SEGMENTS

- US
- Direct traffic
- Paid traffic
- Mobile traffic
- Tablet traffic

DIMENSIONS

- Event name
- Gender
- Country
- Device category
- First user medium
- City
- First user source
- First user campaign

Tab Settings

TECHNIQUE

Cohort exploration

SEGMENT COMPARISONS

Drop or select segment

COHORT INCLUSION

First touch (acquisition date)

RETURN CRITERIA

Any event

COHORT GRANULARITY

Weekly

CALCULATION

Standard

BREAKDOWN

Drop or select dimension

Rows per dimension: 5

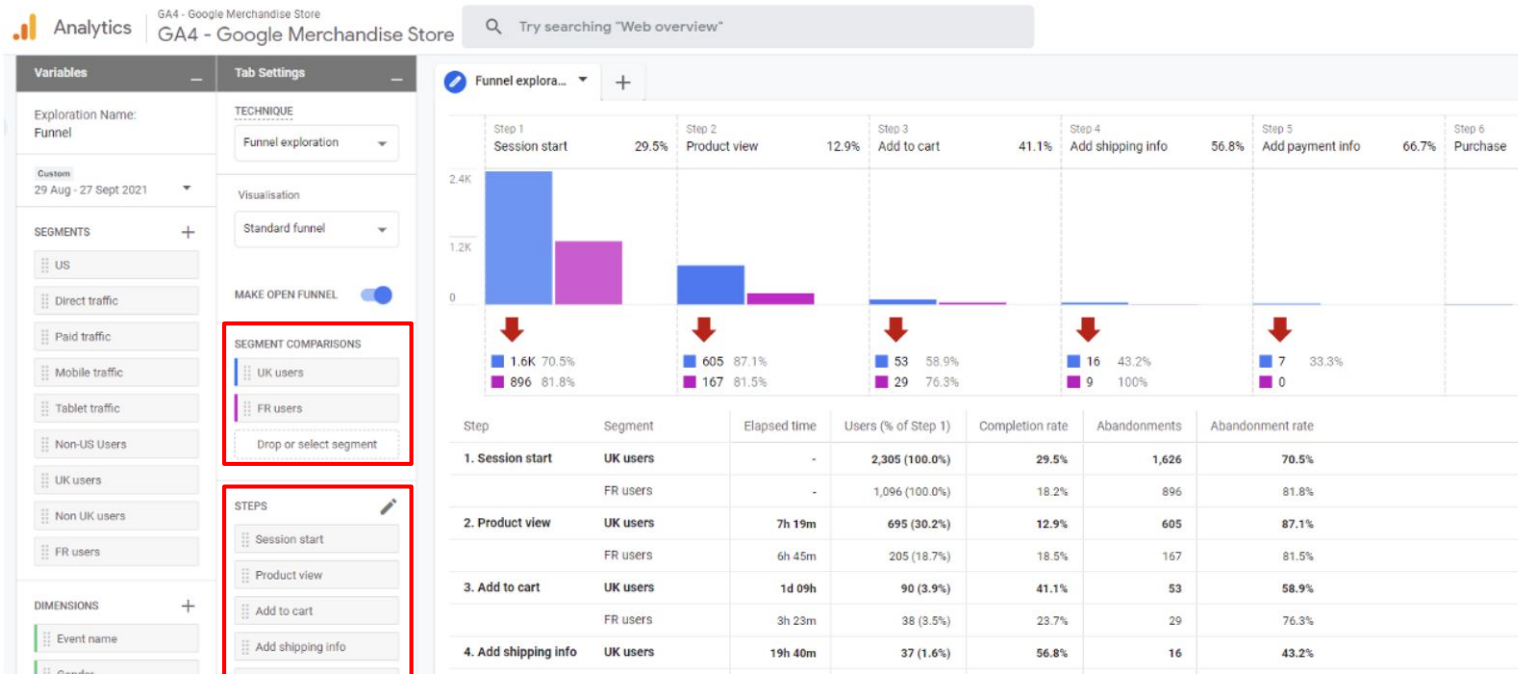
Free form 1 Cohort explor...

Each cell is the sum of Active users for users who had Any event, in that week after First touch (acquisition date)

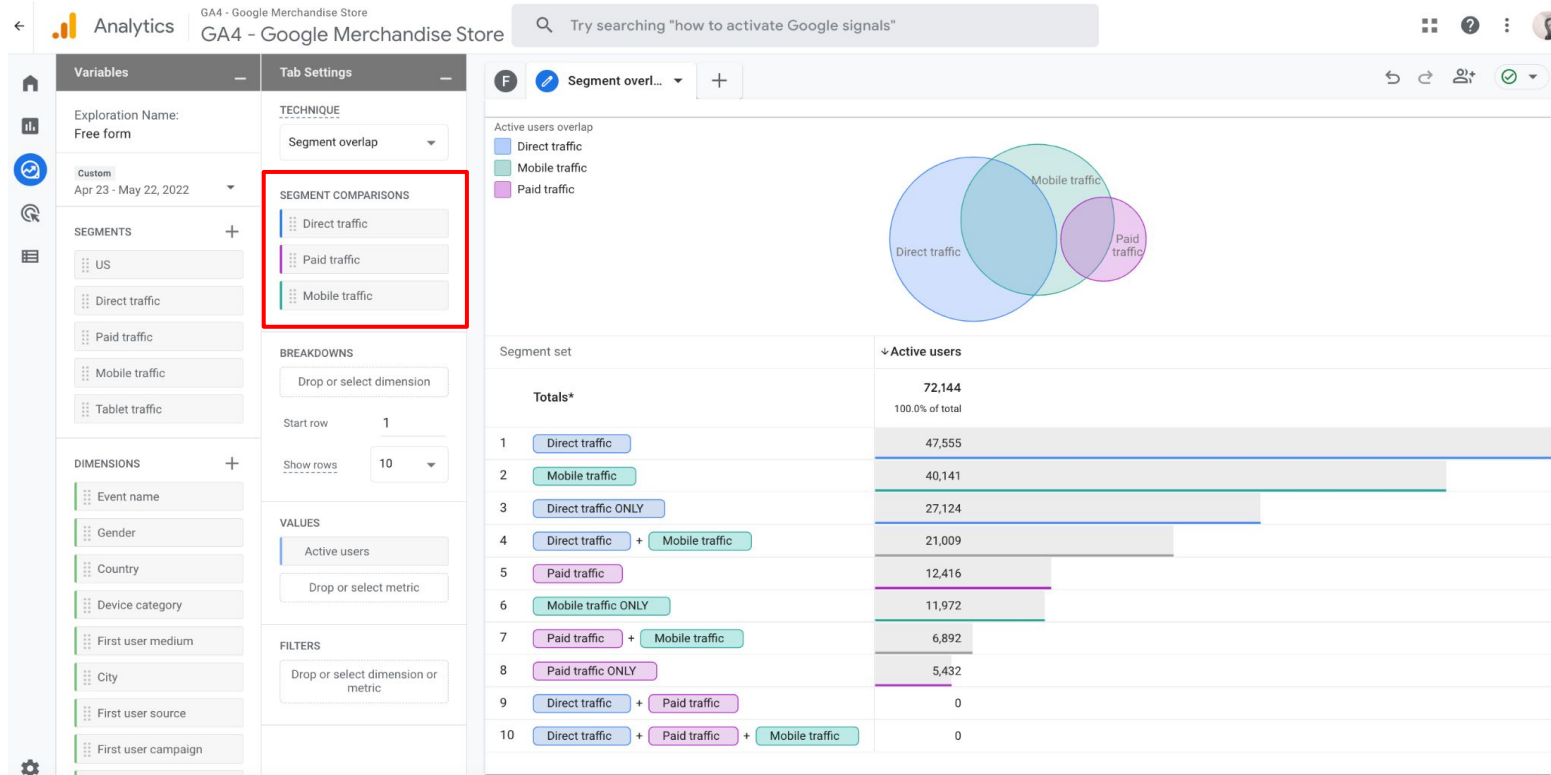
	WEEK 0	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
All Users	91,043	3,107	828	324	10	0
Active users						
Apr 23 - Apr 23, 2022 1,948 users	1,948	170	30	22	10	0
Apr 24 - Apr 30, 2022 20,914 users	20,914	948	401	302	0	
May 1 - May 7, 2022 22,929 users	22,929	930	397	0		
May 8 - May 14, 2022 23,301 users	23,301	1,060	0			
May 15 - May 21, 2022 21,918 users	21,918	0				
May 22 - May 22, 2022 No users	0					

Tab Settings changed based on the template selected

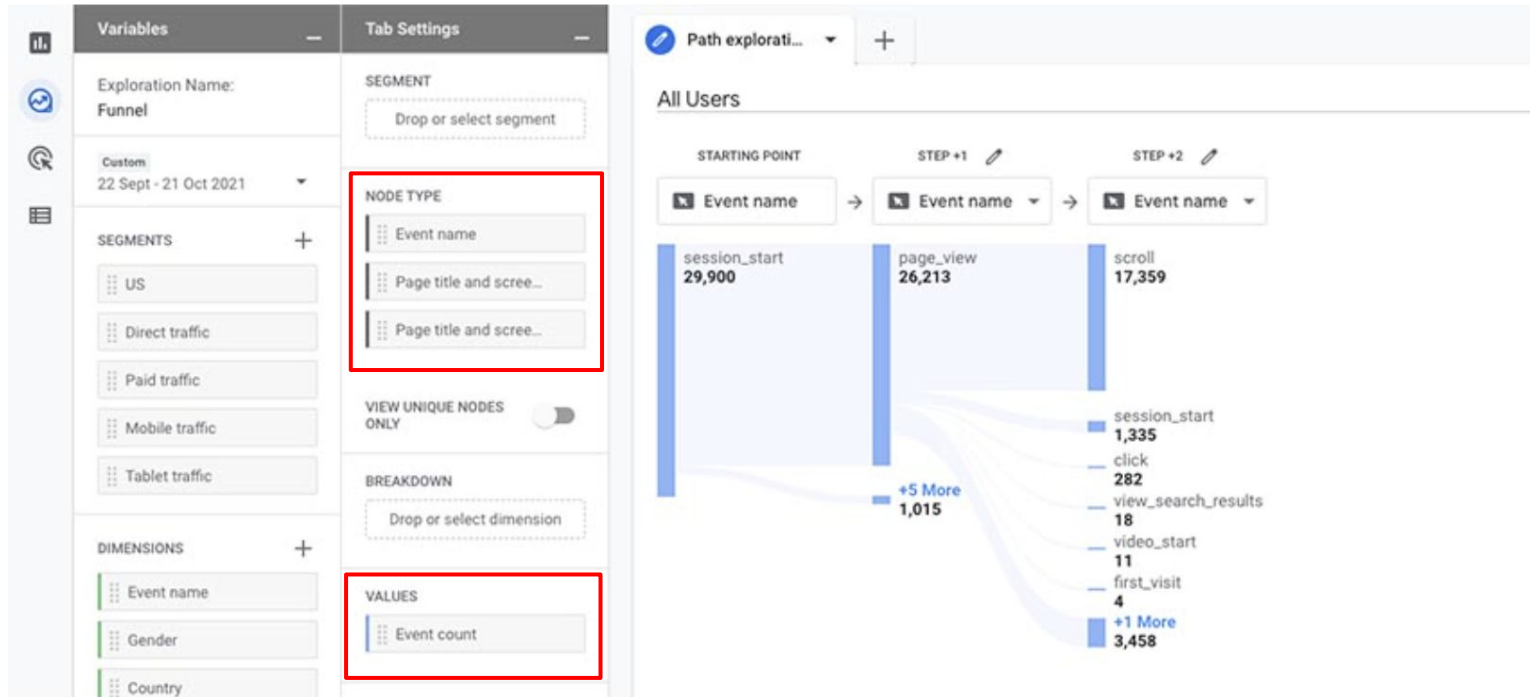
Explorations – Funnel Exploration Report



Explorations – Segment Overlap Report



Explorations – Path Exploration Report



Explorations - User Lifetime Report

Analytics GA4 - Flood-It! Try searching "compare conversions from organic vs direct channels"

Variables

- Paid traffic
- Mobile traffic
- Tablet traffic

DIMENSIONS

- First user medium
- First user source
- First user campaign
- Last audience name
- First visit date

METRICS

- Total users
- LTV: Average
- Lifetime engage...
- Lifetime transactio...
- Purchase probabilit...

Tab Settings

COLUMNS

Drop or select dimension

Start column group 1

Show column groups 5

VALUES

- Total users
- LTV: Average
- Lifetime engage...
- Lifetime transactio...
- Purchase probabilit...

Drop or select metric

Cell type Heat ...

FILTERS

Drop or select dimension or metric

User lifetime 1

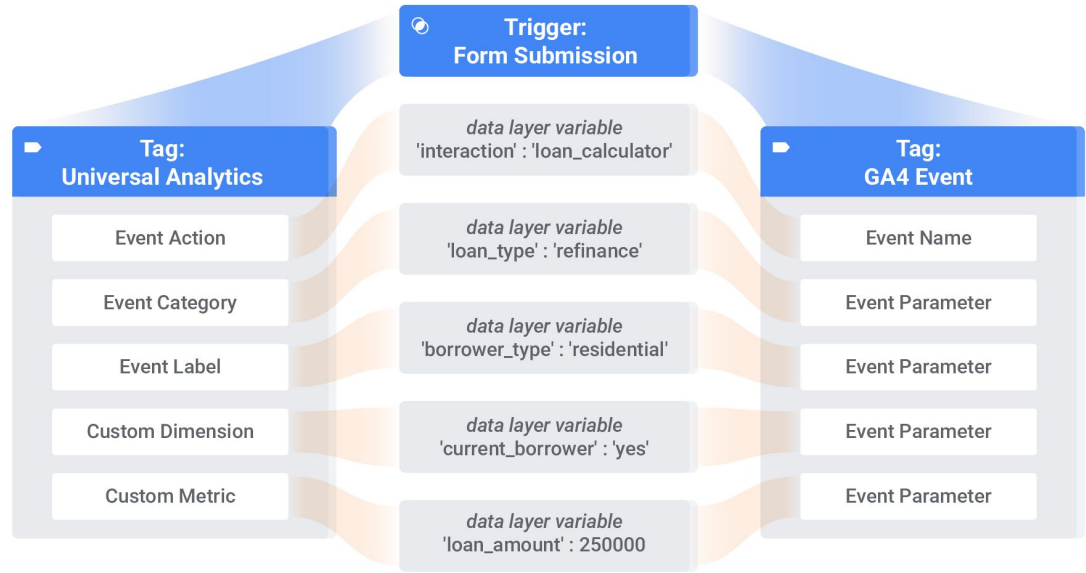
First user medium	↓ Total users	LTV: Average	Lifetime engagement duration: Average	Lifetime transactions: Average	Purchase probability: Average
Totals	37,915 100% of total	\$0.00 100% of total	1h 51m 100% of total	0.001 100% of total	0%
(none)	30,565	\$0.00	2h 09m	0.001	-
(not set)	2,813	\$0.00	18m 18s	0	-
cpc	2,165	\$0.00	33m 02s	0	-
organic	1,220	\$0.01	1h 50m	0.003	-
referral	1,093	\$0.00	0m 00s	0	-
invite_a_friend_campaign	18	\$0.00	38m 17s	0	-
dynamic_link	11	\$0.16	30m 12s	0.091	-

Implementation: a hybrid approach

You should **set up a GA4 account** alongside existing Universal Analytics accounts, **giving you time to collect data in GA4** in parallel without losing any data currently held in your other GA accounts.

HYBRID APPROACH

Dual tagging keeps your Universal Analytics implementation in place while you build out your GA4 implementation.



Rules to the hybrid approach

- » Don't USE data from both properties
- » Rebuild your reports in GA4
- » Create a timeline

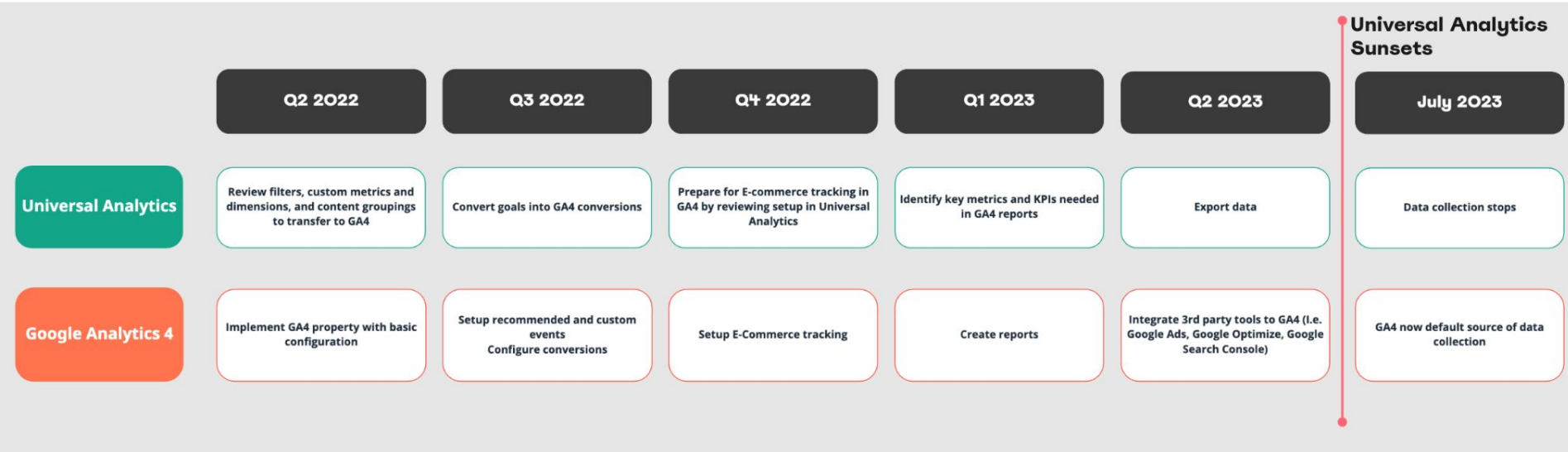


GA4 Roadmap

We've been using Universal Analytics for years and it's where all our legacy data is stored. GA4 data looks and feels different. The setup is different and change is hard. But we know we need to start moving in that direction.

How do we get there?

Roadmap to GA4 Implementation



By spreading out the implementation tasks, you make the transition to GA4 more manageable and create the opportunity to test and validate along the way.

Roadmap to GA4 Implementation

	Q2 2022	Q3 2022	Q4 2022	Q1 2023
Universal Analytics	Review filters, custom metrics and dimensions, and content groupings to transfer to GA4	Convert goals into GA4 conversions	Prepare for E-commerce tracking in GA4 by reviewing setup in Universal Analytics	Identify key metrics and KPIs needed in GA4 reports
Google Analytics 4	Implement GA4 property with basic configuration	Setup recommended and custom events Configure conversions	Setup E-Commerce tracking	Create reports

Roadmap to GA4 Implementation



A pug dog is sitting on a forest floor, wrapped in a light-colored blanket with vertical stripes in shades of pink, green, and grey. The dog's head is visible through the opening of the blanket, and it has a slightly grumpy expression. The background is a soft-focus forest floor with green plants and brown leaves.

Q&A, then that's a wrap!

Key contact and additional information

Christy Jones - Director, Marketing & Optimization

✉ cjones@reasononeinc.com

🏠 reasononeinc.com

Visit us online for additional information on our digital expertise.

Contact us to talk about how we can support your GA4 implementation.

